2013 Health Care Survey of DoD Beneficiaries:

Adult Technical Manual

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Final

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Introduction

The 2013 Adult Health Care Survey of Department of Defense Beneficiaries (HCSDB) is the primary tool with which the TRICARE Management Activity (TMA) of the Assistant Secretary of Defense (Health Affairs) monitors the opinions and experiences of military health system (MHS) beneficiaries. The HCSDB was conducted annually from 1995 to 2000; since that time the surgery has been fielded quarterly. Specifically, the HCSDB is designed to answer the following questions:

- How *satisfied* are DoD beneficiaries with their health care and their health plan?

- How does overall satisfaction with military treatment facilities (MTFs) compare with satisfaction with civilian treatment facilities (CTFs)?

- Does *access* to military and civilian facilities meet TRICARE standards?

- Is beneficiaries' use of preventive health care services in line with national goals, such as those outlined in *Healthy People 2020*?

- Has beneficiaries' use of MHS services changed over time?

- What aspects of MHS care contribute most to beneficiary satisfaction with their health care experiences? With which aspects are beneficiaries least satisfied?

- What are the demographic characteristics of MHS beneficiaries?

The HCSDB is a quarterly mail and email survey of a representative sample of MHS beneficiaries. It is sponsored by the TRICARE Management Activity in the Office of the Assistant Secretary of Defense (Health Affairs) [OASD(HA)] under authority of the National Defense Authorization Act for Fiscal Year 1993 (P.L. 102-484). Altarum Institute prepares the sampling frame, which consists of selected variables for each MHS beneficiary in the Defense Enrollment Eligibility Reporting System (DEERS) database on a specified reference date. DEERS includes everyone who is eligible for a MHS benefit (i.e., everyone in the Uniformed Services—Army, Air Force, Navy, Marine Corps, Coast Guard, the Commissioned Corps of the Public Health Service, National Oceanic and Atmospheric Administration, Guard/Reserve personnel who are activated for more than 30 days – and other special categories of people who qualify for benefits). DEERS includes those on active duty, those retired from military careers, immediate family members of people in the previous two categories, and surviving family members of people in these categories.

Each quarter, Mathematica Policy Research (Mathematica, Washington, D.C.) prepares a sample of 51,000 adult beneficiaries. Ipsos fields the survey each quarter. Mathematica analyzes the survey data, reports on the results and prepares a quarterly public use file and a Codebook and Users' Guide to describe the quarterly dataset. Each year, Mathematica prepares an annual public use dataset, a technical manual and the "Health Care Survey of DoD Beneficiaries: Annual Report".

This manual is designed to be used as a reference by analysts in OASD (HA) as they interpret the survey findings and prepare briefings. This manual provides detailed documentation on the following: naming conventions for variables, editing procedures, selection of records, computation of response rates, recoding of variables, computation of weights, variance estimation, and construction of tables and charts for the reports. This manual also enables an analyst to follow, and

replicate if desired, the processing of the raw survey data through each step in the production of the final database.

A.   OVERVIEW OF THE HCSDB

1.   Sample Design

The 2013 adult sample design is a stratified random sample with 51,000 adult beneficiaries selected each quarter. Stratification is based on three variables: analytical group, geographic area, and enrollment/beneficiary type. The *analytical group* stratification is determined in cooperation with TRICARE Management Activity (TMA) staff, and is important to data users and policymakers. The criteria for the analytical group stratification is the following: (1) beneficiaries younger than 65, enrolled with a military primary care manager (PCM), or active duty beneficiaries; (2) beneficiaries younger than 65, who use Managed Care Support Contractors; (3) beneficiaries younger than 65, who use TRICARE Standard/Extra; (4) beneficiaries enrolled in TRICARE Reserve Select; (5) beneficiaries age 65 or older.

The *geographic area* stratification includes military treatment facilities (MTFs) in which TMA is interested, TNEX regions for those enrolled in other MTFs, and TNEX regions for all other beneficiaries.

The *enrollment/beneficiary* type includes (1) active duty; (2) active duty family members enrolled in Prime with a civilian PCM; (3) active duty family members enrolled in Prime with a military PCM; (4) active duty family members not enrolled in Prime; (5) retirees and their family members younger than 65 enrolled in Prime with a civilian PCM; (6) retirees and their family members younger than 65 enrolled in Prime with a military PCM; (7) retirees and their family members younger than 65 not enrolled in Prime; (8) retirees and their family members age 65 and older; and (9) beneficiaries enrolled in TRICARE Reserve Select.

The sample selection process involves five steps: (1) construction of the sampling frame and definition of sampling strata; (2) allocation of the sample to strata to satisfy the study's precision goals; (3) selection of the survey sample using a permanent random number sample selection algorithm; (4) creation of the sampling weights, which reflect the probability of selection; and (5) verification of results to ensure that sampling was implemented as specified. Please see Mathematica Policy Research, Inc (2013) for details on sample design.

2.   2013 Adult HCSDB

The HCSDB questionnaire was converted from an annual to a quarterly survey in 2000, and is fielded each quarter to a representative sample of MHS beneficiaries. Beginning with 2006, reporting and documentation of the HCSDB is performed on a fiscal year basis. In previous years, reporting and documentation were based on calendar years. Thus this document, the "2013 Health Survey of DoD Beneficiaries: Adult Technical Manual", describes Quarters I-III of fiscal year 2013. Throughout this document, Quarter I, 2013 refers to Quarter I of fiscal year 2013. In FY 2013, surveys were fielded in three quarters instead of four, describing a period from October 2011 to March 2013. The survey for quarter four of FY 2013 was canceled as a result of sequestration. The adult questionnaires for Quarters I-III are reproduced in Appendix A. The 2013 survey consists of an unchanging core questionnaire with different quarterly supplements.

The core adult questionnaire includes the following topics:

- Use of health care
- Use of preventive health care

- Type of health plan covering the beneficiary

- Satisfaction with health plan

- Satisfaction with health care

- Access to health care

- Demographic characteristics

Beginning in 2002, the survey naming convention was changed. Prior to 2000, the year in the survey's name reflected the year that respondents were asked to think about when answering the questions. For example, although the 2000 HCSDB was fielded in 2001, it asked beneficiaries to think about the prior 12 months (mostly 2000) as the reference period for their answer. Under the new naming convention, the survey title refers to the year the questionnaires are fielded, so last year's survey was the 2012 HCSDB and this year's survey is the 2013 HSCDB. Because of the name change, there is no "2001" survey, even though the questionnaire was administered continuously in each quarter of 2001.

3. Survey Response – Quarters I-III

In each of the three quarters in 2013 in which the survey was fielded, Ipsos sent surveys to a random sample of 51,000 adult MHS beneficiaries. By the end of the fielding period in Quarter I, Ipsos received completed surveys from 18.5 percent of the sample. In Quarter II, 16.0 percent of the sample members returned completed surveys while in Quarter III, 16.2 percent of the sample members returned completed surveys. Information pertaining to how Mathematica developed these response rates is presented in Chapter 3.

It should be noted that the above cited response rates do not reflect late arriving responses from the surveys fielded in the first three quarters. The response rates are based on the number of completed surveys returned to the survey vendor at the end of the fielding period. The annual combined dataset, however, includes the surveys returned after the end of the fielding period for Quarters I and II. Therefore, the revised annual response rates were 19.4 percent for Quarter I, 17.1 percent for Quarter II, and 17.6 percent for the combined annual dataset.

4. Database Development

Mathematica edits the data, selects records for inclusion in the final database, and constructs variables to be used in reports. To ensure that the survey data is representative of the DEERS population, Mathematica develops weights to take account of the initial sampling, the sampled individuals who chose not to respond to the survey, and post-stratification if the beneficiary's key information is updated.

5. Reports

Mathematica analyzes the data and produces several reports explaining the findings on topics such as satisfaction, access to care, health care use, and use of preventive services. These reports will be available on the TRICARE website at http://www.TRICARE.USD.mil:

- 2013 TRICARE Beneficiary Reports

- 2013 TRICARE Consumer Watch

- Health Care Survey of DoD Beneficiaries: Annual Report

B. ORGANIZATION OF THIS MANUAL

Chapter 2 explains how the database was developed. It covers naming conventions, editing procedures, record selection criteria, descriptions of all variable types, definitions of each constructed variable, and weighting procedures. Chapter 3 describes how the database was analyzed. This includes rules for developing response rates, the development of table and chart specifications for the Health Care Survey of DoD Beneficiaries (The HCSDB Annual Report, TRICARE Beneficiary Reports and TRICARE Consumer Watch), an explanation of the dependent variables and independent variables, and the methodology for estimating the variance of estimates. The manual concludes with a series of technical appendices:

- Appendix A: Annotated questionnaires – Quarters I-III survey questionnaires annotated with database variable names

- Appendix B: Plan for Data Quality – Coding Scheme – Quarters I-III

- Appendix C: A table mapping MTFs to the catchment area and DMIS ID

- Appendix D: Response rate tables for selected domains – Quarters I-III and Combined Annual

- Appendix E: Technical Description of the 2013 TRICARE Beneficiary Reports

- Appendix F: SAS Code for File Development – Quarters I-III

- Appendix G: SAS Code for Statistical and Web Specifications for the 2013 TRICARE Beneficiary Reports - Quarters I-III

- Appendix H: SAS Code for 2013 TRICARE Consumer Watch - Quarters I-III and Combined Annual

- Appendix I: SAS Code for Statistical and Web Specifications for the 2013 TRICARE Purchased Care Beneficiary Reports - Quarters I-III

- Appendix J: SAS Code for 2013 TRICARE Purchased Care Consumer Watch - Quarters I-III and Combined Annual

Chapter

2

Database

This chapter explains the process of developing the raw survey data into a final database free of inconsistencies and ready for analysis. We discuss the design of the database; cleaning, editing, and implementing the Coding Scheme; record selection; and constructing variables.

A.   DATABASE DESIGN

The 2013 Adult HCSDB consists of variables from various sources. When Ipsos delivers the file to Mathematica after fielding the sample, the following types of variables are present:

- DEERS information on beneficiary group, social security number (SSN), sex, age, etc.

- Sampling variables used to place beneficiaries in appropriate strata

- Core and supplemental questionnaire responses

- Ipsos information from fielding the sample, such as scan date and flags developed during the fielding to assist us in determining eligibility

Mathematica removes all identifying information such as SSN to protect the confidentiality of the respondents. Mathematica then adds the following types of variables to the database:

- Updated DEERS variables from the time of data collection to be used for post-stratification

- Coding Scheme flags

- Constructed variables for analysis

- Weights

In addition, Mathematica updates and cleans the questionnaire responses using the Coding Scheme tables found in Appendix B. Each quarter, the final public-use database will contain only the recoded responses; this will help users to avoid using an uncleaned response for analysis. We structured the final database so that all variables from a particular source are grouped by position. Table 2.1 lists all variables in the Quarters I-III, 2013 database by source. For specific information on variable location within the database, refer to the "2013 Adult Health Care Survey of DoD Beneficiaries: Adult Codebook and User's Guide."

1.   Data Sources

a.   DEERS

Altarum provided the sampling frame to Mathematica prior to the selection of the sample. DEERS information such as sex, date of birth, and service are retained in the database; this data is current as of the time of sample selection.

b.   Sampling Variables

Mathematica developed variables during the sample selection procedure that were instrumental in placing beneficiaries in appropriate strata. Many of the variables are retained on the database.

c.   Questionnaire Responses

These variables represent the cleaned values for all responses to the questionnaire. The original values scanned in by Ipsos are cleaned and recoded as necessary to ensure that responses are consistent throughout the questionnaire. The Coding Scheme tables found in Appendix B are the basis for insuring data quality.

d.   Survey Fielding Variables

In the process of fielding the survey, Ipsos created a number of variables that we retain in the database. Certain of these variables, information that came in by phone, for example, assist us in determining eligibility.

e.   Coding Scheme Flags

Each table of the Coding Scheme (see Appendix B) has a flag associated with it that indicates the pattern of original responses and any recodes that were done. For example, the table for Note 5 has a flag N5.

f.   Constructed Variables

Mathematica constructed additional variables that were used in the TRICARE Beneficiary Reports, TRICARE Consumer Watch, and the "Health Care Survey of DoD Beneficiaries: Annual Report." Often these variables were regroupings of questionnaire responses or the creation of a binary variable to indicate whether or not a TRICARE standard was met. Complete information on each constructed variable is found in section 2.D.

g.   Weights

Mathematica developed weights for each record in the final database. Weights are required for the following reasons:

- To compensate for variable probabilities of selection

- To adjust for differential response rates

- To improve the precision of survey-based estimates through post-stratification

Weighting procedures are discussed in section 2.E.

TABLE 2.1

VARIABLES IN THE 2013 ADULT HCSDB DATA FILE – QUARTERS I-III

SAMPLE VARIABLES	
MPRID	- Unique MPR identifier
SVCSMPL	- Branch of service sampling variable
SEXSMPL	- Sex sampling variable
STRATUM	- Sampling stratum
ENBGSMPL	- Enrollment by beneficiary category
MPCSMPL	- Military personnel category
NHFF	- Stratum sample size
QUARTER	- Survey quarter
D_HEALTH	- Health service region
TNEXREG	- TRICARE next generation of contracts region grouping
SERVAFF	- Service affiliation
DEERS VARIABLES	
RACEETHN	- Race/Ethnic code
PNSEXCD	- Person gender
RDAGEQY	- Age at time of sample preparation-Capped (18 and below, 86 and above)
RFLDAGE	- Age at start of fielding period-Capped (18 and below, 86 and above)
PCM	- Primary manager code (civilian or military)
ACV	- Alternate care value
DBENCAT	- Beneficiary category
DSPONSVC	- Derived sponsor branch of service
PATCAT	- Aggregated beneficiary category
PNTYPCD	- Person type code
QUESTIONNAIRE RESPONSES	
H13001	- Are you the person listed on the cover letter
H13002A	- Health plan(s) covered: TRICARE Prime
H13002C	- Health plan(s) covered: TRICARE Ext/Stnd
H13002F	- Health plan(s) covered: Medicare
H13002G	- Health plan(s) covered: Federal Employees Health Benefit Program (FEHBP)
H13002H	- Health plan(s) covered: Medicaid
H13002I	- Health plan(s) covered: civilian HMO
H13002J	- Health plan(s) covered: other civilian
H13002K	- Health plan(s) covered: Uniformed Services Family Health Plan (USFHP)
H13002L	- Health plan(s) covered: not sure
H13002M	- Health plan(s) covered: Veterans
H13002N	- Health plan(s) covered: TRICARE Plus
H13002O	- Health plan(s) covered: TRICARE For Life
H13002P	- Health plan(s) covered: TRICARE Supplemental Insurance
H13002Q	- Health plan(s) covered: TRICARE Reserve Select
H13002R	- Health plan(s) covered: other Non-US government health insurance
H13002S	- Health plan(s) covered: TRICARE Retired Reserve
H13002T	- Health plan(s) covered: TRICARE Young Adult
H13002U	- Health plan(s) covered: Continued Health Care Benefit Program (CHCBP)
H13003	- Which health plan did you use most in the past 12 months?
H13004	- Months or years in a row with health plan
H13005	- In last year: facility used most for health care
H13006	- In last year: have illness/injury/condition that needed care right away
H13007	- In last year: how often got care as soon as you believed you need it
H13008	- In last year: wait between trying to get care and actually seeing a provider for an illness or injury
H13009	- In last year: made appointments for non-urgent health care
H13010	- In last year: how often got appointments for non-urgent health care as soon as you wanted

H13011	- In last year: days between making an appointment for regular or routine care and actually seeing a provider
H13012	- In last year: times went to an emergency room for own care
H13013	- In last year: times went to a doctors office or clinic for yourself (not counting times went to an emergency room)
H13014	- In last year: how often talk to doctor or other health care provider about illness prevention
H13015	- In last year: doctor or other health care provider talked about more than 1 choice for treatment
H13016	- In last year: doctor talked about pros/cons of each treatment/health care choice
H13017	- In last year: doctor/health care provider asked which treatment option you thought was best for you when there was more than one choice of treatment
H13018	- Rating of all health care in last year
H13019	- Have one person you think of as your personal doctor
H13020	- In last year: number of times visited personal doctor for care for self
H13021	- In last year: how often personal doctor listened carefully to you
H13022	- In last year: how often personal doctor explained things in a way that was easy to understand
H13023	- In last year: how often your personal doctor showed respect for what you have to say
H13024	- In last year: how often your personal doctor spent enough time with you
H13025	- In last year: got care from doctor or other health provider other than personal doctor
H13026	- In last year: how often personal doctor seemed informed and up-to-date about care received from other doctors
H13027	- Rating of your personal doctor
H13028	- In last year: tried to make appointment to see a specialist
H13029	- In last year: how often it was easy to get appointments with specialists
H13030	- In last year: how many specialists seen
H13031	- Rating of specialist seen most often in last year
H13032	- In last year: tried to get care, tests, or treatment through health plan
H13033	- In last year: how often easy to get care, tests, or treatment you thought you needed through health plan
H13034	- In last year: looked for information in written material or on the Internet about how health plan works
H13035	- In last year: how often written material/Internet provide information you needed about how your plan works
H13036	- In last year: looked for information from health plan on cost of health care service or equipment
H13037	- In last year: how often able to find out from health plan cost of health care service or equipment
H13038	- In last year: looked for information from health plan on cost of prescription medications
H13039	- In last year: how often able to find out cost of prescription medications
H13040	- In last year: tried to get information or help from health plan's customer service
H13041	- In last year: how often did customer service give needed information or help
H13042	- In last year: how often did customer service treat with courtesy and respect
H13043	- In last year: health plan gave forms to fill out
H13044	- In last year: how often forms from health plan were easy to fill out
H13045	- In last year: sent in any claims to your health plan
H13046	- In last year: how often health plan handled claims quickly
H13047	- In last year: how often health plan handled claims correctly
H13048	- Rating of all experience with health plan
H13049	- Blood pressure: when last reading
H13050	- Blood pressure: know if blood pressure is too high or not
H13051	- When did you last have a flu shot
H13052	- Smoked at least 100 cigarettes in life
H13053	- Smoke or use tobacco everyday, some days, or not at all
H13054	- Last year: how often advised by doctor to quit smoking or use tobacco

H13055	- Last year: how often medication was recommended or discussed by doctor to assist with quitting smoking or using tobacco
H13056	- Last year: how often doctor recommended or discussed methods and strategies to assist quitting smoking or using tobacco
H13057A	- Do you smoke or use: cigarettes
H13057B	- Do you smoke or use: dip, chewing tobacco, snuff, or snus
H13057C	- Do you smoke or use: cigars
H13057D	- Do you smoke or use: pipes, bidis, or kreteks
H13058	- Are you male or female
H13059B	- Female: last have a Pap smear test
H13060	- Female: are you under age 40
H13061	- Female: last time breasts checked by mammography
H13062	- Female: been pregnant in last year or pregnant now
H13063	- Female: in what trimester is your pregnancy
H13064	- Female: trimester first received prenatal care
H13065	- In general how would you rate your overall health
H13066	- Limited in any way in any activities because of any impairment or health problem
H13067	- In last year: seen doctor or other health provider 3 or more times for same condition or problem
H13068	- Condition lasted for at least 3 months
H13069	- Need to take medicine prescribed by a doctor
H13070	- Medicine to treat condition that has lasted for at least 3 months
H13071F	- Feet portion of height without shoes
H13071I	- Inches portion of height without shoes
H13072	- Weight without shoes in pounds
H13073	- Are you Spanish, Hispanic, or Latino
H13073A	- No, not Spanish, Hispanic, or Latino
H13073B	- Yes, Mexican, Mexican American, Chicano
H13073C	- Yes, Puerto Rican
H13073D	- Yes, Cuban
H13073E	- Yes, other Spanish, Hispanic, or Latino
H13074	- Currently covered by Medicare
H13075	- Currently covered by Medicare part A
H13076	- Currently covered by Medicare part B
H13077	- Enrolled in a Medicare Advantage plan
H13078	- Currently covered Medicare supplemental
H13079	- Enrolled in Medicare Part D
SREDA	- Highest grade completed
SRRACEA	- Race: White
SRRACEB	- Race: Black or African American
SRRACEC	- Race: American Indian or Alaska native
SRRACED	- Race: Asian
SRRACEE	- Race: Native Hawaiian/other Pacific Islander
SRAGE	- What is your age now?
S13009	- Had the same personal doctor or nurse before joining this health plan
S13010	- Since joined health plan, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?
S13011	- Able to see my provider when needed
S13014	- Satisfaction with health care received during last visit
S13B01	- Self rating of overall mental/emotional health
S13B02	- Last year: needed treatment/counseling for personal/family problem
S13B03	- Last year: problem getting needed treatment/counseling
S13B04	- Last year: rating of treatment/counseling received
S13B23	- Past month: had nightmares or unwanted thoughts about an experience that was frightening, horrible, or upsetting
S13B24	- Past month: tried hard not to think about or went out of the way to avoid situations that remind you of experience that was frightening, horrible, or upsetting

S13B25	- Past month: constantly on guard, watchful, or easily startled after experience that was frightening, horrible, or upsetting
S13B26	- Past month: felt numb or detached from others, activities, or surroundings after experience that was frightening, horrible, or upsetting
S13AA01	- Prior health plan
S13AA02A	- Reason switched: I lost my job
S13AA02B	- Reason switched: my spouse/parent lost his/her job
S13AA02C	- Reason switched: I changed jobs
S13AA02D	- Reason switched: my spouse/parent changed jobs
S13AA02E	- Reason switched: I retired from a job that provided coverage
S13AA02F	- Reason switched: spouse/parent retired from job that provided coverage
S13AA02G	- Reason switched: moved to a new area
S13AA02H	- Reason switched: in the Select Reserves and became active
S13AA02I	- Reason switched: spouse/parent activated in Select Reserves
S13AA02J	- Reason switched: I am a National Guard or Reserve Member deactivated
S13AA02K	- Reason switched: spouse/parent deactivated National Guard or Reserve Member
S13AA02L	- Reason switched: employer changed plans
S13AA02V	- Reason switched: employer stopped providing health coverage
S13AA02M	- Reason switched: my dr/other health care provider left the plan
S13AA02N	- Reason switched: I did not like the referral requirements
S13AA02O	- Reason switched: could not get appointments as soon as I wanted
S13AA02P	- Reason switched: dissatisfied with the plan's customer service
S13AA02Q	- Reason switched: preferred new plan
S13AA02R	- Reason switched: difficult to park at clinic/doctor's office
S13AA02S	- Reason switched: travel too far to get needed care
S13AA02T	- Reason switched: married, divorced, or widowed
S13AA02U	- Reason switched: became eligible for Medicare
S13AA02W	- Reason switched: other
S13AA03	- Main reason switched
S13AA04A	- Problem w/ prior plan: expensive bills for services not covered
S13AA04B	- Problem w/ prior plan: doctor charged more than insurance would pay
S13AA04C	- Problem w/ prior plan: doctor's office would not accept my insurance
S13AA04D	- Problem w/ prior plan: insurance did not pay bill promptly or denied payment
S13AA04E	- Problem w/ prior plan: plan did not include specialist I needed
S13AA05	- Changed doctors when switched plan
S13015	- When did you last have cholesterol screening
S13N11	- Prefer civilian or military facilities for hlth care
S13N12A	- Reason preferred: greater choice of doctors
S13N12B	- Reason preferred: personal doctor at that facility type
S13N12C	- Reason preferred: specialist at that facility type
S13N12D	- Reason preferred: no military facilities near me
S13N12E	- Reason preferred: travel too far to civilian facility
S13N12F	- Reason preferred: travel too far to military facility
S13N12G	- Reason preferred: easier to get care from a military facility
S13N12H	- Reason preferred: told to get care at military facility
S13N12I	- Reason preferred: good value for out-of-pocket costs
S13N12J	- Reason preferred: out-of-pocket costs are less
S13N12K	- Reason preferred: have not needed health care
S13N12L	- Reason preferred: another reason
S13N12M	- Reason preferred: no preference
S13J01	- Can obtain civilian health insurance for self through some civilian group
S13J02A	- Obtain civilian coverage: my current employer
S13J02B	- Obtain civilian coverage: COBRA from previous employer
S13J02C	- Obtain civilian coverage: retirement coverage from previous employer
S13J02D	- Obtain civilian coverage: family member's current employer
S13J02E	- Obtain civilian coverage: COBRA from family member's previous employer

S13J02F	- Obtain civilian coverage: retirement coverage from family member's previous employer
S13J02G	- Obtain civilian coverage: another organization
S13J02H	- Obtain civilian coverage: government program
S13J02I	- Obtain civilian coverage: don't know
S13J03	- Are you or you and others in household covered by a civilian policy
S13J04	- I or family member pay all or part of insurance premium for civilian coverage
S13J05	- How much (in dollars) per month do you or family member pay for this coverage
S13J06	- Used civilian coverage for any of your health care in the past 12 months
S13J07A	- Not used civilian coverage: not available
S13J07B	- Not used civilian coverage: had better choice of doctors with TRICARE
S13J07C	- Not used civilian coverage: don't want to pay premium for civilian coverage
S13J07D	- Not used civilian coverage: better customer service with TRICARE
S13J07E	- Not used civilian coverage: civilian benefits are poor compared to TRICARE
S13J07F	- Not used civilian coverage: personal doctor is only available through TRICARE
S13J07G	- Not used civilian coverage: want to be sure I can always use military health care
S13J07H	- Not used civilian coverage: pay less for TRICARE than I would for civilian care
S13J07I	- Not used civilian coverage: prefer to use military doctors
S13J07J	- Not used civilian coverage: prefer military hospitals
S13J07K	- Not used civilian coverage: have not needed health care
S13J07L	- Not used civilian coverage: another reason
S13J07M	- Not used civilian coverage: receive employer bonus for not taking employee coverage
S13J07N	- Not used civilian coverage: family member receives employer bonus for not taking employee coverage
S13J07O	- Not used civilian coverage: better quality care through TRICARE
S13J08	- Used TRICARE for any health care (except for prescription drugs) in the past 12 months
S13J09A	- Not used TRICARE: greater choice of doctors with my civilian plan
S13J09B	- Not used TRICARE: don't want to pay the premium for TRICARE
S13J09C	- Not used TRICARE: better customer service with civilian plans
S13J09D	- Not used TRICARE: personal doctor is not available to me through TRICARE
S13J09E	- Not used TRICARE: TRICARE benefits are poor compared to my civilian plan
S13J09F	- Not used TRICARE: easier to get care through civilian plan
S13J09G	- Not used TRICARE: pay less for civilian care than I would for TRICARE
S13J09H	- Not used TRICARE: no military facilities near me
S13J09J	- Not used TRICARE: prefer civilian hospitals
S13J09K	- Not used TRICARE: have not needed health care
S13J09L	- Not used TRICARE: another reason
S13J10	- Dropped civilian coverage in past 12 months
S13J13A	- Dropped civilian coverage: lost job
S13J13B	- Dropped civilian coverage: spouse or parent lost job
S13J13C	- Dropped civilian coverage: changed jobs
S13J13D	- Dropped civilian coverage: spouse or parent changed jobs
S13J13E	- Dropped civilian coverage: retired from job
S13J13F	- Dropped civilian coverage: spouse or parent retired
S13J13G	- Dropped civilian coverage: moved to new location
S13J13H	- Dropped civilian coverage: you/spouse/parent became active reservist
S13J13I	- Dropped civilian coverage: you/spouse/parent returned to Select Reserve
S13J13J	- Dropped civilian coverage: employer changed plans
S13J13K	- Dropped civilian coverage: found less expensive plan
S13J13L	- Dropped civilian coverage: married, divorced, or widowed
S13J13M	- Dropped civilian coverage: went on Medicare
S13J13N	- Dropped civilian coverage: problems with health plan
S13J14	- Main reason dropped civilian coverage
S13AC01	- Last yr: missed appointment at the facility used most often
S13AC02A	- Missed appointment: forgot about appointment
S13AC02B	- Missed appointment: felt better

S13AC02C	- Missed appointment: felt worse
S13AC02D	- Missed appointment: got care somewhere else
S13AC02E	- Missed appointment: scheduling conflict
S13AC02F	- Missed appointment: difficulty getting to facility
S13AC02G	- Missed appointment: other
S13AC03	- Last yr: canceled/rescheduled appointment at the facility used most often
S13AC04	- Last yr: how many appointments canceled/rescheduled
S13AC05A	- Cancelled/rescheduled appointment: forgot about appointment
S13AC05B	- Cancelled/rescheduled appointment: felt better
S13AC05D	- Cancelled/rescheduled appointment: got care somewhere else
S13AC05E	- Cancelled/rescheduled appointment: scheduling conflict
S13AC05F	- Cancelled/rescheduled appointment: difficulty getting to facility
S13AC05G	- Cancelled/rescheduled appointment: other
S13C09	- Lst yr: did you have a health problem for which you needed special medical equipment, such as a cane, a wheelchair, or oxygen equipment
S13C10	- Lst yr: how much of a problem was it to get special medical equipment you needed through your health plan
S13C11	- Lst yr: did you need special therapy, such as physical, occupational, or speech therapy
S13C12	- Lst yr: how much of a problem was it to get special therapy you needed through your health plan
S13C13	- Lst yr: did you need home health care or assistance
S13C14	- Lst yr: how much of a problem was it to get home health care you needed through your health plan
S13Q01	- Have you ever had a blood stool test using a home kit
S13Q02	- How long since last blood stool test using a home kit
S13Q03	- Have you ever had a sigmoidoscopy or colonoscopy
S13Q04	- How long since last sigmoidoscopy
S13Q05	- How long since last colonoscopy
S13Q08	- Are you under age 50

SURVEY FIELDING VARIABLES

ONTIME	- Responded within 8 weeks of mail-out
FLAG_FIN	- Final disposition
DUPFLAG	- Multiple response indicator
FNSTATUS	- Final status
KEYCOUNT	- Number of key questions answered
WEB	- Web survey indicator

CODING SCHEME FLAGS AND COUNTS

N1	- Coding Scheme Note 1
N1_J1	- Coding Scheme Note 1_J1
N1_J2	- Coding Scheme Note 1_J2
N1_J3	- Coding Scheme Note 1_J3
N1_J4	- Coding Scheme Note 1_J4
N1_J5	- Coding Scheme Note 1_J5
N1_J6	- Coding Scheme Note 1_J6
N1_Q1	- Coding Scheme Note 1_Q1
N1_AA1	- Coding Scheme Note 1_AA1
N1_AC1	- Coding Scheme Note 1_AC1
N1_AC2	- Coding Scheme Note 1_AC2
N1_AC3	- Coding Scheme Note 1_AC3
N2	- Coding Scheme Note 2
N3	- Coding Scheme Note 3
N4	- Coding Scheme Note 4
N5	- Coding Scheme Note 5
N5A1	- Coding Scheme Note 5A1
N5A2	- Coding Scheme Note 5A2
N5A3	- Coding Scheme Note 5A3

N6	- Coding Scheme Note 6
N7	- Coding Scheme Note 7
N8	- Coding Scheme Note 8
N8_01	- Coding Scheme Note 8_01
N9	- Coding Scheme Note 9
N10	- Coding Scheme Note 10
N10_B1	- Coding Scheme Note 10_B1
N11	- Coding Scheme Note 11
N12	- Coding Scheme Note 12
N13	- Coding Scheme Note 13
N14	- Coding Scheme Note 14
N15	- Coding Scheme Note 15
N16	- Coding Scheme Note 16
N17	- Coding Scheme Note 17
N17_Q0	- Coding Scheme Note 17_Q0
N17_Q1	- Coding Scheme Note 17_Q1
N17_Q2	- Coding Scheme Note 17_Q2
N18	- Coding Scheme Note 18
N19A	- Coding Scheme Note 19A
N19B	- Coding Scheme Note 19B
N20	- Coding Scheme Note 20
N21	- Coding Scheme Note 21
N22	- Coding Scheme Note 22
N23	- Coding Scheme Note 23
N24	- Coding Scheme Note 24
N25	- Coding Scheme Note 25
MISS_1	- Count of: violates skip pattern
MISS_4	- Count of: incomplete grid error
MISS_5	- Count of: scalable response of don't know
MISS_6	- Count of: not applicable - valid skip
MISS_7	- Count of: out-of-range error
MISS_9	- Count of: no response - invalid skip
MISS_TOT	- Total number of missing responses

CONSTRUCTED VARIABLES

JSFLAG	- Joint Service Flag
XENRLLMT	- Enrollment in TRICARE prime
XENR_PCM	- Enrollment by PCM type
XINS_COV	- Insurance coverage
XBENCAT	- Beneficiary category
XENR_RSV	- Enrollment by PCM type - reservist
XINS_RSV	- Insurance coverage - reservist
XREGION	- Region
XTNEXREG	- TRICARE next generation of contracts region grouping
XCATCH	- XCATCH - Catchment area (reporting)
USA	- CONUS/OCONUS indicator
XOCONUS	- Overseas Europe/Pacific/Latin indicator
OUTCATCH	- Out of catchment area indicator
XSEXA	- Male or female (recode)
XBMI	- Body mass index
XBMICAT	- Body mass index category
XBNFGRP	- Constructed beneficiary group
XSERVAFF	- Service affiliation
KMILOPQY	- Outpatient visits to military facility
KCIVOPQY	- Outpatient visits to civilian facility
KCIVINS	- Beneficiary covered by civilian insurance
HP_PRNTL	- Pregnant in last year received care in 1st trimester
HP_MAMOG	- Women age 40 and over: mammography in past 2 years

HP_MAM50	- Women age 50 and over: mammography in past 2 years
HP_PAP	- All women: pap smear in last 3 years
HP_BP	- Blood pressure check in last 2 years and know results
HP_FLU	- Age 65 and older: flu shot in last 12 months
HP_OBESE	- Obese or morbidly obese
HP_SMOKE	- Advised to quit smoking in last 12 months
HP_SMKH3	- Smoker under HEDIS definition (modified)
HP_CESH3	- Had smoking cessation counseling - HEDIS (modified)

POSTSTRATIFICATION VARIABLES	
POSTCELL	- Poststratification cell for new weights

WEIGHTS	
BWT	- Basic sampling weight
FWRWT	- Final quarterly weight
CFWT	- Combined Annual Final Weight

In addition to the variables listed above, the file includes replicate weights CFWT1-CFWT180.

2.   Variable Naming Conventions

To preserve continuity with survey data from previous years, Mathematica followed the same variable naming conventions for the core questions used for the 1996, 1997, 1998, 1999, 2000, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012 and 2013 survey data. Variable naming conventions for the 2013 Adult HCSDB core and supplemental questions, shown in Table 2.2 correspond to those of previous years. The suffix "_O" will be used to distinguish the original version of the variable from the recoded version. The public use files for the adult survey will contain only recoded variables.

Variables created from most core survey questions begin with the character "H." The next two characters are the third and fourth digits of the survey year. A small number of self-reported demographic variables begin with the characters "SR."

TABLE 2.2

NAMING CONVENTIONS FOR 2013 HCSDB VARIABLES – QUARTERS I-III
(VARIABLES REPRESENTING SURVEY QUESTIONS)

1st Character: Survey Type	2nd – 3rd Characters: Survey Year	4th – 6th Characters: Question #	Additional Characters: Additional Information
H= Health Beneficiaries (18 and older, Adult Questionnaire) ---------------------------- S = Supplemental Question	13	001 to 079 -------------------------------- Quarter I 009-011, 014 – Supplemental questions about respondent's personal doctor and about the visits to the respondent's healthcare provider. 015 – Supplemental question about cholesterol screening. B01-B04, B23-B26 – Supplemental questions about overall mental or emotional health. N011-N12 – Supplemental questions about preferences for civilian and military healthcare facilities Quarter II 009-011, 014 – Supplemental questions about respondent's personal doctor and about the visits to the respondent's healthcare provider. B01-B04, B23-B26 – Supplemental questions about overall mental or emotional health. J01-J10, J13-J14 – Supplemental questions about civilian health insurance coverage. Quarter III 009-011, 014 – Supplemental questions about respondent's personal doctor and about the visits to the respondent's healthcare provider. B01-B04, B23-B26 – Supplemental questions about overall mental or emotional health. C09-C14 – Supplemental questions about beneficiaries' chronic conditions. Q01-Q05, Q08 – Supplemental questions about colon cancer screening tests.	A to U are used to label responses associated with a multiple response question

1st Character: Survey Type	2nd – 3rd Characters: Survey Year	4th – 7th Characters: Question #	Additional Characters: Additional Information
S = Supplemental Question	13	Quarter I AA01-AA05 – Supplemental questions about previous health plan and reasons for switching. Quarter II AC01-AC05 – Supplemental questions about about missed, cancelled, or rescheduled appointments.	A to W are used to label responses associated with a multiple response question

1st Characters: Variable Group	Additional Characters: Additional Information
SR=Self-reported demographic data	Descriptive text, e.g., SREDA
N=Coding scheme notes	Number referring to Note, e.g., N2
X=Constructed independent variable	Descriptive text, e.g., XREGION
R=Constructed restricted use variables	Descriptive text, e.g., RDAGEQY (Age at time of data collection-capped by grouping those 18 and below, 86 and above)
HP=Constructed *Healthy People 2020* variable	Descriptive text, e.g., HP_BP (had blood pressure screening in past two years and know the results)
K=Constructed dependent variables	Descriptive text, e.g., KMILOPQY (total number of outpatient visits to military facility)
FW= Quarterly weighting variables	Descriptive text, e.g., FWRWT for the overall final quarterly weight, Number referring to replicate weights, e.g., FWRWT10
CFW=Combined annual weighting variables	Descriptive text, e.g., CFWT for the final annual weight; Number referring to replicate weights, e.g., CFWT10

Each quarter, the questionnaire includes a battery of questions on specific health care topics concerning services offered to MHS beneficiaries. Supplemental questions contain the same number of alphanumeric characters as the core questions; each variable begins with an "S" to distinguish it as a supplemental question.

3.   Missing Value Conventions

The 2013 conventions for missing variables are the same as the conventions in previous years. All missing value conventions used in the 2013 HCSDB are shown in Table 2.3.

TABLE 2.3

CODING OF MISSING DATA AND "NOT APPLICABLE" RESPONSES

ASCII or Raw Source Data	Edited and Cleaned SAS Data	Description
Numeric	Numeric	
-9	.	No response
-7	.O	Out of range error
-6	.N	Not applicable or valid skip
-5	.D	Scalable response of "Don't know" or "Not sure"
-4	.I	Incomplete grid error
-1	.C	Question should have been skipped, not answered
	.B	No survey received

B.   CLEANING AND EDITING

Data cleaning and editing procedures ensure that the data are free of inconsistencies and errors. Standard edit checks include the following:

- Checks for multiple surveys returned for any one person

- Range checks for appropriate values within a single question

- Logic checks for consistent responses throughout the questionnaire

We computed frequencies and cross tabulations of values at various stages in the process to verify the accuracy of the data. Data editing and cleaning proceeded in the following way:

1.   Scan Review

Ipsos spot-checked the scanned results from the original survey to verify the accuracy of the scanning process and made any necessary corrections.

2.   Additional Ipsos Editing and Coding

In preparing the database for Mathematica, Ipsos used variable names and response values provided by Mathematica in the annotated questionnaires (see Appendix A). Ipsos delivered to Mathematica a database in SAS format. In this database, any questions with no response were encoded with a SAS missing value code of '.'.

3. Duplicate or Multiple Surveys

At this stage, Ipsos delivered to Mathematica a file containing one record for every beneficiary in the sample, plus additional records for every duplicate survey or multiple surveys received from any beneficiary. These duplicates and multiples were eliminated during record selection, and only the most complete questionnaire in the group was retained in the final database. Record selection is discussed in Section 2.C.

4. Removal of Sensitive or Confidential Information

The file that Mathematica received from Ipsos contained sensitive information such as Social Security Number (SSN). Any confidential information was immediately removed from the file. Each beneficiary had already been given a generic ID (MPRID) substitute during sample selection, and the MPRID was retained as a means to uniquely identify each individual.

5. Initial Frequencies

Mathematica computed frequencies for all fields in the original data file. These tabulations served as a reference for the file in its original form and allowed comparison to final frequencies from previous years, helping to pinpoint problem areas that needed cleaning and editing. Mathematica examined these frequencies and cross-tabulations, using the results to adapt and modify the cleaning and editing specifications as necessary.

6. Data Cleaning and Recoding of Variables

Mathematica's plan for data quality is found in the 2013 Adult Coding Scheme for Quarters I-III. It contains detailed instructions for all editing procedures used to correct data inconsistencies and errors. The Coding Scheme tables for Quarters I-III are found in Appendix B. These tables outline in detail the approach for recoding self-reported fields, doing range checks, logic checks, and skip pattern checks to insure that responses are consistent throughout the questionnaire. The Coding Scheme tables specify all possible original responses and any recoding, also indicating if backward coding or forward coding was used. Every skip pattern is assigned a note number shown in the annotated questionnaire (Appendix A). This note number defines the flag (for example, the Note 5 flag is N5) that is set to indicate the pattern of the original responses and any recoding. Thus, if the value of N5 is 2, the reader can look at line 2 in the Note 5 table for the original and recoded response values.

The SAS programs implementing the Coding Scheme for each quarter are found in Appendix F.

a. Check Self-Reported Fields

Several survey questions seek information that can be verified with DEERS data and/or sampling variables. Nevertheless, in recoding these self-reported fields (such as sex, and TRICARE enrollment) we used the questionnaire responses unless they were missing; in which case, we used the DEERS data. For example, if the question on the sex of the beneficiary was not answered, the recoded variable for self-reported sex was not considered missing but was given the DEERS value for gender. If there was any disagreement between questionnaire responses and DEERS data, the questionnaire response generally took precedence.

In many tables and charts in the reports, the DEERS information was used for active duty status and TRICARE enrollment.

b.   Skip Pattern Checks

At several points in the survey, the respondent should skip certain questions. If the response pattern is inconsistent with the skip pattern, each response in the series was checked to determine which was most accurate, given the answers to other questions. Questions that were appropriately skipped were set to the SAS missing value of '.N'. Inconsistent responses, such as answering questions that should be skipped or not answering questions that should be answered, were examined for patterns that could be resolved. Frequently, responses to subsequent questions provide the information needed to infer the response to a question that was left blank. The 2013 Adult Coding Scheme for Quarters I-III (see Appendix B) specifically addresses every skip pattern and shows the recoded values for variables within each pattern; we back coded and/or forward coded to ensure that all responses are consistent within a sequence.

c.   Missing Values

Ipsos initially encoded any question with a missing response to a SAS missing value code of '.'. After verifying skip patterns, Mathematica recoded some of these responses to reflect valid skips (SAS missing value code of '.N'). The complete list of codes for types of missing values such as incomplete grids, and questions that should not have been answered is shown in Table 2.3.

Occasionally, missing questionnaire responses can be inferred by examining other responses. For example, if a respondent fails to answer H13025 about getting care from a doctor or other health provider besides his/her personal doctor, but goes on to answer how often he/her personal doctor seemed informed and up-to-date about the care received from these doctors or providers, then we assume that the answer to H13025 should have been "yes." Using this technique, we recoded some missing questionnaire responses to legitimate responses.

d.   Logic Checks

Most logic problems are due to inconsistent skip patterns, for example, when a male answers a question intended for women only. Other internal inconsistencies were resolved in the same manner as skip pattern inconsistencies — by looking at the answers to all related questions. For instance, several questions related to smoking were examined as a group to determine the most appropriate response pattern so that any inconsistent response could be reconciled to the other responses in the group.

7.   Quality Assurance

Mathematica created an edit flag for each Coding Scheme table that indicates what, if any, edits were made in the cleaning and editing process. This logic was also used in previous years; variables such as N5 (see Appendix B) indicate exactly what pattern of the Coding Scheme was followed for a particular set of responses. These edit flags have a unique value for each set of original and recoded values, allowing us to match original values and recoded values for any particular sequence.

In order to validate the editing and cleaning process, Mathematica prepared cross-tabulations between the original variables and the recoded variables with the corresponding edit flag. This revealed any discrepancies that needed to be addressed. In addition, we compared unweighted frequencies of each variable with the frequencies from the original file to verify that each variable was accurately recoded. Mathematica reviewed these tabulations for each variable in the survey. If necessary, the earlier edit procedures were modified and the Coding Scheme program rerun. The resulting file was clean and ready for analysis.

C.   RECORD SELECTION

To select final records, we first defined a code that classifies each sampled beneficiary as to his/her final response status. To determine this response status, we used postal delivery information provided by Ipsos for each sampled beneficiary. This information is contained in the FLAG_FIN variable which is described in Table 2.4

TABLE 2.4

FLAG_FIN VARIABLE FOR 2013 HCSDB

Value	Questionnaire Return Disposition	Reason/Explanation Given	Eligibility
1	Returned survey	Completed and returned	Eligible
2	Returned ineligible	Returned with at least one question marked and information that the beneficiary was ineligible	Ineligible
3	Returned blank	Information sent that beneficiary is temporarily ill or incapacitated	Eligible
4	Returned blank	Information sent that beneficiary is deceased	Ineligible
5	Returned blank	Information sent that beneficiary is incarcerated or permanently incapacitated	Ineligible
6	Returned blank	Information sent that beneficiary left military, or divorced after reference date, or retired	Eligible
7	Returned blank	Information sent that beneficiary was not eligible on reference date	Ineligible
8	Returned blank	Blank form accompanied by reason for not participating	Eligible
9	Returned blank	No reason given	Unknown
10	No return	Temporarily ill or incapacitated. Information came in by phone	Eligible
11	No return	Active refuser. Information came in by phone	Eligible
12	No return	Deceased. Information came in by phone	Ineligible
13	No return	Incarcerated or permanently incapacitated.	Ineligible
14	No return	Left military or divorced after reference date, or retired.	Eligible
15	No return	Not eligible on reference date.	Ineligible
16	No return	Other eligible.	Eligible
17	No return	No reason	Unknown
18	Postal Non-Deliverables (PND)	No address remaining	Unknown
19	PND	Address remaining at the close of field	Unknown
20	Original Non-Locatable	No address at start of mailing	Unknown
21	No return or returned blank	Written documentation declining participation, no reason given	Eligible
22	No return or returned blank	Hospitalized but no indication if temporary or permanent	Unknown
23	Returned blank	Deployed	Eligible
24	No return	Deployed	Eligible
25	Deceased	Updating process identified beneficiary as deceased	Ineligible
26	Ineligible	Updating process identified beneficiary as not eligible for Military Health System plan	Ineligible

Using the above variables in Table 2.4, we classified all sampled beneficiaries into four groups:

- **Group 1**: Eligible, Questionnaire Returned. Beneficiaries who were eligible for the survey and returned a questionnaire with at least one question answered (FLAG_FIN = 1)

- **Group 2**: Eligible, Questionnaire Not Returned (or returned blank). Beneficiaries who did not complete a questionnaire but who were determined to be eligible for military health care by the reference date, that is, not deceased, not incarcerated, not permanently hospitalized (FLAG_FIN = 3, 6, 8, 10, 11, 14, 16, 21, 23, 24)

- **Group 3:** Ineligible Beneficiaries who were ineligible because of death, institutionalization, or no longer being in the MHS as of the reference date (FLAG_FIN = 2, 4, 5, 7, 12, 13, 15, 25, 26)

- **Group 4:** Eligibility Unknown. Beneficiaries who did not complete a questionnaire and for whom survey eligibility could not be determined (FLAG_FIN = 9, 17, 18, 19, 20, 22)

Group 1 was then divided into two subgroups according to the number of survey items completed (including legitimate skip responses):

- G1-1. Complete questionnaire returned

- G1-2. Incomplete questionnaire returned

G1-1 consists of eligible respondents who answered "enough" questions to be classified as having completed the questionnaire. G1-2 consists of eligible respondents who answered only a few questions. To determine if a questionnaire is "complete", 20 key questions were chosen. These key questions were adapted from the complete questionnaire rule developed by Agency for Healthcare Research and Quality (AHRQ) for Consumer Assessment of Healthcare Providers and Systems (CAHPS) V4 surveys. At least 50 percent of these key items (more than nine) must be answered for a questionnaire to be accepted as a complete questionnaire. The key survey variables are: H13003, H13005, H13006, H13009, H13013, H13018, H13019, H13027, H13028, H13031, H13033, H13040, H13043, H13048, H13051, H13052, H13065, H13073, SREDA, and the race indicator.

Group 3 was then divided into two subgroups according to how ineligible beneficiaries were identified:

- G3-1. Returned ineligible (FLAG_FIN = 2, 4, 5, 7, 12, 13, 15)

- G3-2. Ineligible at time of Altarum address update (FLAG_FIN = 25, 26)

G3-1 consists of ineligible beneficiaries who responded to the survey request, but told us they were ineligible. G3-2 consists of beneficiaries identified as ineligible during the updating process.

Furthermore, we also subdivided Group 4 into the following:

- G4-1 for locatable-blank return/no reason or no return/no reason (FLAG_FIN = 9, 17, 22)

- G4-2 for nonlocatable-postal nondeliverable/no address, postal nondeliverable/had address, or original nonlocatable (FLAG_FIN = 18, 19, 20).

With this information, we can calculate the location rate (see Section 3.A).

With a code (FNSTATUS) for the final response/eligible status, we classified all sampled beneficiaries using the following values of FNSTATUS:

- 11 for G1-1

- 12 for G1-2

- 20 for Group 2
- 31 for G3-1
- 32 for G3-2
- 41 for G4-1
- 42 for G4-2

There were altogether 458 duplicate questionnaires in the three quarterly data sets Ipsos delivered. All duplicates were classified into one of the above six groups. We then retained the one questionnaire for each beneficiary that had the most "valid" information for the usual record selection process. For example, if two returned questionnaires from the same beneficiary have FNSTATUS code values of 11, 12, 20, 41, or 42, we retained the questionnaire with the smaller value. However, if one of a pair of questionnaires belongs to Group 3 (FNSTATUS = 31 or 32, i.e., ineligible), then we regarded the beneficiary as being ineligible.

Only beneficiaries with FNSTATUS = 11 were retained. All other records were dropped. In Quarters I-III, we retained 26,621 respondents.

D.   CONSTRUCTED VARIABLES

One of the most important aspects of database development is the formation of constructed variables and scale variables to support analysis. Constructed variables are formed when no single question in the survey defines the construct of interest. In Table 2.1 there is a list of all constructed variables for 2013. Each constructed variable is discussed in this section and the relevant piece of SAS code is shown. All SAS programs can be found in Appendix F.

1.   Demographic Variables

a.   Region (XREGION)

Catchment area codes (CACSMPL not retained in public use file to maintain confidentiality) are used to classify beneficiaries into lead agent's regions. These regions correspond to the administrative organization of TRICARE before reorganization in 2004. The XREGION variable partitions all catchment areas into non-overlapped regions so that we can report catchment-level estimates in the catchment reports. The regions are defined as follows:

1 = Northeast

2 = Mid-Atlantic

3 = Southeast

4 = Gulfsouth

5 = Heartland

6 = Southwest

7,8 = Central

9 = Southern California

10 = Golden Gate

11 = Northwest

12 = Hawaii

13 = Europe

14 = Western Pacific Command (Asia)

    15 = TRICARE Latin America

    16 = Alaska

     .= Unassigned (CACSMPL = 9999)

For the purposes of our analysis, Region 7 and Region 8 were combined.

```
/* XREGION –HEALTH CARE REGIONS */
IF     CACSMPL IN (0035, 0036, 0037, 0066, 0067,
                0068, 0069, 0081, 0086, 0100,
                0123, 0306, 0310, 0321, 0326,
                0330, 0385, 0413, 6201, 6223) THEN XREGION= 1;
ELSE IF CACSMPL IN (0089, 0090, 0091, 0092, 0120,
                0121, 0122, 0124, 0335, 0378, 0387, 0432,
                0433, 0508, 7143, 7286, 7294) THEN XREGION= 2;
ELSE IF CACSMPL IN (0039, 0041, 0045, 0046, 0047,
                0048, 0049, 0050, 0051, 0101,
                0103, 0104, 0105, 0337, 0356,
                0405, 0422, 0511          ) THEN XREGION= 3;
ELSE IF CACSMPL IN (0001, 0002, 0003, 0004, 0038,
                0042, 0043, 0073, 0074, 0107,
                0297, 7139         ) THEN XREGION= 4;
ELSE IF CACSMPL IN (0055, 0056, 0060, 0061, 0095,
                9905              ) THEN XREGION= 5;
ELSE IF CACSMPL IN (0013, 0062, 0064, 0096, 0097,
                0098, 0109, 0110, 0112, 0113,
                0114, 0117, 0118, 0338, 0363,
                0364, 0365, 0366, 1587, 1592, 7236, 9906     ) THEN XREGION= 6;
ELSE IF CACSMPL IN (0008, 0009, 0010, 0079, 0083,
                0084, 0085, 0108, 9907      ) THEN XREGION= 7;
ELSE IF CACSMPL IN (0031, 0032, 0033, 0053, 0057,
                0058, 0059, 0075, 0076, 0077,
                0078, 0093, 0094, 0106, 0119,
                0129, 0252, 7200, 7293, 9908          ) THEN XREGION= 8;
ELSE IF CACSMPL IN (0018, 0019, 0024, 0026, 0029, 0030,
                0131, 0213, 0231, 0248, 0407, 5205,
                6215, 9909  ) THEN XREGION= 9;
ELSE IF CACSMPL IN (0014, 0015, 0028, 0235, 0250,
                9910             ) THEN XREGION=10;
ELSE IF CACSMPL IN (0125, 0126, 0127, 0128, 0395, 1646,
                9911             ) THEN XREGION=11;
ELSE IF CACSMPL IN (0052, 0280, 0287, 0534, 7043, 9912 ) THEN XREGION=12;
ELSE IF CACSMPL IN (0606, 0607, 0609, 0617, 0618,
                0623, 0624, 0629, 0633, 0635,
                0653, 0805, 0806, 0808, 0814,
                8931, 8982, 9913          ) THEN XREGION=13;
ELSE IF CACSMPL IN (0610, 0612, 0620, 0621, 0622,
                0637, 0638, 0639, 0640, 0802,
                0804, 0853, 0862, 9914      ) THEN XREGION=14;
ELSE IF CACSMPL IN (0449, 0613, 0615, 0616, 9915 ) THEN XREGION=15;
ELSE IF CACSMPL IN (0005, 0006, 0203, 9916      ) THEN XREGION=16;
ELSE IF CACSMPL = 9999                    THEN XREGION= .;

IF CACSMPL IN (9901,9902,9903,9904) THEN DO;
  IF D_HEALTH NOT IN ('00','17','18','19') THEN DO;
    XREGION=INPUT(D_HEALTH,8.)+0;
```

```
        END;
        ELSE DO;
          IF  DCATCH IN ('0037', '0067', '0123', '0781', '0907',
                    '0908', '0920', '0921', '0922', '0930',
                    '0931', '0933', '0939', '0940', '0946',
                    '0995')
          THEN XREGION=1;
          ELSE IF DCATCH IN ('0124', '0934', '0996')
            THEN XREGION=2;
          ELSE IF DCATCH IN ('0039', '0048', '0105', '0911', '0941',
                    '0987')
            THEN XREGION=3;
          ELSE IF DCATCH IN ('0003', '0787', '0901', '0925', '0943',
                    '0988', '0989')
            THEN XREGION=4;
          ELSE IF DCATCH IN ('0055', '0056', '0061', '0782', '0783',
                    '0789', '0914', '0915', '0918', '0923',
                    '0936', '0950')
            THEN XREGION=5;
          ELSE IF DCATCH IN ('0113', '0904', '0937', '0990', '0993')
            THEN XREGION=6;
          ELSE IF DCATCH IN ('0785', '0929', '0932')
            THEN XREGION=7;
          ELSE IF DCATCH IN ('0078', '0784', '0788', '0906', '0917',
                    '0924', '0927', '0928', '0935', '0942',
                    '0945', '0951', '0974')
            THEN XREGION=8;
          ELSE IF DCATCH IN ('0029', '0786', '0986')
            THEN XREGION=9;
          ELSE IF DCATCH IN ('0014', '0985')
            THEN XREGION=10;
          ELSE IF DCATCH IN ('0125', '0938', '0948', '0973')
            THEN XREGION=11;
          ELSE IF DCATCH IN ('0912')
            THEN XREGION=12;
          ELSE IF DCATCH IN ('0957', '0958', '0960', '0964', '0966',
                    '0967', '0976', '0977', '0979',
                    '0982')
            THEN XREGION=13;
          ELSE IF DCATCH IN ('0006', '0052', '0640', '0961', '0963',
                    '0965', '0978', '0983')
            THEN XREGION=14;
          ELSE IF DCATCH IN ('0075', '0120', '0615', '0622','0953',
                    '0970', '0971', '0972', '0975')
            THEN XREGION=15;
          ELSE IF DCATCH IN ('0902')
            THEN XREGION=16;
        END;
      END;


    IF D_PAR = '0902' THEN XREGION=16;
    IF XREGION = 0 THEN XREGION = .;
```

b.   **United States (USA)**

XREGION is used to classify beneficiaries either in the United States or overseas

USA stands for United States including both Alaska and Hawaii.

```
IF    XREGION IN (1,2,3,4,5,6,7,8,9,10,11,12,16) THEN USA=1;
ELSE IF XREGION IN (13,14,15)              THEN USA=0;
ELSE IF XREGION = .                  THEN USA=.;
```

c.   **Overseas (XOCONUS)**

XREGION is used to classify beneficiaries who are overseas as follows:

```
 1=Europe
 2=Western Pacific
 3=Latin America
 .=In Conus/Missing Region
```

```
IF    XREGION=13 THEN XOCONUS=1;
ELSE IF XREGION=14 THEN XOCONUS=2;
ELSE IF XREGION=15 THEN XOCONUS=3;
```

d.   **TRICARE Next Generation of Contracts Region (XTNEXREG)**

XREGION is used to create XTNEXREG. XTNEXREG is the TRICARE Next Generation of Contracts Region grouping.

```
1=North
2=South
3=West
4=Overseas
```

```
IF XREGION IN (1,2,5) THEN XTNEXREG=1;
ELSE IF XREGION IN (3,4,6) THEN XTNEXREG=2;
ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG=3;
ELSE IF XREGION IN (13,14,15) THEN XTNEXREG=4;
                         /* MER 03/23/10 - If XREGION is missing, set XTNEXREG = TNEXREG */
ELSE IF XREGION = . THEN DO;
  IF TNEXREG = 'N' THEN XTNEXREG=1;
  ELSE IF TNEXREG = 'S' THEN XTNEXREG=2;
  ELSE IF TNEXREG = 'W' THEN XTNEXREG=3;
  ELSE IF TNEXREG = 'O' THEN XTNEXREG=4;
  ELSE XTNEXREG=.;
END; /
```

e.   **Out of Catchment Area (OUTCATCH)**

CACSMPL is used to classify beneficiaries either in a catchment area or outside a catchment area.

```
/* OUTCATCH – OUT OF CATCHMENT AREA */
IF 9900 < CACSMPL < 9999 THEN OUTCATCH=1;    /* Out of catchment area */
  ELSE IF CACSMPL = 9999 THEN OUTCATCH=.;
  ELSE OUTCATCH=0;                   /* Catchment area      */
```

f.   Catchment (XCATCH)

XCATCH is an MTF catchment area for annual beneficiary reports. The code to define catchment area is below::

```
LENGTH XCATCH 8;
com_geo = geocell;
if pcm = 'MTF' then do;
%INCLUDE ."\..\..\Q3_2013\Programs\Sampling\AssignCOM_GEO.inc"
    else if ('1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or
       ('6991' <= enrid <= '6994')   or ('6501' <=enrid <='6512') or
       ('7166' <= enrid <= '7195') or ( '6700' <= enrid <= '6881' ) or enrid = '0000' or
       ('8001' <= enrid <= '8036') or ('6901' <= enrid <= '6919') or
       ('3031' <= enrid <= '3057') or
       enrid in ('0002', '0041', '0044', '0082', '0111', '0213', '0235', '0585', '5208', '0250',
               '0449', '0626', '0012') or
       ('0190' <= enrid <='0199') then com_geo = geocell;
    else com_geo = d_par;
  end;
  else if patcat='ACTDTY' then com_geo=d_par;

  if d_fac='NONCAT' or d_fac='TGRO' or d_fac="TPR" then do;
    if d_health in ('01','02','05','17') then com_geo = '9901';
    else if d_health in ('03','04','06','18') then com_geo = '9902';
    else if d_health in ('07','08','09','10','11','12','19') then com_geo = '9903';
    else if d_health in ('00','13','14','15') then com_geo = '9904';
  end;
***********************************************************************************.
                                                                                 ;
***d_fac="TPR" and d_health = '17', '18', '19' were added above for Q3, 2004,  ***;
***since we got the new regions 17(North T_NEX),18(South T_NEX),19(West T_NEX).***;
***********************************************************************************.
                                                                                 ;

*** If the facility is unknown then set com_geo indicates unknown facility ***;
*** '0999' added 03/15 to account for id 6992;
if com_geo in ('9900', '0999', '0998',' ') then com_geo = '9904';

******************************************************************.
                                                                ;
***Made the following 9 Navy sites stand alone in q1,2005:      ***;
***'0026','0068','0231','0378','0387','0405','0407','0508','6215'***;
******************************************************************.
                                                                ;
if geocell in ('0026','0068','0231','0378','0387','0405','0407','0508','6215') then com_geo=geocell;

xcatch = INPUT(com_geo,8.);
label xcatch = "XCATCH – Catchment Area (Reporting)";
```

g.   Gender of Beneficiary (XSEXA)

XSEXA is constructed using self-reported sex, gender identified on the DEERS database, and answers to gender specific questions.

> 1=Male
> 2=Female

```
/** Note 19a - gender H13058, SEX, H13059B--H13064,
        XSEXA */

/* 1/21/98 use SRSEX & responses to gender specific questions
   if there is discrepancy between SRSEX and SEX */
/* set imputed FMALE and MALE based on gender specific questions */


  ARRAY fmaleval H13059B H13060 H13061 H13062 H13063 H13064
          ;

  cntfmale=0;
  DO OVER fmaleval;        /* mammogram/pap smear/PREGNANT*/
    IF fmaleval>0 THEN cntfmale=cntfmale+1;
  END;

  IF cntfmale>0 THEN FMALE=1;
  ELSE FMALE = 0;


  IF H13058=. THEN DO;
    IF (SEX='F' AND FMALE) THEN DO;
      N19a=1;
      XSEXA=2;
    END;
    ELSE IF (SEX='F' AND FMALE=0) THEN DO;
      N19a=2;
      XSEXA=2;
    END;
    ELSE IF (SEX='M' AND FMALE) THEN DO;
      N19a=3;
      XSEXA=1;
    END;
    ELSE IF (SEX='M' AND FMALE=0) THEN DO;
      N19a=4;
      XSEXA=1;
    END;
    ELSE IF ((SEX IN ('Z',' ') AND FMALE)) THEN DO;
      N19a=5;
      XSEXA=2;
    END;
    ELSE IF (SEX='Z' AND FMALE=0) THEN DO;
      N19a=6;
      XSEXA=.;
    END;
    ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
      N19a=7;
      XSEXA=.;
    END;
  END;
  ELSE IF (H13058=1) THEN DO;
    IF FMALE=0 THEN DO;
      N19a=8;
      XSEXA=1;
    END;
    ELSE IF FMALE THEN DO;
      IF SEX='F' THEN DO;
```

```
            N19a=9;
             XSEXA=2;
           END;
          ELSE DO;
            N19a=10;
             XSEXA=1;
           END;
        END;
      END;
      ELSE IF (H13058=2) THEN DO;
       IF FMALE THEN DO;
        N19a=11;
         XSEXA=2;
       END;
       ELSE IF FMALE=0 THEN DO;
         IF SEX='M' THEN DO;
          N19a=12;
           XSEXA=1;
         END;
         ELSE DO;
           N19a=13;
            XSEXA=2;
         END;
       END;
      END;
```

h.   **Beneficiary Group (XBNFGRP)**

We redefined beneficiary groups to exclude any active duty personnel and any active duty family members who are age 65 or older. The variable XBNFGRP reconstructs beneficiary groups into the following values:

1 = Active Duty, under 65
2 = Family members of Active Duty, under 65
3 = Retirees, survivors, and family members, under 65
4 = Retirees, survivors, and family members, 65 or over
 .= Unknown/other

```
/* XBNFGRP-Beneficiary Group that excludes those 65 and over-Active Duty and Family Members
of Active Duty and TRICARE Reserve select enrollees.*/
IF FIELDAGE  >= 65 AND ENBGSMPL IN (1, 2, 3, 4) THEN XBNFGRP = .;
  ELSE IF ENBGSMPL = 1 THEN XBNFGRP = 1;
  ELSE IF ENBGSMPL IN (2, 3, 4) THEN XBNFGRP = 2;
  ELSE IF ENBGSMPL IN (5, 6, 7) THEN XBNFGRP = 3;
  ELSE IF ENBGSMPL IN (8, 9, 10) THEN XBNFGRP = 4;
  ELSE IF ENBGSMPL IN (11)      THEN XBNFGRP = .;
```

i.   **Service Affiliation (XSERVAFF)**

We redefined service affiliation to collapse coast guard, administrative, support contractor, USTF, noncatchment, other, not available, missing/unknown service affiliations into a single category. The variable XSERVAFF reconstructs service affiliation into the following values:
1 = Army
2 = Air Force
3 = Navy
4 = Other

```
IF SERVAFF='A' THEN XSERVAFF=1; *Army;
IF SERVAFF='F' THEN XSERVAFF=2; *Air Force;
IF SERVAFF='N' THEN XSERVAFF=3; *Navy;

/***Coast Guard, Administrative, Support Contractor, USTF, Noncatchment,
    Other, Not available, Missing/unknown
 *** will collapse to other per Eric Shone ***/

IF SERVAFF IN ('C' 'J' 'M' 'T' 'S' 'O' 'X' ' ') THEN XSERVAFF=4; *Other;
```

2.   TRICARE Prime Enrollment and Insurance Coverage

a.   TRICARE Prime Enrollment Status (XENRLLMT)

For reporting purposes, a person is considered enrolled in TRICARE Prime if they are under 65 and the poststratification enrollment type (ENBGSMPL), based on DEERS data, indicates that they were enrolled at the time of data collection. Because it is important to view the experiences of active duty personnel separately from other enrollees, there is a separate category for Active Duty (under 65) — they are automatically enrolled in Prime. The five categories for TRICARE Prime enrollment are as follows:

1 = Active Duty, under 65
2 = Other enrollees, under 65
3 = Not enrolled in TRICARE Prime, under 65
4 = Not enrolled in TRICARE Prime, 65 or over
5 = Enrolled in TRICARE Prime, 65 or over
. = Unknown

```
 /* XENRLLMT—ENROLLMENT STATUS */
 IF 17 <= INPUT(FIELDAGE,8.) < 65 THEN DO;
   IF INPUT(ENBGSMPL,8.) = 1 THEN XENRLLMT = 1;              /*  Active duty (<65) */
   ELSE IF INPUT(ENBGSMPL,8.) IN (2, 3, 5, 6) THEN XENRLLMT = 2;   /*  Non-active duty
enrolled (<65)*/
   ELSE IF INPUT(ENBGSMPL,8.) IN (4, 7,11) THEN XENRLLMT = 3;     /*  Not Enrolled (<65)*/
 END;
 ELSE IF INPUT(FIELDAGE,8.)  > = 65 THEN DO;
   IF INPUT(ENBGSMPL,8.) = 10 THEN XENRLLMT = 4;              /*  Not Enrolled (65+)*/
   IF INPUT(ENBGSMPL,8.) IN (8,9) THEN XENRLLMT = 5;          /*  Enrolled (65+)    */
 END;
```

b.   TRICARE Prime Enrollment Status by Primary Care Manager (XENR_PCM)

This variable, similar to the previous variable XENRLLMT, separates the enrollees other than the active duty category into those with a military primary care manager (PCM) and those with a civilian PCM. Active duty personnel are automatically enrolled and always have a military PCM. XENR_PCM has seven possible values:

1 = Active Duty, under 65, military PCM
2 = Other enrollees, under 65, military PCM
3 = Other enrollees, under 65, civilian PCM
4 = Not enrolled in TRICARE Prime, under 65
5 = Not enrolled in TRICARE Prime, 65 or over
6 = Enrolled in TRICARE Prime, 65 or over, military PCM
7 = Enrolled in TRICARE Prime, 65 or over, civilian PCM
 . = Unknown

```
/* XENR_PCM—ENROLLMENT BY PCM TYPE */
IF 17 <= FIELDAGE < 65 THEN DO;
  IF ENBGSMPL = 1 THEN XENR_PCM = 1;              /*  Active duty (<65)      */
  ELSE IF ENBGSMPL IN (3, 6) THEN XENR_PCM = 2;    /*  Enrolled (<65) - mil PCM */
  ELSE IF ENBGSMPL IN (2, 5) THEN XENR_PCM = 3;    /*  Enrolled (<65) - civ PCM */
  ELSE IF ENBGSMPL IN (4, 7,11) THEN XENR_PCM = 4;  /*  Not Enrolled (<65)      */
END;
 ELSE IF FIELDAGE > = 65 THEN DO;
  IF ENBGSMPL = 10 THEN XENR_PCM = 5;           /*  Not Enrolled (65+)      */
  IF ENBGSMPL = 9 THEN XENR_PCM = 6;            /*  Enrolled (65+)-mil PCM  */
  IF ENBGSMPL = 8 THEN XENR_PCM = 7;            /*  Enrolled (65+)-civ PCM  */ /*NJ_Q2*/
 END;
END;
```

c.   **Most–Used Health Plan (XINS_COV)**

The respondent's most–used health plan comes directly from variable H12003 (unless the respondent is active duty) and the respondent's age. All active duty personnel are automatically enrolled in Prime. The twelve categories for this variable are as follows:

1 = Active Duty, under 65
2 = Other TRICARE Prime enrollees, under 65
3 = TRICARE Standard/Extra (CHAMPUS)
4 = Medicare Part A and/or Part B
5 = Other civilian health insurance or civilian HMO
6 = Prime, 65 or over
7 = TRICARE Plus and Medicare
8 = Veterans Administration (VA)
9 = TRICARE Reserve Select
10 = TRICARE Retired Reserve
11 = TRICARE Young Adult
12 = CHCBP
 . = Unknown

```
/* XINS_COV--INSURANCE COVERAGE */
IF XENRLLMT = 1 THEN XINS_COV =1;                        /* Prime <65-Active Duty */
  ELSE IF 17 <= INPUT(FIELDAGE,8.)  < 65 AND H13003 IN (1) THEN XINS_COV = 2; /* Prime
<65-Non-active Duty */
  ELSE IF H13003 = 3 THEN XINS_COV = 3;                  /* Standard/Extra */
  ELSE IF H13003 = 11 THEN XINS_COV = 7;                  /* Plus and Medicare */
  ELSE IF H13003 = 4 THEN XINS_COV = 4;                   /* Medicare*/
  ELSE IF H13003 IN (5,6, 7, 8, 9, 13) THEN XINS_COV = 5;           /* Other civilian health
insurance*/
  ELSE IF H13003 = 10 THEN XINS_COV = 8;                   /* Veterans Administration (VA) */
  ELSE IF H13003 = 12 THEN XINS_COV = 9;                  /* TRICARE Reserve Select */
  ELSE IF H13003 = 14 THEN XINS_COV = 10;                  /* TRICARE Retired Reserve -
MER 06/21/11 */
  ELSE IF 21 <= INPUT(FIELDAGE,8.) <= 26
    AND H13003 = 15 THEN XINS_COV = 11;                  /* TRICARE Young Adult - MER
06/21/11 */
  ELSE IF H13003 = 16 THEN XINS_COV = 12;                  /* CHCBP - MER 06/21/11 */
  ELSE IF (INPUT(FIELDAGE,8.)>= 65 AND XENRLLMT = 5 and H13003 = 1) THEN XINS_COV
= 6;  /* Prime, >= 65 */
  ELSE IF H13075=1 AND H13076=1 AND H13003 NE .N THEN XINS_COV = 4;          /*
NEW Q2 Medicare/Medicaid */
```

d.   Insurance Coverage Distinguishing Reservists From Active Duty (XINS_RSV)

This variable is similar to XINS_COV but separates reservists from other Active Duty.
XINS_RSV has 13 possible values:

  1 = Prime <65-Active Duty (Non reservists)
  2 = Prime <65-Non-active Duty
  3 = Standard/Extra
  4 = Medicare/Medicaid
  5 = Other civilian health insurance
  6 = Prime, >= 65
  7 = Plus and Medicare
  8 = Veterans Administration (VA)
  9 = TRICARE Reserve Select
 10 = Prime <65-Active Duty (Reservists)
 11 = TRICARE Retired Reserve
 12 = TRICARE Young Adult
 13 = CHCBP
  . = Unknown

```
/* XINS_RSV--INSURANCE COVERAGE DISTINGUISHING RESERVISTS FROM ACTIVE
DUTY*/
 IF XENRLLMT = 1 THEN DO;
   IF XBENCAT IN (1) THEN XINS_RSV =1;                    /* Prime <65-Active Duty (Non
reservists) */
   ELSE IF XBENCAT IN (3,5) THEN XINS_RSV=10;             /* Prime <65-Active Duty
(Reservists) */
 END;
 ELSE IF 17 <= INPUT(FIELDAGE,8.)  < 65 AND H13003 IN (1) THEN XINS_RSV = 2; /* Prime
<65-Non-active Duty */
 ELSE IF H13003 =3 THEN XINS_RSV = 3;                   /* Standard/Extra */
 ELSE IF H13003 = 11 THEN XINS_RSV = 7;                  /* Plus and Medicare */
 ELSE IF H13003 = 4 THEN XINS_RSV = 4;                  /* Medicare*/
 ELSE IF H13003 IN (5,6, 7, 8, 9, 13) THEN XINS_RSV = 5;          /* Other civilian health
insurance*/
 ELSE IF H13003 = 10 THEN XINS_RSV = 8;                 /* Veterans Administration (VA) */
 ELSE IF H13003 = 12 THEN XINS_RSV = 9;                 /* TRICARE Reserve Select */
 ELSE IF H13003 = 14 THEN XINS_RSV = 11;                /* TRICARE Retired Reserve -
MER 06/21/11 */
 ELSE IF 21 <= INPUT(FIELDAGE,8.) <= 26
   AND H13003 = 15 THEN XINS_RSV = 12;                  /* TRICARE Young Adult - MER
06/21/11 */
 ELSE IF H13003 = 16 THEN XINS_RSV = 13;                /* CHCBP - MER 06/21/11 */
 ELSE IF (INPUT(FIELDAGE,8.)>= 65 AND XENRLLMT = 5 and H13003 = 1) THEN XINS_RSV
= 6;  /* Prime, >= 65 */
 ELSE IF H13075=1 AND H13076=1 AND H13003 NE .N THEN XINS_RSV = 4;            /*
Medicare/Medicaid */
```

e.   Enrollment Distinguishing Reservists From Active Duty (XENR_RSV)

This variable is similar to XENR_PCM but separates reservists from other active duty.
XINS_RSV has 8 possible values:

  1 = Active duty (<65) Non reservists
  2 = Enrolled (<65) - mil PCM

```
3 = Enrolled (<65) - civ PCM
4 = Not Enrolled (<65)
5 = Not Enrolled (65+)
6 = Enrolled (65+)-mil PCM
7 = Enrolled (65+)-civ PCM
8 = Active Duty (<65) Reservists
. = Unknown

/* XENR_RSV--ENROLLMENT DISTINGUISHING RESERVISTS FROM ACTIVE DUTY */
IF 17 <= INPUT(FIELDAGE,8.) < 65 THEN DO;
  IF INPUT(ENBGSMPL,8.) = 1 THEN DO;
    IF XBENCAT IN (1) THEN XENR_RSV = 1;               /*  Active duty (<65) Non reservists */
    ELSE IF XBENCAT IN (3,5) THEN XENR_RSV = 8;        /*  Active duty (<65) Reservists */
  END;
  ELSE IF INPUT(ENBGSMPL,8.) IN (3, 6) THEN XENR_RSV = 2;      /*  Enrolled (<65) - mil
PCM */
  ELSE IF INPUT(ENBGSMPL,8.) IN (2, 5) THEN XENR_RSV = 3;      /*  Enrolled (<65) - civ
PCM */
  ELSE IF INPUT(ENBGSMPL,8.) IN (4, 7,11) THEN XENR_RSV = 4;   /*  Not Enrolled (<65)
*/
END;
ELSE IF INPUT(FIELDAGE,8.) > = 65 THEN DO;
  IF INPUT(ENBGSMPL,8.) = 10 THEN XENR_RSV = 5;        /* Not Enrolled (65+)      */
  IF INPUT(ENBGSMPL,8.) = 9 THEN XENR_RSV = 6;         /* Enrolled (65+)-mil PCM   */
  IF INPUT(ENBGSMPL,8.) = 8 THEN XENR_RSV = 7;         /* Enrolled (65+)-civ PCM   */
END;
```

f.   Types of Coverage (KCIVINS)

A binary variable was created to indicate the type of insurance that respondents use:

- Is the respondent covered by private civilian insurance (KCIVINS)

This variable has the following values:
1 = Yes
2 = No
.= Unknown

```
IF H13002G=1 OR H13002I=1 OR H13002J=1 THEN KCIVINS=1;        /* YES */
   ELSE KCIVINS=2;                                    /* NO   */
```

3.   Preventive Care

(HP_PRNTL, HP_MAMOG, HP_MAM50, HP_PAP, HP_BP, HP_FLU, HP_SMOKE, HP_SMKH3, HP_CESH3, HP_OBESE, XBMI, XBMICAT)

Preventive care analyses incorporate either a TRICARE standard or a federal Healthy People 2020 objective. We constructed new binary variables from the responses to indicate whether the respondent received the preventive care service within the recommended time period. See Table 2.5 for the list of the variables developed for analysis of preventive care; these variables will be compared to the TRICARE standard or Healthy People 2020 Goal. With the exception of XBMI and XBMICAT, the new preventive care variables have the following values:

1 = Received service within the recommended time period
2 = Did not receive service within the recommended time period
.= Missing information

TABLE 2.5
PREVENTIVE CARE STANDARDS

Preventive Care Delivered	Relevant Question	Variable Name	Received Service In Recommended Time Period (Numerator)	Population Involved (Denominator)	Standard
Blood Pressure Check	H13049 & H13050	HP_BP	Number with care in the past 24 months and know the results	Adults	95% within past 2 years
Flu Shot	H13051	HP_FLU	Number with care in the past 12 months	Adults age 65 and older	90% in past year, age 65 and over
Pap Smear	H13059B	HP_PAP	Number with care in the past 36 months	Adult females	93% in the past 36 months
Mammography	H13061	HP_MAMOG	Number with care in the past 24 months	Females age 40 and over	81% in the past 24 months
Mammography	H13061	HP_MAM50	Number with care in the past 24 months	Females age 50 and over	81% in the past 24 months
Smoker	H13054	HP_SMOKE	Number that smoked in the past 12 months	Adults	12% in the last 12 months
Smoker	H13052 & H13053	HP_SMKH3	Number that smoked in the past 12 months	Adults	12% in the last 12 months
Smoking Cessation	H13053 & H13054	HP_CESH3	Number that smoked in the past 12 months and received smoking cessation counseling	All current adult smokers and those who quit smoking within the past year	None
Prenatal Care	H13062, H13063, H13064	HP_PRNTL	Number with care in the first trimester	Adult females who are currently pregnant or who were pregnant in the past 12 months, excluding those less than 3 months pregnant who haven't received care	78% had care in first trimester
Non-Obese Weight	H13071F, H13071I & H13072	HP_OBESE	Number of people who are not obese	Adults	69% are not obese

```
/* HP_PRNTL--IF PREGNANT LAST YEAR, RECEIVED PRENATAL CARE IN 1ST TRIMESTER
*/
IF H13062 IN (1,2) THEN DO;                         /*  Pregnant in last 12 months  */
  IF H13064 = 4 THEN HP_PRNTL = 1;                  /*  Yes  */
    ELSE IF (H13063 = 1 AND H13064 = 1) THEN HP_PRNTL = .;   /* <3 months pregnant now */
    ELSE IF H13064 IN (1,2,3) THEN HP_PRNTL = 2;          /*  No */
END;
/* MER 12/19/2011 - added HP_PRNTL recode to N/A for males */
ELSE IF H13062 IN (.C,.N) THEN HP_PRNTL = .N; /* Male */


/* HP_MAMOG--FOR WOMEN AGE 40 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS
*/
IF XSEXA = 2 AND INPUT(FIELDAGE,8.)  >= 40 THEN DO;
  IF H13061 IN (5, 4) THEN HP_MAMOG = 1;        /* Yes */
    ELSE IF H13061 IN (1, 2, 3) THEN HP_MAMOG = 2;   /* No */
END;


/* HP_MAM50--FOR WOMEN AGE 50 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS
*/
IF XSEXA = 2 AND INPUT(FIELDAGE,8.)  >= 50 THEN DO;
  IF H13061 IN (5, 4) THEN HP_MAM50 = 1;          /* Yes */
```

```
      ELSE IF H13061 IN (1, 2, 3) THEN HP_MAM50 = 2;    /* No */
   END;


   /* HP_PAP--FOR ALL WOMEN, HAD PAP SMEAR IN LAST 3 YEARS */
   IF XSEXA = 2 THEN DO;
      IF H13059B IN (4, 5, 6) THEN HP_PAP = 1;           /* Yes */
      ELSE IF H13059B IN (1, 2, 3) THEN HP_PAP = 2;      /* No  */
   END;


   /* HP_BP--HAD BLOOD PRESSURE SCREENING IN LAST 2 YEARS AND KNOW RESULT */
   IF H13049 IN (2,3) AND H13050 IN (1,2) THEN HP_BP = 1;  /* Yes    */
      ELSE IF H13049 = 1 THEN HP_BP = 2;                  /* No     */
      ELSE IF H13049 < 0 OR H13050 < 0 THEN HP_BP = .;    /* Unknown */
      ELSE HP_BP = 2;                                     /* No     */


   /* HP_FLU--FOR PERSON AGE 65 OR OVER, HAD FLU SHOT IN LAST 12 MONTHS */
   IF INPUT(FIELDAGE,8.) >= 65 THEN DO;
      IF H13051 = 4 THEN HP_FLU = 1;                  /*  Yes */
      ELSE IF H13051 IN (1, 2, 3) THEN HP_FLU = 2;    /*  No */
   END;


   /* HP_SMOKE--ADVISED TO QUIT SMOKING IN PAST 12 MONTHS */
   IF H13054 IN (2, 3, 4) THEN HP_SMOKE = 1;        /*  Yes  */
      ELSE IF H13054 = 1 THEN HP_SMOKE = 2;         /*  No   */


   /* Add code for smoking and smoking cessation counseling according to the HEDIS */
   /* definition.  Smoking variable is HP_SMKH3 and smoking cessation counseling   */
   /* is HP_CESH3.                                     */
   IF H13052 IN (1,2) THEN DO;
      IF H13052=1 AND (H13053=3 OR H13053=4) AND H13057A=1 THEN HP_SMKH3=1; /* Yes */
      ELSE IF H13052=2 OR H13053=2 OR H13057A NE 1 THEN HP_SMKH3=2;        /* No */
   END;


   IF (H13053=3 OR H13053=4) AND H13054>0 THEN DO;
      IF H13054>1 THEN HP_CESH3=1;  /* Yes */
      ELSE HP_CESH3=2;           /* No */
   END;


   ■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■
   * Calculate XBMI- Body Mass Index and XBMICAT- Body Mass Index Category
   * BMI=Weight(in pounds)*703 divide by Height(in inch)*Height(in inch)
   ****************************************************************************.
                                                                            ;


   IF H13071F IN (.A,.O,.I,.B) THEN TSRHGTF=.; ELSE TSRHGTF=H13071F;
   IF H13071I IN (.A,.O,.I,.B) THEN TSRHGTI=.; ELSE TSRHGTI=H13071I;
   IF H13072  IN (.A,.O,.I,.B) THEN TSRWGT =.; ELSE TSRWGT =H13072;


   IF TSRHGTF IN (.) OR
     TSRWGT  IN (.) THEN XBMI=.;
```

```
  ELSE DO;
    XBMI = ROUND((TSRWGT*703)/
            (SUM(TSRHGTF*12,TSRHGTI)*SUM(TSRHGTF*12,TSRHGTI)), .1);
  END;

  IF XBMI >= 100 THEN XBMI=.;


  DROP TSRHGTF TSRHGTI TSRWGT;

  IF XBMI = .       THEN XBMICAT=.;
  ELSE IF XBMI < 18.5 THEN XBMICAT=1;  *Underweight;
  ELSE IF XBMI < 25   THEN XBMICAT=2;  *Normal Weight;
  ELSE IF XBMI < 30   THEN XBMICAT=3;  *Overweight;
  ELSE IF XBMI < 40   THEN XBMICAT=4;  *Obese;
  ELSE                XBMICAT=5;  *Morbidly Obese;


  /*ADD HP_OBESE VARIABLE. JMA 11/3/2005*/

  IF XBMICAT=. THEN HP_OBESE=.;
  ELSE IF XBMICAT IN (4,5) THEN HP_OBESE=1;   *OBESE ;
  ELSE HP_OBESE=2;                  *NOT OBESE;
```

4. Utilization

a. Outpatient Utilization (KMILOPQY, KCIVOPQY)

H13013 contains the total outpatient visits. This is called KMILOPQY for those receiving care at military facilities; we adjust KMILOPQY to reflect zero visits for those with no care or those who get their care from civilian facilities. KCIVOPQY is the comparable variable for those who receive care at civilian facilities.

```
/* KMILOPQY--OUTPATIENT VISITS TO MILITARY FACILITY
   KCIVOPQY--OUTPATIENT VISITS TO CIVILIAN FACILITY */
IF H13005 = 1 THEN DO;
  KMILOPQY=H13013;
  KCIVOPQY=1;
END;
ELSE IF H13005 IN  (2, 3, 4) THEN DO;
  KCIVOPQY=H13013;
  KMILOPQY=1;
END;
ELSE IF H13005 = 5 THEN DO;
  KMILOPQY=1;
  KCIVOPQY=1;
END;
```

E. WEIGHTING PROCEDURES

Quarterly and annual estimates based on the 2013 HCSDB must account for the survey's complex sample design and adjust for possible bias due to nonresponse. As part of sample selection, Mathematica constructed sampling weights (BWT) that reflect the differential selection probabilities used to sample beneficiaries across strata. With the level of nonresponse experienced in the HCSDB and the likelihood that respondents and nonrespondents will differ in terms of their

responses to survey questions, the issue of nonresponse bias is potentially a serious one. In previous surveys prior to 2005 we compensated for potential nonresponse bias by adjusting for nonresponse independently within weighting classes defined by the stratification variables— enrollment status, beneficiary group, and geographic area. In other words, it was assumed that both response propensity and characteristics related to survey outcome variables were homogeneous within these weighting classes.

However, because the HCSDB sample is selected from the DEERS, a great deal is known about both respondents and nonrespondents. Consequently, a wide choice of variables is available for use as auxiliary variables in the nonresponse weighting adjustments. As described above, in previous surveys, the only auxiliary variables used in developing the nonresponse weighting adjustments were the stratification variables, a small subset of the available variables.

Therefore, beginning with the 2005 HCSDB we developed a new weighting adjustment procedure to incorporate more information about respondents and nonrespondents. The first stage in this process identified variables from the frame that were most related to whether or not a beneficiary responded to the survey. After initial screening of variables, the Chi-squared Automatic Interaction Detection (CHAID) (Biggs et al. 1991) technique was used for this purpose. Second, we incorporated the chosen auxiliary variables into a weighting class adjustment procedure using a response propensity model.

1. Constructing the Sampling Weight

The sampling weight was constructed on the basis of the sample design. In the 2013 HCSDB, stratified sampling was used to select the samples that would receive the questionnaire. Sampling was independently executed within strata defined by combinations of three domains: enrollment status groups; beneficiary groups; and geographic areas.

The sample was selected with differential probabilities of selection across strata. Sample sizes were driven by predetermined precision requirements. For further details of the 2013 adult sample design, see "Health Care Survey of DoD Beneficiaries: 2013 Adult Sampling Report (2013)." Our first step in constructing sampling weights was to ensure that they reflected these unequal sampling rates. These sampling weights can be viewed as the number of population elements each sampled beneficiary represents. The sampling weight was defined as the inverse of the beneficiary's selection probability:

$$W_s(h,i) = \frac{N_h}{n_h}$$

where:

$W_s(h,i)$ is the sampling weight for the ith sampled beneficiary in stratum h,

N_h is the total number of beneficiaries in stratum h, and

n_h is the number of sampled beneficiaries in stratum h.

The sum of the sampling weights over selections i, from stratum h equals the total population size of stratum h or N_h.

2. Adjustment for Total Nonresponse

Survey estimates obtained from respondent data only can be biased with respect to describing characteristics of the total population (Lessler and Kalsbeek 1992). The choice of an appropriate method for adjusting for potential nonresponse bias depends on the response mechanism that underlies the study population. We adjusted for nonresponse independently within classes, with the assumptions that both response and characteristics directly or indirectly related to survey variables are homogeneous within these classes. Two types of nonresponse were associated with the 2013 HCSDB:

- Unit or total nonresponse occurred when a sampled beneficiary did not respond to the survey questionnaire (e.g., refusals, no questionnaire returned, blank questionnaire returned, bad address).

- Item nonresponse occurred when a question that should have been answered was not answered (e.g., refusal to answer, no response).

Because item response rates in previous surveys were high, statistical imputation, a technique used to compensate for item nonresponse, was not used in the 2013 HCSDB. To account for unit or total nonresponse, we implemented a weighting class adjustment procedure where the weighting classes are formed from a response propensity model.

3. Weighting Class Adjustments

Weighting class adjustments were made by partitioning the sample into groups, called weighting classes, and then adjusting the weights of respondents within each class so that they sum to the weight total for nonrespondents and respondents from that class. Implicit in the weighting class adjustment is the assumption that—had the nonrespondents responded—their responses would have been distributed in the same way as the responses of the other respondents in their weighting class.

The 2013 HCSDB weighting was implemented by using a method that was instituted in 2005. This method forms the weighting classes using the propensity scores from the propensity model.

Nonresponse adjustment factors for the 2013 HCSDB were calculated in two steps. First, we adjusted the sampling weights to account for sampled beneficiaries for whom eligibility status could not be determined. Sampled beneficiaries were then grouped as follows according to their response status d:

$d = 1$ Eligible — complete questionnaire returned (FNSTATUS = 11)

$d = 2$ Eligible — incomplete or no questionnaire returned (FNSTATUS = 12 or 20)

$d = 3$ Ineligible — deceased, incarcerated or permanently incapacitated beneficiary (FNSTATUS = 31)

$d = 4$ Eligibility unknown — no questionnaire or eligibility data (FNSTATUS = 41 or 42)

$d = 5$ Ineligible — ineligible at time of Altarum address update (FNSTATUS = 32)

Within weighting class c, the weights of the $d = 4$ nonrespondents with unknown eligibility were redistributed to the cases for which eligibility was known ($d = 1, 2, 3$), using an adjustment factor $A_{wc1}(c, d)$ that was defined to be zero for $d = 4$, one for $d = 5$, and defined as:

$$A_{wc1}(c,d) = \frac{\sum_{i \in S(c)} W_s(c,i)}{\sum_{i \in S(c)} I_1(i)W_s(c,i) + \sum_{i \in S(c)} I_2(i)W_s(c,i) + \sum_{i \in S(c)} I_3(i)W_s(c,i)} \text{ for d = 1, 2, 3}$$

where:

$A_{wc1}(c,d)$ is the eligibility-status adjustment factor for weighting class c and response status code d,

$I_d(i)$ is the indicator function that has a value of 1 if sampled unit i has a response status code of d and value of 0 otherwise,

$S(c)$ is the set of sample members belonging to weighting class c, and

$W_s(c,i)$ is the sampling weight (BWT) for the ith sample beneficiary from weighting class c before adjustment.

The adjustment $A_{wc1}(c,d)$ was then applied to the sampling weights to obtain the eligibility-status adjusted weight. Beneficiaries in weighting class c with response status code of d were assigned the eligibility-status adjusted weight:

$$W_{wc1}(c,d,i) = A_{wc1}(c,d)\, W_s(c,i) \text{ for } d = 1, 2, 3, 4, 5$$

Note that since $d = 5$ cases have an adjustment factor of one, they have an adjusted weight equal to the sampling weight. Moreover, note that since $d = 4$ cases have adjustment factors of zero; they also have adjusted weights of zero.

The next step in weighting was to adjust for incomplete or missing questionnaires from beneficiaries known to be eligible. For this adjustment, the weighting class method is again used. Within weighting class c the sample was again partitioned into groups according to the beneficiary's response status code d. Within weighting class c, the weights of the $d = 2$ nonresponding eligibles were redistributed to the responding eligibles $d = 1$, using an adjustment factor $A_{wc2}(c,d)$ that was defined to be zero for $d = 2, 4$. For Group 1 ($d = 1$), the questionnaire-completion adjustment or $A_{wc2}(c, 1)$ factor for class c was computed as:

$$A_{wc2}(c,1) = \frac{\sum_{i \in S(c)} I_1(i)W_{wc1}(c,i) + \sum_{i \in S(c)} I_2(i)W_{wc1}(c,i)}{\sum_{i \in S(c)} I_1(i)W_{wc1}(c,i)}$$

By definition, all $d = 3$ and $d = 5$ ineligible beneficiaries "respond," so the $d = 3$ and $d = 5$ adjustment factor is 1, or $A_{wc2}(c,3) = A_{wc2}(c,5) = 1$. The questionnaire-completion adjusted weight was calculated as the product of the questionnaire-completion adjustment $A_{wc2}(c,d)$ and the previous eligibility-status adjusted weight $W_{wc1}(c,d,i)$, or:

$$W_{wc2}(c,d,i) = A_2(c,d)W_{wc1}(c,d,i)$$

As a result of this step, all nonrespondents ($d = 2, 4$) had questionnaire-completion adjusted weights of zero, while the weight for ineligible cases ($d = 3, 5$) remained unchanged, or $W_{wc2}(c,3,i) = W_{wc1}(c,3,i)$ and $W_{wc2}(c,5,i) = W_{wc1}(c,5,i)$.

4.   Response Propensity Model

It is common practice to use weighting adjustments to compensate for unit nonresponse in sample surveys. There are numerous methods developed to make these adjustments (Kalton and Maligalig, 1991; Holt and Smith, 1979; Oh and Scheuren, 1983; Little and Vartivarian, 2003; Vartivarian and Little, 2003). Moreover, a number of studies have evaluated multiple weighting methods to adjust for nonresponse. Carlson and Williams (2001) found nearly identical results with respect to the design effects and the weighted estimates for two weighting approaches: 1) weighting classes using the design features (strata and sampling units), and 2) propensity models containing numerous variables identified as predictors of response. They conjectured that the propensity model approach might perform better for estimates in key geographic subdomains because there would be many fewer weighting cells than for the national estimates. Rizzo et al. (1994) investigated several alternative methods for panel nonresponse in the Survey of Income and Program Participation (SIPP), including nonresponse adjustment cells, logistic regression, CHAID methods, and generalized raking methods. They found a number of variables related to panel nonresponse that are not employed in the standard SIPP nonresponse adjustment cells methodology. These variables were used in the alternative weighting methods and were found to result in similar weights regardless of method. Therefore, Rizzo et al conclude that the choice of model variables is more important than the weighting methodology.

a.   Predictors of Response Propensity

The first step in developing nonresponse adjustments is deciding which of the large number of variables available from the HCSDB sample frame would be best to use in the adjustment procedures. We do this by evaluating each variable and its relationship to response. Segmentation analysis using the CHAID software was used to allow for a model-building process that focuses on segments showing different response propensities.[1] This analysis avoids the problem of examining "all possible interactions" that is typical of regression modeling. The unweighted segmentation algorithm split the sample into subgroups based on response rates. The splitting process continued until either no other predictors were found or the segment size fell below a minimum size of 50. For ease of interpretation, we also limited the splitting process to three levels. We ran the CHAID analysis twice, once to predict eligibility determination and again to predict survey completion among eligible beneficiaries

b.   Response Propensity Weighting Classes

The nonresponse adjustments involved developing weighting classes using sample design characteristics and the response propensity model developed in the modeling stage. The usual HCSDB approach computes the response weight adjustment cells based on fully observed variables from the sample frame. However, in order to avoid empty or sparsely populated cells, we limited our classification to the stratification variables (catchment area, enrollment, and beneficiary group) and collapsed these cells as necessary.

The alternative approach we used to reduce the number of cells was to stratify based on response propensity. The method used a model of the relationship between a set of beneficiary characteristics and a response outcome. We used logistic regression to model this relationship because response outcome is dichotomous: beneficiaries either respond or they do not. If the characteristics in the model predict response well and if the characteristics are correlated with the substantive variables of the survey, then the model-based adjustment factors applied to the

---

[1] Using as a criterion the significance of a chi-squared test, CHAID evaluates all of the values of a potential predictor variable. It merges values that are judged to be statistically homogeneous (similar) with respect to response and maintains all other values that are heterogeneous (dissimilar). It then selects the best predictor variable to form the first branch in the decision tree, such that each node is made of a group of homogeneous values of response. This process continues recursively until the tree is fully grown.

sampling weights greatly reduce the potential for nonresponse bias. Like the previous weighting class adjustment method, we make two separate weighting adjustments to attempt to compensate for nonresponse: an eligibility determination adjustment and a completion adjustment.

The overall probability of having a known eligibility status is estimated with a logistic regression model. The probability that sample beneficiary *i* has a known eligibility status is:

$$\hat{\lambda}_i = P\left[E_i = 1 \mid X_i\hat{\beta}\right]$$
$$= \left[1 + \exp\left(-X_i\hat{\beta}\right)\right]^{-1}$$

where

$$E_i = \begin{cases} 1 \text{ if sample beneficiary } i \text{ has eligibility status determined} \\ 0 \text{ otherwise} \end{cases}$$

and X_i is a vector of HCSDB response predictors (main effects and interaction terms) and $\hat{\beta}$ are the estimated regression coefficients.

To determine the best set of response predictors we fit models using unweighted stepwise, backward, and forward logistic regression procedures in SAS. We developed a model for Continental U.S. (CONUS) and Outside of Continental U.S. (OCONUS) separately and included as response predictors an indicator variable for each TNEX region. Besides TNEX region, an indicator of whether a beneficiary is in a catchment area or not was added in the model. In the full model, we included all nine variables (TNEX region, age, beneficiary group, PCM, personnel category, rank, sex, service, and an indicator for being in a catchment area) and interactions identified by the CHAID analysis as response predictors. We re-ran the three resulting unweighted models using weights and the sample design characteristics in SUDAAN. We estimated the coefficients using a weighted logistic regression procedure in SUDAAN, which incorporates the stratified design in estimating standard errors for the coefficients. We selected the model with the best Hosmer and Lemeshow (H-L) goodness-of-fit test from both SAS and SUDAAN since all models have similar concordance-discordance rates.

For each eligibility determination model, we ordered the list of response propensity scores and then divided them into groups of equal size. Ten weighting classes were formed from the deciles of the propensity score for CONUS. For OCONUS we formed five classes using the quintiles of the propensity scores.

For the completion adjustment stage, we formed the weighting classes using the results from the CHAID trees; the number of weighting classes was determined by the number of the terminal nodes in the CHAID trees. Because we observed little variation in the questionnaire-completion adjustment stage, the modeling was not necessary, and instead the weighting classes were formed directly from the CHAID trees.

In addition, we poststratified the nonresponse-adjusted weights to the frame totals to obtain specific domain weighted totals equal to population totals. The poststrata were defined by stratification variables—TNEX region, catchment area, and enrollment status, and were collapsed to form poststrata of sufficient size. Due to the possibly insufficient sample size constraint within each TNEX region, we stratified by catchment area only for those enrolled with military primary care manager. The poststratification adjustment factor for the hth poststratum is defined as:

$$A_h^{PS} = \frac{N_h}{\sum_{i \in h} W_i^C}$$

where W_i^C is the nonresponse-adjusted weights, and N_h is the total number of beneficiaries in the DEERS frame associated with the hth poststratum. We calculated the poststratified adjusted weight for the ith sample record from the hth poststratum by the following:

$$W_{hi}^{PS} = A_h^{PS} \times W_i^C$$

Therefore, when summed over all respondents in poststratum h, the poststratified weights now total N_h.

Lastly, we evaluated the weights and trimmed some extreme weights to reduce excessive effect of extreme weights to variance inflation. Whenever some weights were trimmed, we re-poststratified the weights to produce the final survey weights.

5. Calculation of Combined Annual Weights

As a final step, we constructed a dataset combining the three consecutive quarterly data files. Because there were a total of 1015 late respondents who were not included in the Quarters I–II 2013 files, the first two quarters were re-weighted before they were merged into the combined annual dataset. The new Quarters I–II datasets contain the responses of respondents who "trickled" in past the deadline for the survey. After reweighting the Quarters I–II datasets, the Quarters I–II datasets and the Quarter III dataset were merged to form a combined annual dataset with data for all three quarters.

Because the combined annual dataset sample sizes are sufficiently large to provide statistically reliable estimates, users will be able to calculate survey estimates for subdomains, such as catchment areas (XCATCH). Construction of an appropriate annual weight will allow users to consider the combined data as the data from a single survey. Quarterly weights are still included so that users may continue to calculate quarterly estimates and retain the ability to combine any sequential three quarters into a combined data set.

The method used for combining the three quarters of data and calculating combined estimates assumes that the variance in estimates from one quarter to the next is merely due to sampling variation. That is, combined estimates can be calculated from the three independent samples by averaging the estimates for the three quarters. These combined estimates will, in fact, be more precise than the quarterly estimates because they average out the variation across quarters (For a further discussion, see Friedman, et al. 2002).

We calculated the final survey weight for each quarter within the combined dataset. Without the loss of generality, let us denote the current quarter by Q3. Then, the combined dataset would include the three quarterly datasets: Q1, Q2, and Q3. Let us denote quarterly final survey weights by WQ1, WQ2, and WQ3. To retain the sum of the weights from the combined data as the population count, we average the population over the three quarters, by rescaling each quarterly survey weight as follows in order to develop a combined annual weight:

(1) $$WCOM = q_i \times WQi$$

where q_i is between 0 and 1 with the constraint $q_1 + q_2 + q_3 = 1$. We can make the choice of the appropriate value for each of the q_i's based on various assumptions. We have decided that each quarterly contribution to the annual weight should be equal and therefore the value of each q_i is as follows:

$$q_1 = 0.33; q_2 = 0.33; q_3 = 0.33$$

Then, the weight for the combined annual data will be *WCOM* in (1).

The final data file retains the quarterly sampling stratum variables and quarterly weight as calculated using the response propensity (FWRWT) and the combined weights (CFWT). The file also contains an indicator variable for the quarters. From this combined dataset, one can calculate both combined data and revised quarterly estimates.

6. Calculation of Quarterly Jackknife Replicate Weights

Calculation of variance estimates in the HCSDB requires a design-based variance estimation technique that is available in most statistical software packages for analysis from a complex survey data, such as WesVarPC® (Brick et al. 1996), SUDAAN®, SAS/STAT® version 8 or higher, and STATA®. This technique requires sample design information, including the sampling weight and stratification information. As an alternative, a replication technique such as the Jackknife method can be used to calculate variance estimates. In the HCSDB, a series of jackknife replicate weights are calculated and attached to each beneficiary record in the database. In jackknife replication, deleting selected cases from the full sample generates the prescribed number of replicates.

To construct the quarterly HCSDB replicate weights, the quarterly file of sampled beneficiaries is first sorted in sample selection order in which the stratification variables are used in the sorting process. Next, 60 mutually exclusive and exhaustive systematic subsamples of the full sample are identified in the sorted file. A jackknife replicate is then obtained by dropping one subsample from the full sample. As each subsample is dropped in turn, 60 sets of jackknife replicates are produced. The weighting process after the modeling is applied to the full sample is then applied separately to each of the jackknife replicates to produce a set of replicate weights for each record. The propensity score modeling was skipped. Instead the weighting cells from the propensity scores from the full sample weight were adopted in the replicate weights construction. Then, a series of jackknife replicate weights (FWRWT1-FWRWT60) is attached to the final data in order to construct jackknife replication variance estimates. These replicate weights should be used to estimate variances of quarterly estimates.

7. Calculation of Annual Jackknife Replicates

Since 60 quarterly replicate weights are available in each quarter, 180 annual replicate weights(CFWT1 – CFWT180) were constructed as follows:

Figure 1: Construction of Annual replicate weights based on the quarterly replicate weights
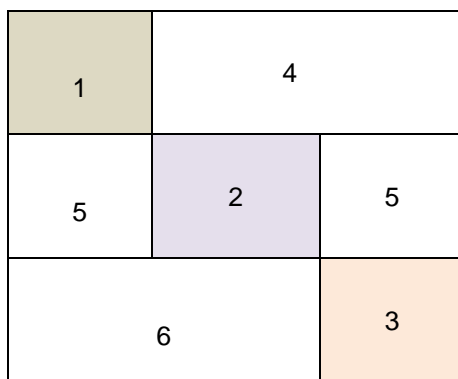
1 – Q1 Replicate Weights
2 – Q2 Replicate Weights

3 – Q3 Replicate Weights
4 – Q1 Final weights
5 – Q2 Final weights
6 – Q3 Final weights

Each quarterly replicate weight was put into the data set as a form of block diagonal (1, 2, 3), and the quarterly final weights were put into the dataset for off-diagonal (4, 5, 6). This construction was based on the assumption that each quarterly sample was independent. The use of the quarterly final weights as the replicate weights for off-diagonal units in the dataset does not introduce variability into the variance. In fact, the replicate estimates from the off-diagonal are equal to the full sample estimate, because the replicate weights on the off-diagonal are same as the quarterly final weight. Thus, the values of variance factor $(\hat{\theta}_{hi} - \hat{\theta})^2$, i.e., the difference between the estimates calculated from the replicate r and that calculated on the basis of full sample, is zero for replicates with off-diagonal units only.

The general formula for the jackknife variance estimator in SUDAAN (RTI 2002) can be expressed as:

$$v_{Jack}\left(\hat{\theta}\right) = \sum_{h} \frac{N_h - D_h}{D_h R_h} \sum_{i} \left(\hat{\theta}_{hi} - \hat{\theta}\right)^2$$

where

N_h is the number of PSUs or clusters within the stratum *h*,

D_h is the number of PSUs or clusters deleted in creating the replicate,

R_h is the number of replicates selected,

$\hat{\theta}_{hi}$ is the estimate of the parameter θ from the *i*-th replicate of the *h*-th stratum,

$\hat{\theta}$ is the estimate based on the entire sample.

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Chapter

3

Analysis

This chapter explains how the HCSDB variables were processed during the analysis phase of the project. It covers the procedures for calculating response rates, developing dependent and independent variables for the analysis and estimating the variance of the statistics.

A.   RESPONSE RATES

In this section, we present the procedures for response rate calculations along with a brief analysis of response rates for domains of interest. Response rates for the 2013 HCSDB were calculated in the same way since 2006. The procedure is based on the guidelines established by the Council of American Survey Research Organizations (CASRO 1982) for defining a response rate.

1.   Definition of Response Rates

In calculating response rates and related measures, we considered two different rates: *unweighted* and *weighted*. The unweighted version of the response rate represents the counted proportion of respondents among all sampled units, and the weighted version indicates the estimated proportion of respondents among all population units. When sampling rates across all strata are equal, these two approaches give the same result. However, the 2013 HCSDB used different sampling rates across strata. So, it is useful to show both "unweighted" and "weighted" response rates. We calculated these two response rates in the same way. As presented in Chapter 2, all sampled beneficiaries were completely classified into these four main (seven detailed) groups:

- Group 1 (G1-1): eligible and complete questionnaire returned;
- Group 1 (G1-2): eligible and incomplete questionnaire returned;
- Group 2: eligible and questionnaire not returned;
- Group 3 (G3-1): returned ineligible
- Group 3 (G3-2): ineligible at time of Altarum address update
- Group 4 (G4-1): eligibility unknown and locatable; and
- Group 4 (G4-2): eligibility unknown and unlocatable.

The unweighted counts reflect the number of sampled cases (n_i for Group *i*, where *i* =1,2,3,4), and the weighted counts reflect the estimated population size[2] ($\hat{N}_i$ for Group *i*, where *i* =1,2,3,4) for the four main response categories.

These weighted and unweighted counts were also calculated for the subgroups G1-1, G1-2, G3-1, G4-1, and G4-2, where we denote the unweighted counts by $n_{1,1}$, $n_{1,2}$, $n_{3,1}$, $n_{4,1}$, and $n_{4,2}$, and the weighted counts by $\hat{N}_{1,1}, \hat{N}_{1,2}, \hat{N}_{3,1}, \hat{N}_{4,1}, \text{and } \hat{N}_{4,2}$. With these values, we calculated response rates as follows.

---

[2] The weighted sum of sampled units can be regarded as an estimated population size. The base weight (BWT) was used in calculating weighted counts, where BWT is the inverse of selection probability.

Response rates can be partitioned into two measures: the location rate and the completion rate. To calculate the location rate, we first estimated the number of Group 4 "located" beneficiaries who were expected to be eligible for the survey:

(1)

$$ l = \left(\frac{n_1 + n_2}{n_1 + n_2 + n_{3,1}} \right) n_{4,1} \qquad \text{and} \qquad l_w = \left(\frac{\hat{N}_1 + \hat{N}_2}{\hat{N}_1 + \hat{N}_2 + \hat{N}_{3,1}} \right) \hat{N}_{4,1} $$

where l and l_w are unweighted and weighted estimates of the number of "located" beneficiaries among Group 4. Then, the unweighted and weighted "location rates" are defined by:

(2)

$$ LR = \frac{n_1 + n_2 + l}{n_1 + n_2 + n_4 \left(\dfrac{n_1 + n_2}{n_1 + n_2 + n_{3,1}} \right)} \qquad \text{and} \qquad LR_w = \frac{\hat{N}_1 + \hat{N}_2 + l_w}{\hat{N}_1 + \hat{N}_2 + \hat{N}_4 \left(\dfrac{\hat{N}_1 + \hat{N}_2}{\hat{N}_1 + \hat{N}_2 + \hat{N}_{3,1}} \right)}. $$

And the corresponding unweighted and weighted "completion rates" are defined by:

(3)

$$ CR = \frac{n_{1,1}}{n_1 + n_2 + l} \qquad \text{and} \qquad CR_w = \frac{\hat{N}_{1,1}}{\hat{N}_1 + \hat{N}_2 + l_w}. $$

The final response rates in Equation (4) can be obtained by multiplying the location rate in Equation (2) by the completion rate in Equation (3).

(4)

$$ FRR = LR \times CR \quad \text{and} \quad FRR_w = LR_w \times CR_w $$

In the definitions in Equations (1) through (4), the subscript "w" indicates that all calculations involve weighted counts. The method used to calculate response rates is consistent with the CASRO guidelines.

2. Reporting

We examined response rates to identify patterns across different domains or characteristics. While analysts prefer weighted rates that reflect the estimated proportion of respondents among all population beneficiaries, operational staff often is interested in getting unweighted measures. All tables include unweighted and weighted values under columns headed "RR" and "RR$_w$", respectively. In the following, we focus on discussing unweighted response rates for domains of interest.

Table 3.1 includes overall response rates for the 2013 HCSDB for Quarters I-III, separate and combined. It also contains response rates by beneficiary groups, and by enrollment status:

- ▪ Overall: The overall unweighted response rate for the combined 2013 Adult HCSDB was 17.6 percent (which is found in Table 3.1 in the row of "Overall"). This rate is slightly lower than 20.1 percent rate achieved in the combined 2012 Adult HCSDB.

- ▪ Beneficiary group and enrollment status: All response rates calculated by beneficiary group and enrollment status show similar patterns to the 2012 survey, i.e., active duty beneficiaries and their family members had the lowest response rates and beneficiaries 65 years and older had the highest rate.[3]

- ▪ The response rates for the first two quarters include late respondents (respondents whose survey "trickled-in" after the deadline).

TABLE 3.1

RESPONSE RATES OVERALL AND BY ENROLLEE BENEFICIARY GROUP: QUARTERS I-III, 2013

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR (%)	RR$_W$ (%)	RR (%)	RR$_W$ (%)	RR (%)	RR$_W$ (%)	RR (%)	RR$_W$ (%)
Overall	19.4	36.0	17.1	32.8	16.2	30.9	17.6	33.2
Active Duty	13.9	11.7	12.6	10.5	13.3	11.3	13.3	11.1
Active Duty fam,Prime,civ PCM	13.4	13.2	13.2	13.1	10.9	10.9	12.5	12.4
Active Duty fam,Prime,mil PCM	14.1	14.4	12.6	11.9	11.0	10.6	12.6	12.3
Active Duty fam,non-enrollee	10.7	10.5	9.1	9.2	8.8	9.6	9.6	9.8
Retired,<65,civ PCM	39.0	40.1	36.2	36.9	30.1	31.0	35.1	36.0
Retired,<65,mil PCM	37.7	38.5	30.8	32.2	28.5	29.1	32.3	33.3
Retired,<65,non-enrollee	31.9	35.7	27.3	31.0	24.6	28.5	27.9	31.7
Retired,65+,enrollee	66.0	66.4	61.5	61.4	66.0	66.2	64.4	64.6
Retired,65+,non-enrollee	67.2	67.2	62.7	62.6	59.5	59.3	63.1	63.0
TRICARE Reserve Select	17.0	17.0	14.5	14.5	14.9	14.9	15.5	15.4

RR = Weighted

RR$_w$ = Unweighted

Appendix D (Response Rate Tables) contains tables showing unweighted and weighted response rates for all three quarters and the combined annual dataset. We summarize results about unweighted response rates for selected domains as follows:

- ▪ TNEX Regions: Combined response rates across regions range from 14.9 percent for Overseas to 20.8 percent for North (Table D.9).

- ▪ Sex: Combined response rate for men is 17.5 percent as compared to 17.6 percent for women. (Table D.3).

- ▪ CONUS: Combined response rate for Western Pacific is 13.3 percent as compared to 19.1 percent for Latin America. (Table D.2).

- ▪ Catchment areas: Combined response rates across catchment areas range from 8.2 percent for Guthrie AHC-Ft. Drum to 35.4 percent for Walter Reed AMC-Washington DC. (Table D.6).

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[3] However, response patterns vary considerably across beneficiary and enrollment groups. The relatively low level of response for active duty persons and their family members could be due to frequent relocations and our inability to receive new addresses in a timely manner.

- Beneficiary groups by sex: Women respond at a higher rate than men for both Active Duty and Active Duty family members, 15.9 percent versus 12.8 percent and 12.2 percent versus 6.7 percent, respectively. The opposite pattern emerges for retirees, survivors and family members 65 and older, 59.2 percent for women versus 67.7 percent for men. The response rates for retirees less than 65 are 32.2 for men vs 29.5 for women. (Table D.11).

- Beneficiary group by service affiliation (Army, Navy, Air Force, Marine Corps, Coast Guard, Other/Unknown): Among service affiliations, the smallest combined response rate comes from Active Duty in the Marine Corps with 6.7 percent and the largest from retired beneficiaries over 65 from Air Force with 65.3 percent (Table D.12).

B.   VARIANCE ESTIMATION

Due to the complex sample design, variance estimation for the 2013 HCSDB is not simple, and may be most easily achieved using one of two methods. The first, the Taylor series linearization via SUDAAN (Shah et al. 1996) or SAS/STAT version 8 or higher, is a direct variance estimation method, which may be used to calculate the standard errors (the square root of the variance) of estimates. For the 2013 HCSDB analyses, we used the Taylor series linearization method. For analysts who prefer a replication method of variance estimation, replicate weights for jackknife replication are provided in the public use file. This section details the two approaches to calculating variance estimates of the characteristics of interest associated with the 2013 HCSDB.

1.   Taylor Series Linearization

Mathematica uses Taylor series linearization to produce standard errors for the estimates from the 2013 HCSDB. For most sample designs, including the 2013 HCSDB, design-based variance estimates for linear estimators of totals and means can be obtained with explicit formulas. Estimators for nonlinear parameters, such as ratios, do not have exact expressions for the variance. The Taylor series linearization method approximates the variance of a nonlinear estimator with the variances of the linear terms from the Taylor series expansion for the estimator (Woodruff 1971). To calculate variance estimates based on the Taylor series linearization method, given HCSDB's stratified sampling design, we need to identify stratum as well as the final analysis weight for each data record. We included these variables on the final database. For variance estimation, we use the general-purpose statistical software package SUDAAN to produce Taylor series variance estimates. SUDAAN is the most widely used of the publicly available software packages based on the Taylor series linearization method. In SUDAAN, the user specifies the sample design and includes the stratum variables and the analysis weight for each record. Unlike WesVarPC, SUDAAN allows for unlimited strata, so stratification effects can be incorporated in calculating standard errors.

2.   Jackknife Replication

Resampling methods are often used in estimating the variance for surveys with complex designs. In resampling, the sample is treated as if it was a population, and many smaller samples are drawn from the original sample (Lohr 1999, pages 298-308). The subsamples are then used to compute the variance. Replication methods have been recommended for surveys in which the sample design is complex, nonresponse adjustments are needed, and statistics of interest are complicated. In such surveys, the usual design-based estimation formula is extremely difficult or impossible to develop (see, for example, Wolter 1985, pages 317-318). Jackknife replicate weights can be used to calculate the standard errors of estimates. An estimate of a characteristic of interest is calculated (with the same formula as the full sample estimate) using each set of replicate weights; these replicate estimates are used to derive the variance of the full sample statistic.

The jackknife variance of the full sample statistic of interest is estimated from the variability among the replicated estimates. When the replicate weights are produced according to the above procedure, jackknife replicate standard errors can be produced using custom written software or publicly available statistical software. For instance, WesVarPC® (Brick et al. 1996) is a popular software package that calculates standard errors based on replication methods. It produces standard errors for functions of survey estimates such as differences and ratios as well as simple estimates such as means, proportions, and totals. Additional details about the jackknife replication approach are given in Wolter (1985). Like other replication methods, the jackknife variance estimation can be easily implemented for any form of estimate without further algebraic work.

C.   SIGNIFICANCE TESTS

In certain charts in the adult report cards and the "Health Care Survey of DoD Beneficiaries: Annual Report", statistical testing is done to show which columns of the chart (values of the independent variable) are statistically different from all CONUS regions as a whole. Positional arrows show if a region is statistically better than the CONUS regions (an arrow pointing up) or statistically worse than the CONUS regions (an arrow pointing down); if there is no arrow, there is no statistical difference.

The null hypothesis for this significance test is that the mean for the column is essentially equal with the CONUS mean, and the alternative is that the mean for the column is different from the CONUS mean. That is, we are testing:

$$H_0: \mu_1 = \mu_2 \quad \text{vs.} \quad H_a: \mu_1 \neq \mu_2$$

For instance, μ_1 might represent the characteristic of interest for the active duty group while μ_2 might represent the same characteristic for all CONUS regions.

With large sample sizes, the estimator $\overline{y}_1 - \overline{y}_2$ is approximately distributed as a normal distribution with mean zero and variance $\sigma^2_{\overline{y}_1 - \overline{y}_2}$ under the null hypothesis. In testing the hypothesis, a test statistic T is thus calculated as:

$$T = \frac{\overline{y}_1 - \overline{y}_2}{\hat{\sigma}_{\overline{y}_1 - \overline{y}_2}}.$$

With $\alpha = 0.05$, the null hypothesis should be rejected if $|T| > 1.96$. The denominator of T, the standard error of $\overline{y}_1 - \overline{y}_2$, can be calculated as the square root of the variance estimator $\hat{\sigma}^2_{\overline{y}_1 - \overline{y}_2}$:

$$\hat{\sigma}^2_{\overline{y}_1 - \overline{y}_2} = \text{var}(\overline{y}_1) + \text{var}(\overline{y}_2) - 2\text{cov}(\overline{y}_1, \overline{y}_2).$$

If $\overline{y}_1$ and $\overline{y}_2$ are independent, then the covariance term equals zero and thus the variance estimator can be easily obtained as the sum of two individual variance estimators. However, there are some cases in which the condition of independence does not hold. For example, active duty MTF group is not independent with the CONUS regions because these two domains share active duty group within the CONUS regions. So the covariance term should be incorporated in calculating the variance estimator of the estimator of the difference. With suitable algebra and program modification, these covariance terms were calculated for all such cases. All detailed programs are included in Appendix G.

D. DEMOGRAPHIC ADJUSTMENTS

All scores in the TRICARE Beneficiary Reports are adjusted for patient characteristics affecting their scores. Scores can be adjusted for a wide range of socioeconomic and demographic variables.

The purpose of risk adjustment is to make comparisons of outcomes, either internally or to external benchmarks, that control for characteristics beyond the health care provider's control. Based on previous work with satisfaction scales derived from Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, it appears that satisfaction increases with age and decreases with poor health across social classes and insurance types. Besides, controlling for these factors, the methodology used does the following:

- Permits risk-adjusted comparisons among regions and catchment areas within and across beneficiary and enrollment groups

- Permits testing the hypothesis that the difference in risk-adjusted scores between a region or catchment area and a benchmark is due to chance

- Is appropriate for CAHPS composites and global satisfaction ratings.

The methodology used is an adaptation of that found in CAHPS 2.0 Survey and Reporting Kit (DHHS, 1999).

The model used for this adjustment is:

$$Y_{ijkl} = \beta_{1l}A_{1l} + \beta_{2l}A_{2l} + ... + \beta_{5l}A_{5l} + \beta_{6l}P_l + \varepsilon_{ijkl} ,$$

where Y_{ijkl} is a dependent variable, β_{ql}'s are parameters to be estimated, A_{ql}'s are age dummy variables ($A_{ql} = 1$ if the beneficiary is in age group q, and 0 otherwise; A_1 = age 18-24, A_2 = age 25-34, A_3 = age 35-44, A_4 = age 45-54, A_5 = age 55-64), P_l is health status. The subscripts *i, j, k and l* refer to the service/region, MTF, beneficiary, and beneficiary's enrollment group, respectively.

Given 24 region and service combinations and *J*+1 catchment areas, the specifications that we use are:

$$\varepsilon_{ijkl} = \delta_{0l} + \delta_{1l}R_{1l} + \delta_{2l}R_{2l} + ... + \delta_{24l}R_{24l} + w_{ijkl} ,$$

where R_i's are service/region dummy variables ($R_{il} = 1$ if the beneficiary is in service/region *i* and beneficiary group *l*, and 0 otherwise), and

$$\varepsilon_{ijkl} = \gamma_{0l} + \gamma_{1l}H_{1l} + \gamma_{2l}H_{2l} + ... + \gamma_{Jl}H_{Jl} + w_{ijkl} ,$$

where H_{ij}'s are catchment area dummy variables ($H_{jl} = 1$ if the beneficiary is in catchment area *j* and beneficiary group *l*, and 0 otherwise). The first specification is used when catchment area values are not reported, and the second when catchment areas are reported.

The methods for calculating demographically adjusted values and testing hypotheses of differences in demographically adjusted scores among geographic areas vary with the way ε_{ijkl} is defined. For specification 1, the adjusted mean of the dependent variable *Y* for region *i* can be obtained as:

$$\overline{y_i} = \hat{\delta}_0 + \hat{\delta}_i + \hat{\beta}_1\hat{A}_1 + \hat{\beta}_2\hat{A}_2 + ... + \hat{\beta}_5\hat{A}_5 + \hat{\beta}_6\hat{P} ,$$

where $\hat{\beta}_i$'s are estimated model parameters, $\hat{A}_i$'s are weighted proportions of age group *i* among the total U.S. population, and $\hat{P}$ is the weighted MHS mean of the variable *P*. For beneficiary group *l*, the adjusted regional value is:

$$\overline{y_{il}} = \hat{\delta}_{0l} + \hat{\delta}_{il} + \hat{\beta}_{1l}\hat{A} + \hat{\beta}_{2l}\hat{A}_{2l} + ... + \hat{\beta}_{5l}\hat{A}_{5l} + \hat{\beta}_{6l}\hat{P}_l,$$

where $\hat{A}_{ql}$'s are weighted proportions of age group *q* in the MHS.

For specification 2, an adjusted catchment area value can be calculated as:

$$\overline{y_{ijl}} = \hat{\gamma}_{0l} + \hat{\gamma}_{ijl} + \hat{\beta}_{1l}\hat{A}_{1l} + \hat{\beta}_{2l}\hat{A}_{2l} + ... + \hat{\beta}_{5l}\hat{A}_{5l} + \hat{\beta}_{6l}\hat{P}_l,$$

while the regional value is calculated using specification 1.

Standard errors then can be estimated as the standard error of residuals for catchment areas or regions using SUDAAN. These standard errors can be used in hypothesis tests comparing adjusted values to other adjusted values or to external benchmarks. Composite values are calculated as averages of regional or catchment area adjusted values for questions making up the composites, in which each question is equally weighted.

Benchmarks can also be adjusted for age and health status as are scores taken from survey responses. If the benchmark data set contains age and health status information, we fit a model of the form

$$y = \alpha + \beta_1 A_1 + \beta_2 A_2 + ... + \beta_5 A_5 + \beta_6 P$$

where the A's are age groups and P is health status. Then the adjusted benchmark is

$$\hat{y}_l = \hat{\alpha} + \hat{\beta}_1\overline{A}_{1l} + \hat{\beta}_2\overline{A}_{2l} + ... + \hat{\beta}_5\overline{A}_{5l} + \hat{\beta}_6\overline{P}_l$$

using the mean values of A and P for beneficiary group l.

The adjusted values for that beneficiary group can then be compared to a benchmark appropriate for their age distribution and health status.

In some cases, it may be desirable for a single benchmark to be presented in comparison to many beneficiary groups. We accomplish this by recentering scores for beneficiary groups. In the Beneficiary Reports, described below, the benchmark presented is the all-users beneficiary group, but scores for many other beneficiary groups are also presented. Each score and benchmark is calculated for the appropriate beneficiary group. Then a recentering factor for each beneficiary group is calculated as the difference in adjusted benchmarks between a beneficiary group and the all-users group. For the all-users group, that recentering factor is zero. The recentering factor is added to the score for each region or catchment area for that beneficiary group. Thus beneficiary groups can also be compared controlling for age and health status and can be compared to the same benchmark.

E.   CALCULATING SCORES

Beneficiary Reports (see below) include four types of scores: CAHPS composites, ratings, a preventive care composite, and a healthy behaviors composite.

Composites and Ratings

The preventive care composite is calculated as $P_i = \Sigma w_i r_i$, where w is the proportion of the eligible population for whom the preventive care measure is relevant and r is the proportion of that eligible group receiving preventive care.

CAHPS composites are calculated as

$$S_i = (1/n_i) \, \Sigma(q_j/k_j),$$

where n_i is the number of questions in the composite *i*, q_j is the number giving a favorable response to question *j* in the composite *i*, and k_j is the number responding to that question *j*. CAHPS ratings are calculated as

$$S_i = q_i/k_i,$$

where q_i is the number giving a favorable response and k_i is the (weighted) number responding to rating *i*. All scores are adjusted for age and health status (see above).

F.   TESTS FOR TREND

In the Beneficiary Reports (see below), we use linear regression to estimate a quarterly rate of change and test it for statistical significance. Our estimate for the rate of change, *T*, is

$$T = \sum_{t=1}^{4} w_t (S_t - \overline{S})(t - \overline{t}) / \sum_{t=1}^{4} w_t (t - \overline{t})^2 \, ,$$

where t is the quarter, S_i is the score and w_i is the total weight of quarter i's observations. In order to test the hypothesis that trend is zero, we use the standard error for the trend coefficient

$$\sigma = \frac{\sqrt{\sum_{t=1}^{4} w_t^2 \sigma_t^2}}{\sum_{t=1}^{4} w_t} \, , \text{ and}$$

$$S = \sigma / \sqrt{\sum_{t=1}^{4} w_t (t - \overline{t})^2 / \sum_{t=1}^{4} w_t}$$

where σ_t is the standard error for quarter t. The hypothesis test is based on a t-test of the hypothesis that T=0, where n is the total number of observations for all 3 quarters p=Prob(abs(T/S)>0,n).

G.   DEPENDENT AND INDEPENDENT VARIABLES

Dependent, or outcome, variables represent the research questions the survey is designed to answer. For example, beneficiary satisfaction and access are dependent variables in this analysis. The research questions are listed in Chapter 1. Generally, dependent variables form the rows of the tables and the vertical axis of the charts.

Independent, or explanatory, variables do not directly represent research questions, but they may help to explain the differences in one or more of the outcome variables. They may also be

correlated with one or more dependent variables. For example, a beneficiary's satisfaction with health care may be correlated with their age and/or TRICARE Prime enrollment status. Each table is designed to help determine whether a particular dependent variable is correlated with a particular independent variable. Independent variables form the columns of the tables and the horizontal axis of the charts.

In analyzing the relationship between dependent and independent variables, Mathematica produced charts and tables that are found in the reports described below. Beginning with the HCSDB in a SAS format, Mathematica programmers developed SAS procedures such as PROC FREQ and PROC MEANS and SAS-callable SUDAAN procedures such as PROC DESCRIPT and PROC CROSSTAB to generate the relevant statistics (e.g., per cents, means, and standard errors). These statistical values were moved directly from SAS programs to Excel tables using a dynamic data exchange to populate the cells of the tables. Graphical displays were generated from table values wherever feasible.

H.   REPORTS

This section lists the three types of reports produced and states the main purpose of each report: 2013 TRICARE Beneficiary Reports, the TRICARE Consumer Watch, and the "Health Care Survey of DoD Beneficiaries: Annual Report." The 2013 TRICARE Beneficiary Reports and the TRICARE Consumer Watch are presented on a quarterly basis and display results from the most recent quarter. The "Health Care Survey of DoD Beneficiaries: Annual Report" is produced annually and describes findings from all three quarters of survey data.

1.   2013 TRICARE Beneficiary Reports

a.   Purpose

The purpose of the Beneficiary Reports is to provide TRICARE Regional offices, services and MTF commanders with a comprehensive description of TRICARE beneficiaries' satisfaction with care, access to care, and use of preventive care, in comparison with other regions and catchment areas, and with relevant national benchmarks. MHS scores are adjusted using demographic characteristics. Both quarterly and annual Beneficiary Reports are produced. The quarterly reports present results from the most recent quarter for each region, service and for CONUS MHS by beneficiary status and enrollment group, making it easy for the reader to compare findings across groups and quarters. The annual report is a cumulative report that combines results from this year's three quarters and full files from previous years presenting results by catchment area, region, and service.

b.   Beneficiary Report Production

1.   Content

The quarterly Beneficiary Report presents 12 scores for all beneficiary groups and all enrollment groups by region and CONUS MHS overall. Scores are presented in the following areas: getting needed care; getting care quickly; courteous and helpful office staff; how well doctors communicate; customer service; claims processing; rating of the health plan, health care, personal doctor, and specialist; healthy behavior; and preventive care standards. The first 6 scores are CAHPS composites, which group together responses to several related survey questions. The CAHPS composite questions are shown in Appendix E. The scores are presented in relation to national benchmarks.

The four ratings of health care and health care providers are health plan, health care, personal doctor, and specialist. Each rating is based on a scale of 0 to 10, where 0 is the worst and 10 is the best. The scores are adjusted for patient age and health status and are presented relative to national benchmarks.

The TMA Standard Composite for preventive care is based on how beneficiaries compare preventive care services offered through the MHS with the Healthy People 2020 goals. Preventive care indicators include prenatal care, hypertension, mammography, and Pap smears.

Healthy behavior combines the non-smoking rate, the rate at which smokers are counseled to quit, and the percent non-obese.

2. Format

a. Programming Specifications

Data for the Beneficiary Reports is arranged in a SAS data set, consisting of records indexed by region, service, catchment area, enrollment group, beneficiary category, and table column. Records contain scores and categorical variables showing the existence and directions of significant differences. The benchmark record contains national mean values, where available, for a comparable non-MHS population.

Data files serve as the basis for the electronic reports and quality assurance. The file for the quarterly Beneficiary Reports is updated each quarter and referenced by the report card application. In each quarter, a separate file is created. The quarterly and annual Beneficiary Reports are coded in HTML and a program generates the information in the form of a data set corresponding to the cells in the tables of the reports described below. Appendix G contains the programs to generate the Beneficiary Reports.

b. Web Specifications

Quarterly Beneficiary Reports are published in a tabular, interactive, HTML format on TRICARE's website, allowing users to "drill down" in the reports to follow the performance of the MHS over time by enrollment status and beneficiary group. Each report consists of several pages of tables. The first set of tables presents the findings for a single quarter for all enrollment and beneficiary groups by region and CONUS MHS. A second set of tables presents the findings for the current quarter and for the past quarters for each enrollment and beneficiary group, by regions and CONUS MHS. Significant differences between the scores and the benchmark are indicated by color, bolding and italics. Scores significantly above the benchmark are green and bold. Scores significantly below the benchmark are red and italicized.

Like the quarterly report, the annual report is presented in HTML tabular format. One set of tables shows cumulative scores for the 2013 HCSDB by region for all beneficiary groups and enrollment groups. Another set shows scores for the questions that make up the composite, and a third set shows composites or ratings from prior years. The fourth set of tables shows scores for the catchment areas that make up the MHS regions.

2. TRICARE Consumer Watch

a. Purpose

Like the TRICARE Beneficiary Reports, the TRICARE Consumer Watch is targeted to TRICARE Regional offices, services and MTF commanders. TRICARE Consumer Watch presents key results from the quarterly HCSDB in a graphical format. The exhibits present TRICARE beneficiaries' experiences with their health care and health plan and utilization rates for preventive services. The TRICARE Consumer Watch is produced on a quarterly basis for all regions and

three service affiliations. In the final quarter, the TRICARE Consumer Watch is produced for all catchment areas.

Two versions of the quarterly TRICARE Consumer Watch are produced: one for all Prime Enrollees, and one comparing beneficiaries who are enrolled to military facilities (direct care users) with those who rely on civilian care financed by TRICARE through Prime or Standard/Extra (purchased care users).

b.   2013 TRICARE Consumer Watch Production

1.   Content

The Consumer Watch contains graphs presenting four ratings and six composite scores. These graphs are based on data from the Beneficiary Reports. Beneficiaries are asked to rate their experiences with their health care and health plan, and their personal provider on a scale of 0 to 10 where 0 is the worst and 10 is the best. Composite scores evaluate beneficiaries' experiences with the following: getting needed care, getting care quickly, courteous and helpful office staff, how well doctors communicate, customer service, and claims processing.   Using data from the National CAHPS Benchmarking Database (NCBD), ratings and composites are compared to experiences of individuals in civilian health plans. Ratings and composites are also compared to results from previous surveys.

Utilization of preventive care services are measured against the goals established by Healthy People 2020 as well as results from the prior years. Preventive care indicators include preventive cancer screenings, such as mammography and Pap smears, hypertension screening, and prenatal care.   Preventative care also includes a non-smoking rate and the percentage of smokers counseled to quit.

2.   Format

a.   Programming Specifications

Data for the Consumer Watch is arranged in a SAS data set, and consists of records indexed by region, catchment area, enrollment group, and beneficiary category. Scores for the rating and composite graphs utilize the same programs as the TRICARE Beneficiary Reports. The data file for the Consumer Watch is updated each quarter. The programs to generate the Consumer Watch are in Appendix H.

b.   Report Production Specifications

Though the Consumer Watch files reside on TRICARE's website, it is designed to be used primarily in print form. The reports are created in portable document format (PDF). The Consumer Watch is arranged on two pages; the key findings are presented as bar graphs. Preventive care scores are presented in table format.

3.   "Health Care Survey of DoD Beneficiaries: Annual Report"

a.   Purpose

The purpose of the "Health Care Survey of DoD Beneficiaries: Annual Report" is to provide OASD(HA), in general, and TMA, in particular, with a comprehensive national summary of the HCSDB findings. The "Health Care Survey of DoD Beneficiaries: Annual Report" bar charts reflect survey data from all respondents in the domestic MHS and incorporates data from the adult HCSDB for 2013 and previous years.

b.   Procedures for Report Production

1.   Content

The content will reflect areas relevant for policy makers, and may vary from year to year. Possible topics include choices of health plan and sources of health care, access to care, and satisfaction with care.

2.   Programming Specification

Programs for calculation of the statistics appearing in the report are written in SAS-callable SUDAAN. Means and proportions and their standard errors are calculated using PROC DESCRIPT. Tests for linear trends are performed using PROC REGRESS or PROC RLOGIST. Values are compared with benchmarks from the National CAHPS Benchmarking Database. The benchmarks are readjusted for age and health status using the methods described in Chapter 3, Section D above.

3.   Report Production

Numbers and text are presented using publishing software following models developed by importing SUDAAN results into Excel as a text file. Results in the finished report are compared with their Excel models for accuracy. Methods used in the Annual Report are also described in the "Health Care Survey of DoD Beneficiary: Annual Report."

2013 HEALTH CARE SURVEY OF DOD BENEFICIARIES

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APPENDIX A

ANNOTATED QUESTIONNAIRE – QUARTER I

Health Care Survey of DoD Beneficiaries

A world-wide survey of beneficiaries eligible for health care coverage through the military health system

October 2012

According to the Privacy Act of 1974 (5 U.S.C. §552a), the Department of Defense is required to inform you of the purposes and use of this survey. Please read it carefully.

Authority: 10 U.S.C. §1074 (Medical and Dental Care for Members and Certain Former Members, as amended by National Defense Authorization Act of 1993, Public Law 102-484, §706); 10 U.S.C. §1074f (Medical Tracking System for Members Deployed Overseas); 32 C.F.R. §199.17 (TRICARE Program); 45 C.F.R. Part 160 Subparts A and E of Part 164 (Health Insurance Portability and Accountability Act of 1996, Privacy Rule); DoD 6025.18-R (Department of Defense Health Information Privacy Regulation); DoD 6025.13-R (Military Health System Clinical Quality Assurance Program Regulation); 64 FR 22837 (DHA 08 – Health Affairs Survey Data Base, April 28, 1999); and, E.O. 9397 (as amended, November 20, 2008, for SSN collection).

Purpose: This survey helps health policy makers gauge beneficiary satisfaction with the current military health care system and provides valuable input from beneficiaries that will be used to improve the Military Health System.

Routine Uses: None.

Disclosure: Participation is voluntary. Failure to respond will not result in any penalty to the respondent. However, maximum participation is encouraged so that data will be as complete and representative as possible.

YOUR PRIVACY

Your participation in this survey effort is very important. Your responses are confidential and your participation is voluntary. The number on the back of this survey is ONLY used to let us know if you returned your survey so we don't have to send you reminders.

This is your opportunity to tell officials of your opinions and experiences with the current military health care system. It is also an opportunity to provide feedback and identify areas where improvements are needed.

The survey processing center removes all identifying information before sending the results to the Department of Defense.

Your information is grouped with others and no individual information is shared. Only group statistics will be compiled and reported. No information about you as an individual will be disclosed.

SURVEY INSTRUCTIONS

Answer all the questions by marking an "X" in the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☒ Yes ➔ Go to Question 1
☐ No

Please return the completed questionnaire in the enclosed postage-paid envelope within _seven days_. If the envelope is missing, please send to:

> Office of the Assistant Secretary of Defense (Health Affairs)
> TMA/DHCAPE
> c/o Synovate Survey Processing Center
> PO Box 5030
> Chicago, IL 60680-4138

12-040276-01-10

As an eligible TRICARE beneficiary, please complete this survey even if you did not receive your health care from a military facility.

Please recognize that some specific questions about TRICARE benefits may not apply to you, depending on your entitlement and particular TRICARE program.

This survey is about the health care of the person whose name appears on the cover letter. The questionnaire should be completed by that person. If you are not the addressee, please give this survey to that person.

1. Are you the person whose name appears on the cover letter?

Percent of Responses*

| H13001 |

99.6% 1 ☐ Yes ➔ *Go to Question 2*

0.4% 2 ☐ No ➔ Please give this questionnaire to the person addressed on the cover letter.

2. By which of the following health plans are you currently covered?

MARK ALL THAT APPLY.

| H13002A-H13002U |

Military Health Plans

48.8% A ☐ TRICARE Prime *(including TRICARE Prime Remote and TRICARE Overseas)*

12.5% C ☐ TRICARE Extra or Standard (CHAMPUS)

1.2% N ☐ TRICARE Plus

27.7% O ☐ TRICARE for Life

0.7% P ☐ TRICARE Supplemental Insurance

2.2% Q ☐ TRICARE Reserve Select

1.6% S ☐ TRICARE Retired Reserve

0.6% T ☐ TRICARE Young Adult

0.2% U ☐ Continued Health Care Benefit Program (CHCBP) *(a COBRA-like premium-based health care program)*

Other Health Plans

28.6% F ☐ Medicare

2.8% G ☐ Federal Employees Health Benefit Program (FEHBP)

1.2% H ☐ Medicaid

2.0% I ☐ A civilian HMO *(such as Kaiser)*

9.4% J ☐ Other civilian health insurance *(such as Blue Cross)*

1.1% K ☐ Uniformed Services Family Health Plan (USFHP)

7.0% M ☐ The Veterans Administration (VA)

0.2% R ☐ Government health insurance from a country other than the US

4.1% L ☐ Not sure

3. Which health plan did you use for all or most of your health care in the last 12 months?

Percent of Responses*

MARK ONLY ONE ANSWER. | H13003 | | See Note 1_Q1 |

46.2% 1 ☐ TRICARE Prime *(including TRICARE Prime Remote and TRICARE Overseas)*

8.5% 3 ☐ TRICARE Extra or Standard (CHAMPUS)

1.1% 11 ☐ TRICARE Plus

1.9% 12 ☐ TRICARE Reserve Select

0.7% 14 ☐ TRICARE Retired Reserve

0.3% 15 ☐ TRICARE Young Adult

0.0% 16 ☐ Continued Health Care Benefit Program (CHCBP) *(a COBRA-like premium-based health care program)*

23.4% 4 ☐ Medicare (may include TRICARE for Life)

1.7% 5 ☐ Federal Employees Health Benefit Program (FEHBP)

0.5% 6 ☐ Medicaid

1.5% 7 ☐ A civilian HMO *(such as Kaiser)*

6.6% 8 ☐ Other civilian health insurance *(such as Blue Cross)*

0.9% 9 ☐ Uniformed Services Family Health Plan (USFHP)

3.0% 10 ☐ The Veterans Administration (VA)

0.1% 13 ☐ Government health insurance from a country other than the US

3.3% -5 ☐ Not sure

-6 ☐ Did not use any health plan in the last 12 months ➔ *Go to Question 5*

For the remainder of this questionnaire, the term health plan refers to the plan you indicated in Question 3.

4. How many months or years in a row have you been in this health plan?

Percent of Responses*

| H13004 | | See Note 1_Q1 |

1.8% 1 ☐ Less than 6 months ➔ *Go to Question 5*

6.5% 2 ☐ 6 up to 12 months ➔ *Go to Question 5*

8.7% 3 ☐ 12 up to 24 months ➔ *Go to Question 5*

20.0% 4 ☐ 2 up to 5 years ➔ *Go to Question 10*

20.4% 5 ☐ 5 up to 10 years ➔ *Go to Question 10*

42.6% 6 ☐ 10 or more years ➔ *Go to Question 10*

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

These questions ask about the health plan you used before your current plan. The term previous health plan refers to the plan you used for most of your health care prior to the plan you indicated in Question 3.

5. **Which health plan did you use for all or most of your health care BEFORE YOUR CURRENT PLAN?**

Percent of Responses*

MARK ONLY ONE ANSWER.

S13AA01

See Note 1_Q1

See Note 1_AA1

Percent	Code	Response
24.8%	1 ☐	TRICARE Prime *(including TRICARE Prime Remote and TRICARE Overseas)*
10.2%	3 ☐	TRICARE Extra or Standard (CHAMPUS)
1.1%	11 ☐	TRICARE Plus
3.5%	12 ☐	TRICARE Reserve Select
1.0%	14 ☐	TRICARE Retired Reserve
0.3%	15 ☐	TRICARE Young Adult
0.0%	16 ☐	Continued Health Care Benefit Program (CHCBP) *(a COBRA-like premium-based health care program)*
3.5%	4 ☐	Medicare (may include TRICARE for Life)
3.5%	5 ☐	Federal Employees Health Benefit Program (FEHBP)
2.5%	6 ☐	Medicaid
7.2%	7 ☐	A civilian HMO *(such as Kaiser)*
30.2%	8 ☐	Other civilian health insurance *(such as Blue Cross)*
0.4%	9 ☐	Uniformed Services Family Health Plan (USFHP)
2.6%	10 ☐	The Veterans Administration (VA)
0.5%	13 ☐	Government health insurance from a country other than the US
8.9%	-5 ☐	Not sure
	-6 ☐	Did not use any health plan prior to current plan ➜ *Go to Question 10*

6. **Which of the following are reasons you switched from your PREVIOUS health plan?**

Percent of Responses*

MARK ALL THAT APPLY.

S13AA02A-S13AA02W

See Note 1_Q1

See Note 1_AA1

Percent	Code	Response
2.0%	A ☐	I lost my job
0.9%	B ☐	My husband/wife/parent lost his/her job
12.5%	C ☐	I changed jobs
3.9%	D ☐	My husband/wife/parent changed jobs
7.0%	E ☐	I retired from a job that provided coverage
3.6%	F ☐	My husband/wife/parent retired from a job that provided coverage
9.4%	G ☐	Moved to a new area
3.3%	H ☐	I am in the Select Reserves and became active
2.2%	I ☐	My husband/wife/parent is in the Select Reserves and became active
3.5%	J ☐	I am a National Guard or Reserve Member separating from active duty (deactivated)
2.0%	K ☐	My husband/wife/parent is a National Guard or Reserve Member separating from active duty (deactivated)
2.5%	L ☐	Employer changed plans
0.7%	V ☐	Employer stopped providing health coverage
0.5%	M ☐	My doctor or other health care provider left the plan
1.1%	N ☐	I did not like the referral requirements
1.9%	O ☐	I could not get appointments as soon as I wanted
1.6%	P ☐	I was dissatisfied with the plan's customer service
6.9%	Q ☐	Preferred new health plan, because of lower cost, better benefits or some other reason
0.2%	R ☐	It was difficult to find parking at the clinic or doctor's office
1.2%	S ☐	I had to travel too far to get needed care
14.2%	T ☐	Married, divorced, or widowed
14.3%	U ☐	Became eligible for Medicare
16.2%	W ☐	Other

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

7. Which of these reasons is the MAIN reason <u>you switched from your PREVIOUS</u> health plan?

MARK ONLY ONE.

S13AA03
See Note 1_Q1
See Note 1_AA1

- 1.9% ¹ ☐ I lost my job
- 0.4% ² ☐ My husband/wife/parent lost his/her job
- 12.1% ³ ☐ I changed jobs
- 3.6% ⁴ ☐ My husband/wife/parent changed jobs
- 6.6% ⁵ ☐ I retired from a job that provided coverage
- 3.7% ⁶ ☐ My husband/wife/parent retired from a job that provided coverage
- 7.0% ⁷ ☐ Moved to a new area
- 3.1% ⁸ ☐ I am in the Select Reserves and became active
- 2.3% ⁹ ☐ My husband/wife/parent is in the Select Reserves and became active
- 2.8% ¹⁰ ☐ I am a National Guard or Reserve Member separating from active duty (deactivated)
- 1.9% ¹¹ ☐ My husband/wife/parent is a National Guard or Reserve Member separating from active duty (deactivated)
- 2.5% ¹² ☐ Employer changed plans
- 0.6% ²² ☐ Employer stopped providing health coverage
- 0.4% ¹³ ☐ My doctor or other health care provider I see left the plan
- 0.4% ¹⁴ ☐ I did not like the referral requirements
- 0.4% ¹⁵ ☐ I could not get appointments as soon as I wanted
- 0.3% ¹⁶ ☐ I was dissatisfied with the plan's customer service
- 6.9% ¹⁷ ☐ Preferred new health plan, because of lower cost, better benefits or some other reason
- 0.0% ¹⁸ ☐ It was difficult to find parking at the clinic or doctor's office
- 0.5% ¹⁹ ☐ I had to travel too far to get needed care
- 14.3% ²⁰ ☐ Married, divorced, or widowed
- 14.2% ²¹ ☐ Became eligible for Medicare
- 14.0% ²³ ☐ Other

8. Below is a list of problems some people experience with their health insurance plan. Please mark if you experienced any of these problems with your PREVIOUS HEALTH PLAN, even if it was not a reason you switched health plans.

		Yes	No	Not Applicable
a.	I had expensive medical bills not covered by my insurance	18.7% ¹ ☐	81.3% ² ☐	-6 ☐
b.	My doctor charged me more than my insurance would pay and I had to pay the difference	22.6% ¹ ☐	77.4% ² ☐	-6 ☐
c.	A doctor's office told me they do not accept my insurance	15.8% ¹ ☐	84.2% ² ☐	-6 ☐
d.	I had to contact my insurance company because they did not pay a bill promptly or denied payment	19.1% ¹ ☐	80.9% ² ☐	-6 ☐
e.	My plan did not include the specialist I needed	10.4% ¹ ☐	89.6% ² ☐	-6 ☐

S13AA04A-S13AA04E	See Note 1_Q1	See Note 1_AA1

9. When you switched to your CURRENT health plan, did you need to change doctors?

S13AA05
See Note 1_Q1
See Note 1_AA1

- 39.3% ¹ ☐ Yes, changed all doctors
- 8.5% ³ ☐ Yes, changed some doctors
- 41.7% ² ☐ No
- 10.6% -5 ☐ Don't know

YOUR HEALTH CARE IN THE LAST 12 MONTHS

These questions ask about your own health care. Do <u>not</u> include care you got when you stayed overnight in a hospital. Do <u>not</u> include the times you went for dental care visits.

10. In the last 12 months, where did you go most often for your health care?

MARK ONLY ONE ANSWER.

H13005

- 35.3% ¹ ☐ A military facility – This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
- 56.2% ² ☐ A civilian facility – This includes: Doctor's office, Clinic, Hospital, Civilian TRICARE contractor
- 0.8% ³ ☐ Uniformed Services Family Health Plan facility (USFHP)
- 4.5% ⁴ ☐ Veterans Affairs (VA) clinic or hospital
- 3.1% ⁵ ☐ I went to none of the listed types of facilities in the last 12 months

11. In the last 12 months, did you have an illness, injury, or condition that <u>needed care right away</u> in a clinic, emergency room, or doctor's office?

H13006
See Note 2

- 45.1% ¹ ☐ Yes
- 54.9% ² ☐ No ➔ *Go to Question 14*

12. In the last 12 months, when you <u>needed care right away</u>, how often did you get care as soon as you thought you needed?

H13007
See Note 2

- 2.5% ¹ ☐ Never
- 12.7% ² ☐ Sometimes
- 24.1% ³ ☐ Usually
- 60.7% ⁴ ☐ Always
- -6 ☐ I didn't need care right away for an illness, injury or condition in the last 12 months

13. In the last 12 months, when you <u>needed care right away</u> for an illness, injury, or condition, how long did you usually have to wait between trying to get care and actually seeing a provider?

H13008
See Note 2

- 62.2% ¹ ☐ Same day
- 13.7% ² ☐ 1 day
- 7.6% ³ ☐ 2 days
- 4.6% ⁴ ☐ 3 days
- 5.9% ⁵ ☐ 4-7 days
- 3.4% ⁶ ☐ 8-14 days
- 2.7% ⁷ ☐ 15 days or longer
- -6 ☐ I didn't need care right away for an illness, injury or condition in the last 12 months

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

14. In the last 12 months, not counting the times you needed health care right away, did you make any <u>appointments</u> for your health care at a doctor's office or clinic?

86.9%	1 ☐ Yes	H13009
13.1%	2 ☐ No ➔ *Go to Question 17*	See Note 3

15. In the last 12 months, <u>not</u> counting times you needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought you needed?

H13010

See Note 3

- 4.1%   1 ☐ Never
- 14.8%   2 ☐ Sometimes
- 30.4%   3 ☐ Usually
- 50.7%   4 ☐ Always
-   -6 ☐ I had no appointments in the last 12 months

16. In the last 12 months, not counting the times you needed health care right away, how many <u>days</u> did you usually have to wait between making an <u>appointment</u> and actually <u>seeing a provider</u>?

H13011

See Note 3

- 10.1%   1 ☐ Same day
- 12.4%   2 ☐ 1 day
- 24.8%   3 ☐ 2-3 days
- 21.4%   4 ☐ 4-7 days
- 15.6%   5 ☐ 8-14 days
- 11.2%   6 ☐ 15-30 days
- 4.5%   7 ☐ 31 days or longer
-   -6 ☐ I had no appointments in the last 12 months

17. In the last 12 months, how many times did you go to an <u>emergency room</u> to get care for yourself?

H13012

- 70.3%   1 ☐ None
- 18.8%   2 ☐ 1
- 6.4%   3 ☐ 2
- 2.4%   4 ☐ 3
- 1.2%   5 ☐ 4
- 0.8%   6 ☐ 5 to 9
- 4.5%   7 ☐ 10 or more

18. In the last 12 months (not counting times you went to an emergency room), how many times did you go to a <u>doctor's office or clinic</u> to get health care for yourself?

10.8%	1 ☐ None ➔ *Go to Question 24*	
10.9%	2 ☐ 1	H13013
17.2%	3 ☐ 2	
21.4%	4 ☐ 3	See Note 4
14.7%	5 ☐ 4	
21.4%	6 ☐ 5 to 9	
10.1%	7 ☐ 10 or more	

19. In the last 12 months, how often did you and a doctor or other health provider talk about specific things you could do to prevent illness?

H13014

See Note 4

- 13.1%   1 ☐ Never
- 29.8%   2 ☐ Sometimes
- 29.0%   3 ☐ Usually
- 28.1%   4 ☐ Always

20. Choices for your treatment or health care can include choices about medicine, surgery, or other treatment. In the last 12 months, did a doctor or other health provider tell you there was more than one choice for your treatment or health care?

56.9%	1 ☐ Yes	H13015 See Notes 4 and 5
43.1%	2 ☐ No ➔ *Go to Question 23*	

21. In the last 12 months, did a doctor or other health provider talk with you about the pros and cons of each choice for your treatment or health care?

H13016

See Notes 4 and 5

- 65.0%   1 ☐ Definitely yes
- 29.9%   2 ☐ Somewhat yes
- 3.5%   3 ☐ Somewhat no
- 1.6%   4 ☐ Definitely no

22. In the last 12 months, when there was more than one choice for your treatment or health care, did a doctor or other health provider ask which choice you thought was best for you?

H13017

See Notes 4 and 5

- 57.3%   1 ☐ Definitely yes
- 32.0%   2 ☐ Somewhat yes
- 6.7%   3 ☐ Somewhat no
- 4.0%   4 ☐ Definitely no

23. Using <u>any number from 0 to 10</u>, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?

H13018

See Note 4

- 0.7%   0 ☐ 0 Worst health care possible
- 0.3%   1 ☐ 1
- 0.9%   2 ☐ 2
- 1.6%   3 ☐ 3
- 2.2%   4 ☐ 4
- 5.7%   5 ☐ 5
- 5.1%   6 ☐ 6
- 12.7%   7 ☐ 7
- 20.8%   8 ☐ 8
- 18.6%   9 ☐ 9
- 31.4%   10 ☐ 10 Best health care possible
-   -6 ☐ I had no visits in the last 12 months

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

5

YOUR PERSONAL DOCTOR

Percent of Responses*

24. A personal doctor is the one you would see if you need a checkup, want advice about a health problem, or get sick or hurt. Do you have a personal doctor?

H13019 — See Note 6

78.6% 1 ☐ Yes
21.4% 2 ☐ No → *Go to Question 34*

25. In the last 12 months, how many times did you visit your personal doctor to get care for yourself?

8.0% 0 ☐ None → *Go to Question 32*
16.8% 1 ☐ 1
22.1% 2 ☐ 2
18.5% 3 ☐ 3
15.0% 4 ☐ 4
15.2% 5 ☐ 5 to 9
4.4% 6 ☐ 10 or more

H13020 — See Notes 6 and 7

26. In the last 12 months, how often did your personal doctor listen carefully to you?

1.4% 1 ☐ Never
6.2% 2 ☐ Sometimes
17.8% 3 ☐ Usually
74.6% 4 ☐ Always
-6 ☐ I had no visits in the last 12 months

H13021 — See Notes 6 and 7

27. In the last 12 months, how often did your personal doctor explain things in a way that was easy to understand?

1.2% 1 ☐ Never
4.5% 2 ☐ Sometimes
19.7% 3 ☐ Usually
74.6% 4 ☐ Always
-6 ☐ I had no visits in the last 12 months

H13022 — See Notes 6 and 7

28. In the last 12 months, how often did your personal doctor show respect for what you had to say?

1.2% 1 ☐ Never
4.9% 2 ☐ Sometimes
15.5% 3 ☐ Usually
78.4% 4 ☐ Always
-6 ☐ I had no visits in the last 12 months

H13023 — See Notes 6 and 7

29. In the last 12 months, how often did your personal doctor spend enough time with you?

2.2% 1 ☐ Never
6.7% 2 ☐ Sometimes
25.6% 3 ☐ Usually
65.5% 4 ☐ Always
-6 ☐ I had no visits in the last 12 months

H13024 — See Notes 6 and 7

30. In the last 12 months, did you get care from a doctor or other health provider besides your personal doctor?

75.2% 1 ☐ Yes
24.8% 2 ☐ No → *Go to Question 32*

H13025 — See Notes 6, 7, and 8

31. In the last 12 months, how often did your personal doctor seem informed and up-to-date about the care you got from these doctors or other health providers?

Percent of Responses*

8.3% 1 ☐ Never
13.7% 2 ☐ Sometimes
32.8% 3 ☐ Usually
45.2% 4 ☐ Always

H13026 — See Notes 6, 7, and 8

32. Using any number from 0 to 10, where 0 is the worst personal doctor possible and 10 is the best personal doctor possible, what number would you use to rate your personal doctor?

H13027 — See Note 6

0.8% 0 ☐ 0 Worst personal doctor possible
0.5% 1 ☐ 1
0.8% 2 ☐ 2
1.2% 3 ☐ 3
1.6% 4 ☐ 4
4.1% 5 ☐ 5
4.0% 6 ☐ 6
7.9% 7 ☐ 7
15.8% 8 ☐ 8
22.8% 9 ☐ 9
40.5% 10 ☐ 10 Best personal doctor possible
-6 ☐ I don't have a personal doctor

33. Did you have the same personal doctor or nurse <u>before</u> you joined this health plan?

32.8% 1 ☐ Yes → *Go to Question 35*
67.2% 2 ☐ No

S13009 — See Notes 6 and 8_01

34. Since you joined your health plan, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?

S13010 — See Note 8_01

10.9% 1 ☐ A big problem
21.7% 2 ☐ A small problem
67.4% 3 ☐ Not a problem

GETTING HEALTH CARE FROM A SPECIALIST

When you answer the next questions, <u>do not</u> include dental visits or care you got when you stayed overnight in a hospital.

35. <u>Specialists</u> are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and other doctors who specialize in one area of health care.

In the last 12 months, did you try to make any appointments to see a specialist?

Percent of Responses*

61.5% 1 ☐ Yes
38.5% 2 ☐ No → *Go to Question 39*

H13028 — See Note 9

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

6

36. In the last 12 months, how often was it easy to get appointments with specialists?

H13029

See Note 9

- 6.1% 1 ☐ Never
- 13.9% 2 ☐ Sometimes
- 31.2% 3 ☐ Usually
- 48.8% 4 ☐ Always
- -6 ☐ I didn't need a specialist in the last 12 months

37. How many specialists have you seen in the last 12 months?

H13030 See Notes 9 and 10

- 3.5% 0 ☐ None ➜ *Go to Question 39*
- 42.8% 1 ☐ 1 specialist
- 29.5% 2 ☐ 2
- 14.5% 3 ☐ 3
- 5.9% 4 ☐ 4
- 3.8% 5 ☐ 5 or more specialists

38. We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?

H13031 See Notes 9 and 10

- 0.5% 0 ☐ 0 Worst specialist possible
- 0.5% 1 ☐ 1
- 0.9% 2 ☐ 2
- 0.8% 3 ☐ 3
- 1.3% 4 ☐ 4
- 3.7% 5 ☐ 5
- 3.2% 6 ☐ 6
- 8.2% 7 ☐ 7
- 17.2% 8 ☐ 8
- 25.3% 9 ☐ 9
- 38.3% 10 ☐ 10 Best specialist possible
- -6 ☐ I didn't see a specialist in the last 12 months

39. In general, how would you rate your overall mental or emotional health?

S13B01

- 41.0% 1 ☐ Excellent
- 31.0% 2 ☐ Very good
- 19.0% 3 ☐ Good
- 7.3% 4 ☐ Fair
- 1.6% 5 ☐ Poor

40. In the last 12 months, did you need any treatment or counseling for a personal or family problem?

S13B02 See Note 10_B1

- 17.4% 1 ☐ Yes
- 82.6% 2 ☐ No ➜ *Go to Question 43*

41. In the last 12 months, how much of a problem, if any, was it to get the treatment or counseling you needed through your health plan?

S13B03 See Note 10_B1

- 10.9% 1 ☐ A big problem
- 14.7% 2 ☐ A small problem
- 74.4% 3 ☐ Not a problem

42. Using any number from 0 to 10, where 0 is the worst treatment or counseling possible and 10 is the best treatment or counseling possible, what number would you use to rate your treatment or counseling in the last 12 months?

S13B04 See Note 10_B1

- 2.1% 0 ☐ 0 Worst treatment or counseling possible
- 1.4% 1 ☐ 1
- 1.7% 2 ☐ 2
- 2.1% 3 ☐ 3
- 3.8% 4 ☐ 4
- 7.4% 5 ☐ 5
- 6.3% 6 ☐ 6
- 10.5% 7 ☐ 7
- 15.9% 8 ☐ 8
- 19.6% 9 ☐ 9
- 29.3% 10 ☐ 10 Best treatment or counseling possible
- -6 ☐ I had no treatment or counseling in the last 12 months

YOUR HEALTH PLAN

The next questions ask about your experience with your health plan. By your health plan, we mean the health plan you marked in Question 3.

43. In the last 12 months, did you try to get any kind of care, tests, or treatment through your health plan?

H13032 See Note 11

- 74.1% 1 ☐ Yes
- 25.9% 2 ☐ No ➜ *Go to Question 45*

44. In the last 12 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?

H13033 See Note 11

- 2.9% 1 ☐ Never
- 9.1% 2 ☐ Sometimes
- 27.4% 3 ☐ Usually
- 60.5% 4 ☐ Always
- -6 ☐ I didn't need care, tests, or treatment through my health plan in the last 12 months

45. In the last 12 months, did you look for any information in written materials or on the Internet about how your health plan works?

H13034 See Note 12

- 30.6% 1 ☐ Yes
- 69.4% 2 ☐ No ➜ *Go to Question 47*

46. In the last 12 months, how often did the written material or the Internet provide the information you needed about how your plan works?

H13035 See Note 12

- 6.6% 1 ☐ Never
- 28.1% 2 ☐ Sometimes
- 42.4% 3 ☐ Usually
- 22.9% 4 ☐ Always
- -6 ☐ I didn't look for information from my health plan in the last 12 months

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

47. Sometimes people need services or equipment beyond what is provided in a regular or routine office visit, such as care from a specialist, physical therapy, a hearing aid, or oxygen.

| H13036 | See Note 13 |

In the last 12 months, did you look for information from your health plan on how much you would have to pay for a health care service or equipment?

15.4% 1 ☐ Yes
84.6% 2 ☐ No ➔ *Go to Question 49*

48. In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for a health care service or equipment?

| H13037 |
| See Note 13 |

17.2% 1 ☐ Never
19.2% 2 ☐ Sometimes
31.8% 3 ☐ Usually
31.8% 4 ☐ Always
       -6 ☐ I didn't need a health care service or equipment from my health plan in the last 12 months

49. In some health plans, the amount you pay for a prescription medicine can be different for different medicines, or can be different for prescriptions filled by mail instead of at the pharmacy.

In the last 12 months, did you look for information from your health plan on how much you would have to pay for specific prescription medicines?

| H13038 | See Note 14 |

20.6% 1 ☐ Yes
79.4% 2 ☐ No ➔ *Go to Question 51*

50. In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for specific prescription medications?

| H13039 |
| See Note 14 |

11.6% 1 ☐ Never
15.9% 2 ☐ Sometimes
28.9% 3 ☐ Usually
43.5% 4 ☐ Always
       -6 ☐ I didn't need prescription medications from my health plan in the last 12 months

51. In the last 12 months, did you try to get information or help from your health plan's customer service?

| H13040 | See Note 15 |

26.1% 1 ☐ Yes
73.9% 2 ☐ No ➔ *Go to Question 54*

52. In the last 12 months, how often did your health plan's customer service give you the information or help you needed?

| H13041 |
| See Note 15 |

6.3%   1 ☐ Never
17.4% 2 ☐ Sometimes
28.8% 3 ☐ Usually
47.5% 4 ☐ Always
       -6 ☐ I didn't call my health plan's customer service in the last 12 months

53. In the last 12 months, how often did your health plan's customer service staff treat you with courtesy and respect?

| H13042 |
| See Note 15 |

1.4%   1 ☐ Never
8.1%   2 ☐ Sometimes
21.1% 3 ☐ Usually
69.4% 4 ☐ Always
       -6 ☐ I didn't call my health plan's customer service in the last 12 months

54. In the last 12 months, did your health plan give you any forms to fill out?

| H13043 | See Note 16 |

26.4% 1 ☐ Yes
73.6% 2 ☐ No ➔ *Go to Question 56*

55. In the last 12 months, how often were the forms from your health plan easy to fill out?

| H13044 |
| See Note 16 |

2.8%   1 ☐ Never
13.0% 2 ☐ Sometimes
43.3% 3 ☐ Usually
40.9% 4 ☐ Always
       -6 ☐ I didn't have any experiences with paperwork for my health plan in the last 12 months

56. Claims are sent to a health plan for payment. You may send in the claims yourself, or doctors, hospitals, or others may do this for you. In the last 12 months, did you or anyone else send in any claims to your health plan?

| H13045 | See Note 17 |

48.9% 1 ☐ Yes
31.4% 2 ☐ No ➔ *Go to Question 59*
19.7% -5 ☐ Don't know ➔ *Go to Question 59*

57. In the last 12 months, how often did your health plan handle your claims quickly?

| H13046 |
| See Note 17 |

1.4%   1 ☐ Never
6.2%   2 ☐ Sometimes
29.2% 3 ☐ Usually
49.3% 4 ☐ Always
13.1% -5 ☐ Don't know
       -6 ☐ No claims were sent for me in the last 12 months

58. In the last 12 months, how often did your health plan handle your claims correctly?

| H13047 |
| See Note 17 |

1.2%   1 ☐ Never
4.1%   2 ☐ Sometimes
26.0% 3 ☐ Usually
56.6% 4 ☐ Always
12.2% -5 ☐ Don't know
       -6 ☐ No claims were sent for me in the last 12 months

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

8

59. Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?

H13048

0.6%	0 ☐	0 Worst health plan possible
0.4%	1 ☐	1
0.8%	2 ☐	2
0.8%	3 ☐	3
1.7%	4 ☐	4
5.6%	5 ☐	5
5.5%	6 ☐	6
12.4%	7 ☐	7
19.8%	8 ☐	8
20.2%	9 ☐	9
32.3%	10 ☐	10 Best health plan possible

PREVENTIVE CARE

Preventive care is medical care you receive that is intended to maintain your good health or prevent a future medical problem. A physical or blood pressure screening are examples of preventive care.

60. When did you last have a blood pressure reading?

H13049

93.3%	3 ☐	Less than 12 months ago
4.2%	2 ☐	1 to 2 years ago
2.5%	1 ☐	More than 2 years ago

61. Do you know if your blood pressure is too high?

H13050

17.6%	1 ☐	Yes, it is too high
76.6%	2 ☐	No, it is not too high
5.8%	3 ☐	Don't know

62. When did you last have a cholesterol screening, that is, a test to determine the level of cholesterol in your blood?

S13015

62.7%	5 ☐	Less than 12 months ago
14.5%	4 ☐	1-2 years ago
4.6%	3 ☐	More than 2 years but less than 5 years ago
1.9%	2 ☐	5 or more years ago
16.2%	1 ☐	Never had a cholesterol screening

63. When did you last have a flu shot?

H13051

62.9%	4 ☐	Less than 12 months ago
14.8%	3 ☐	1-2 years ago
11.0%	2 ☐	More than 2 years ago
11.3%	1 ☐	Never had a flu shot

64. Have you ever <u>smoked</u> at least 100 cigarettes in your entire life?

H13052

40.0%	1 ☐	Yes
58.7%	2 ☐	No
1.3%	-5 ☐	Don't know

65. Do you now <u>smoke cigarettes</u> or <u>use tobacco</u> every day, some days or not at all?

H13053   See Note 18

9.3%	4 ☐	Every day	➔ *Go to Question 66*
5.7%	3 ☐	Some days	➔ *Go to Question 66*
84.4%	2 ☐	Not at all	➔ *Go to Question 70*
0.6%	-5 ☐	Don't know	➔ *Go to Question 70*

66. In the last 12 months, how often were you advised to quit smoking or using tobacco by a doctor or other health provider in your plan?

H13054   See Note 18

19.1%	1 ☐	Never
24.1%	2 ☐	Sometimes
20.5%	3 ☐	Usually
36.3%	4 ☐	Always

67. In the last 12 months, how often was medication recommended or discussed by a doctor or other health provider to assist you with quitting smoking or using tobacco? *Examples of medication are: nicotine gum, patch, nasal spray, inhaler, or prescription medication.*

H13055   See Note 18

48.3%	1 ☐	Never
24.3%	2 ☐	Sometimes
14.0%	3 ☐	Usually
13.4%	4 ☐	Always

68. In the last 12 months, how often did your doctor or other health provider discuss or provide methods and strategies other than medication to assist you with quitting smoking or using tobacco? *Examples of methods and strategies are: telephone helpline, individual or group counseling, or cessation program.*

H13056   See Note 18

52.5%	1 ☐	Never
22.2%	2 ☐	Sometimes
12.7%	3 ☐	Usually
12.7%	4 ☐	Always

69. On the days you smoke or use tobacco products, what type of product do you smoke or use?

MARK ALL THAT APPLY.

H13057A-H13057D   See Note 18

70.8%	A ☐	Cigarettes
13.8%	B ☐	Dip, chewing tobacco, snuff or snus
12.8%	C ☐	Cigars
2.9%	D ☐	Pipes, bidis, or kreteks *(Pipes include hookahs. Bidis are small, brown, hand-rolled cigarettes from India and other southeast Asian countries. Kreteks are clove cigarettes made in Indonesia that contain clove extract and tobacco.)*

70. Are you male or female?

H13058   See Note 19A

48.0%	1 ☐	Male	➔ *Go to Question 77*
52.0%	2 ☐	Female	

71. When did you last have a Pap smear test?

| H13059B |

See Notes 19A and 19B

- 48.6% 6 ☐ Within the last 12 months
- 25.2% 5 ☐ 1 to 2 years ago
- 6.5% 4 ☐ More than 2 but less than 3 years ago
- 4.5% 3 ☐ More than 3 but less than 5 years ago
- 10.6% 2 ☐ 5 or more years ago
- 4.5% 1 ☐ Never had a Pap smear test

72. Are you under age 40?

H13060

See Notes 19A, 19B, and 20

- 37.1% 1 ☐ Yes ➜ *Go to Question 74*
- 62.9% 2 ☐ No

73. When was the last time your breasts were checked by mammography?

H13061   See Notes 19A, 19B, and 20

- 64.7% 5 ☐ Within the last 12 months
- 18.7% 4 ☐ 1 to 2 years ago
- 6.9% 3 ☐ More than 2 years ago but less than 5 years ago
- 5.1% 2 ☐ 5 or more years ago
- 4.5% 1 ☐ Never had a mammogram

74. Have you been pregnant in the last 12 months or are you pregnant now?

H13062   See Notes 19A,19B, and 21

- 2.7% 1 ☐ Yes, I am currently pregnant ➜ *Go to Question 75*
- 6.3% 2 ☐ No, I am not currently pregnant, but have been pregnant in the past 12 months ➜ *Go to Question 76*
- 91.0% 3 ☐ No, I am not currently pregnant, and have not been pregnant in the past 12 months ➜ *Go to Question 77*

75. In what trimester is your pregnancy?

H13063

- 21.0% 1 ☐ First trimester (up to 12 weeks after 1st day of last period) ➜ *Go to Question 77*
- 41.9% 2 ☐ Second trimester (13th through 27th week)
- 37.1% 3 ☐ Third trimester (28th week until delivery)

See Notes 19A,19B, and 21

76. In which trimester did you first receive prenatal care?

- 90.4% 4 ☐ First trimester (up to 12 weeks after 1st day of last period)
- 5.0% 3 ☐ Second trimester (13th through 27th week)
-        2 ☐ Third trimester (28th week until delivery)
- 4.6% 1 ☐ Did not receive prenatal care

H13064   See Notes 19A,19B, and 21

ABOUT YOU

77. In general, how would you rate your overall health?

H13065

- 17.4% 5 ☐ Excellent
- 39.3% 4 ☐ Very good
- 31.3% 3 ☐ Good
- 9.8% 2 ☐ Fair
- 2.3% 1 ☐ Poor

78. Are you limited in any way in any activities because of any impairment or health problem?

H13066

- 33.4% 1 ☐ Yes
- 66.6% 2 ☐ No

79. In the last 12 months, have you seen a doctor or other health provider 3 or more times for the same condition or problem?

H13067   See Note 22

- 44.0% 1 ☐ Yes
- 56.0% 2 ☐ No ➜ *Go to Question 81*

80. Is this a condition or problem that has lasted for at least 3 months? Do not include pregnancy or menopause.

H13068   See Note 22

- 86.6% 1 ☐ Yes
- 13.4% 2 ☐ No

81. Do you now need or take medicine prescribed by a doctor? Do not include birth control.

H13069   See Note 23

- 67.7% 1 ☐ Yes
- 32.3% 2 ☐ No ➜ *Go to Question 83*

82. Is this medicine to treat a condition that has lasted for at least 3 months? Do not include pregnancy or menopause.

H13070   See Note 23

- 93.3% 1 ☐ Yes
- 6.7% 2 ☐ No

83. Have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month…

S13B23-S13B26

MARK "YES" OR "NO" FOR EACH.

		YES	NO
a.	You have had nightmares about it or thought about it when you did not want to?	10.8% 1 ☐	89.2% 2 ☐
b.	You tried hard not to think about it or went out of your way to avoid situations that reminded you of it?	11.1% 1 ☐	88.9% 2 ☐
c.	You have been constantly on guard, watchful, or easily startled?	9.5% 1 ☐	90.5% 2 ☐
d.	You felt numb or detached from others, activities, or your surroundings?	9.8% 1 ☐	90.2% 2 ☐

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

84. How tall are you without your shoes on?

Please give your answer in feet and inches. Please write one number in each box.

Example: 5 feet. 6 inches

H13071F, H13071I

Percent of Responses* **98.2%**

5		0	6

FEET   INCHES

Your height:

FEET   INCHES

85. How much do you weigh without your shoes on?

Please give your answer in pounds. Please write one number in each box.

H13072

Example: 152 pounds

Percent of Responses* **97.9%**

1	5	2

POUNDS

Your weight:

POUNDS

86. What is the highest grade or level of school that you have completed?

Percent of Responses*

SREDA

- 12.7%   1 ☐   8th grade or less
- 2.0%   2 ☐   Some high school, but did not graduate
- 11.9%   3 ☐   High school graduate or GED
- 43.9%   4 ☐   Some college or 2-year degree
- 15.3%   5 ☐   4-year college graduate
- 17.2%   6 ☐   More than 4-year college degree

87. Are you of Hispanic or Latino origin or descent?

(Mark "NO" if not Spanish/Hispanic/Latino.)

- 87.6%   A ☐   No, not Spanish, Hispanic, or Latino
- 3.7%   B ☐   Yes, Mexican, Mexican American, Chicano
- 2.3%   C ☐   Yes, Puerto Rican
- 0.4%   D ☐   Yes, Cuban
- 3.1%   E ☐   Yes, other Spanish, Hispanic, or Latino

H13073A-H13073E, H13073   See Note 24

88. What is your race?

SRRACEA-SRRACEE

Percent of Responses*

(Mark ONE OR MORE races to indicate what you consider yourself to be.)

- 79.6%   A ☐   White
- 10.7%   B ☐   Black or African American
- 2.0%   C ☐   American Indian or Alaska Native
- 6.0%   D ☐   Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- 0.8%   E ☐   Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

89. What is your age now?

- 12.7%   1 ☐   18 to 24
- 18.1%   2 ☐   25 to 34
- 11.9%   3 ☐   35 to 44
- 11.0%   4 ☐   45 to 54
- 18.0%   5 ☐   55 to 64
- 16.5%   6 ☐   65 to 74
- 11.7%   7 ☐   75 or older

SRAGE

90. Are you currently covered by Medicare?

H13074   See Note 25

- 31.5%   1 ☐   Yes
- 61.3%   2 ☐   No   ➔   *Go to Question 96*
- 7.2%   -5 ☐   Don't know   ➔   *Go to Question 96*

91. Currently, are you covered by Medicare Part A? *Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part A helps pay for inpatient hospital care.*

H13075

- 31.5%   1 ☐   Yes, I am now covered by Medicare Part A
- 61.3%   2 ☐   No, I am not covered by Medicare Part A

See Note 25

92. Currently, are you covered by Medicare Part B? *Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.*

H13076

- 31.5%   1 ☐   Yes, I am now covered by Medicare Part B
- 61.3%   2 ☐   No, I am not covered by Medicare Part B

See Note 25

93. Medicare Advantage is the new name for Medicare Plus Choice plans. Are you enrolled in a Medicare Advantage plan? *This plan is also sometimes known as Medicare Part C.*

H13077

- 31.5%   1 ☐   Yes
- 61.3%   2 ☐   No
- 7.2%   -5 ☐   Don't know

See Note 25

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

11

94. **Currently, are you covered by Medicare supplemental insurance?** *Medicare supplemental insurance, also called Medigap or MediSup, is usually obtained from private insurance companies and covers some of the costs not paid for by Medicare.*

| H13078 | See Note 25 |

17.2% 1 ☐ Yes, I am now covered by Medicare supplemental insurance

82.8% 2 ☐ No, I am not covered by Medicare supplemental insurance

95. **Are you enrolled in Medicare Part D, also known as the Medicare Prescription Drug Plan?**

| H13079 | See Note 25 |

7.5% 1 ☐ Yes
82.8% 2 ☐ No
9.7% -5 ☐ Don't know

96. **Using a scale of 1 to 5, with 1 being "strongly disagree" and 5 being "strongly agree", how much do you agree with the following statement: In general, I am able to see my provider(s) when needed?**

| S13011 |

5.1% 1 ☐ 1 Strongly disagree
4.6% 2 ☐ 2 Disagree
9.0% 3 ☐ 3 Neither agree nor disagree
42.8% 4 ☐ 4 Agree
38.5% 5 ☐ 5 Strongly agree

97. **Using a scale of 1 to 5, with 1 being "completely dissatisfied" and 5 being "completely satisfied", how satisfied are you, overall, with the health care you received during your last visit?**

| S13014 |

4.5% 1 ☐ 1 Completely dissatisfied
4.2% 2 ☐ 2 Somewhat dissatisfied
6.7% 3 ☐ 3 Neither satisfied nor dissatisfied
24.1% 4 ☐ 4 Somewhat satisfied
60.4% 5 ☐ 5 Completely satisfied

98. **If you were free to choose between civilian and military facilities for all of your health care, which would you prefer? Would you say…**

| S13N11 |

12.5% 1 ☐ All care from military facilities
37.7% 2 ☐ All care from civilian facilities
36.2% 3 ☐ Some care from military and some care from civilian facilities
13.6% 4 ☐ Or, no preference

Q.99 refers to your preference between civilian and military facilities that you gave in Q.98.

99. **Why do you prefer the type of facility you selected in Q.98?**

| S13N12A-S13N12M |

MARK ALL THAT APPLY.

37.1% A ☐ I have a greater choice of doctors at my preferred type of facility
34.1% B ☐ My chosen personal doctor is at my preferred type of facility
23.8% C ☐ My chosen specialist is at my preferred type of facility
20.1% D ☐ There are no military facilities near me
1.5% E ☐ I have to travel too far to a civilian facility
24.2% F ☐ I have to travel too far to a military facility
33.3% G ☐ It is easier to get care from a military facility
4.9% H ☐ I was told I must get my care from a military facility
15.7% I ☐ The care at my preferred type of facility is a good value for my out-of-pocket costs
10.0% J ☐ My out-of-pocket costs are less at my preferred type of facility
1.7% K ☐ I have not needed health care
12.9% L ☐ Another reason
14.9% M ☐ No preference

THANK YOU FOR TAKING THE TIME TO COMPLETE THE SURVEY! Your generous contribution will greatly aid efforts to improve the health of our military community.

Return your survey in the postage-paid envelope. If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (Health Affairs)
TMA/DHCAPE
c/o Synovate Survey Processing Center
PO Box 5030
Chicago, IL 60680-4138

APPENDIX A

ANNOTATED QUESTIONNAIRE – QUARTER II

Health Care Survey of DoD Beneficiaries

A world-wide survey of beneficiaries eligible for health care coverage through the military health system

January 2013

SURVEY INSTRUCTIONS

Answer <u>all</u> the questions by checking the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☒ Yes ➜ *Go to Question 12*
☐ No

Please return the completed questionnaire in the enclosed postage-paid envelope within <u>seven days.</u> If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (Health Affairs)
TMA/DHCAPE
c/o Synovate Survey Processing Center
PO Box 5030
Chicago IL 60680-4138

SURVEY STARTS HERE

As an eligible TRICARE beneficiary, please complete this survey even if you did not receive your health care from a military facility.

Please recognize that some specific questions about TRICARE benefits may not apply to you, depending on your entitlement and particular TRICARE program.

This survey is about the health care of the person whose name appears on the cover letter. The questionnaire should be completed by that person. If you are not the addressee, please give this survey to that person.

1. Are you the person whose name appears on the cover letter?

   H13001

   1 ☐ Yes ➜ *Go to Question 2 on the next page*
   2 ☐ No ➜ Please give this questionnaire to the person addressed on the cover letter.

2. **By which of the following health plans are you currently covered?**

MARK ALL THAT APPLY.

H13002A-H13002U

Military Health Plans

- A ☐ TRICARE Prime *(including TRICARE Prime Remote and TRICARE Overseas)*
- C ☐ TRICARE Extra or Standard (CHAMPUS)
- N ☐ TRICARE Plus
- O ☐ TRICARE for Life
- P ☐ TRICARE Supplemental Insurance
- Q ☐ TRICARE Reserve Select
- S ☐ TRICARE Retired Reserve
- T ☐ TRICARE Young Adult
- U ☐ Continued Health Care Benefit Program (CHCBP) *(a COBRA-like premium-based health care program)*

Other Health Plans

- F ☐ Medicare
- G ☐ Federal Employees Health Benefit Program (FEHBP)
- H ☐ Medicaid
- I ☐ A civilian HMO *(such as Kaiser)*
- J ☐ Other civilian health insurance *(such as Blue Cross)*
- K ☐ Uniformed Services Family Health Plan (USFHP)
- M ☐ The Veterans Administration (VA)
- R ☐ Government health insurance from a country other than the US
- L ☐ Not sure

3. **Which health plan did you use for all or most of your health care in the last 12 months?**

H13003   See Note 1

MARK ONLY ONE ANSWER.

- 1 ☐ TRICARE Prime *(including TRICARE Prime Remote and TRICARE Overseas)*
- 3 ☐ TRICARE Extra or Standard (CHAMPUS)
- 11 ☐ TRICARE Plus
- 12 ☐ TRICARE Reserve Select
- 14 ☐ TRICARE Retired Reserve
- 15 ☐ TRICARE Young Adult
- 16 ☐ Continued Health Care Benefit Program (CHCBP) *(a COBRA-like premium-based health care program)*
- 4 ☐ Medicare *(may include TRICARE for Life)*
- 5 ☐ Federal Employees Health Benefit Program (FEHBP)
- 6 ☐ Medicaid
- 7 ☐ A civilian HMO *(such as Kaiser)*
- 8 ☐ Other civilian health insurance *(such as Blue Cross)*
- 9 ☐ Uniformed Services Family Health Plan (USFHP)
- 10 ☐ The Veterans Administration (VA)
- 13 ☐ Government health insurance from a country other than the US
- -5 ☐ Not sure
- -6 ☐ Did not use any health plan in the last 12 months ➜ *Go to Question 5*

For the remainder of this questionnaire, the term health plan refers to the plan you indicated in Question 3.

4. **How many months or years in a row have you been in this health plan?**

H13004   See Note 1

- 1 ☐ Less than 6 months
- 2 ☐ 6 up to 12 months
- 3 ☐ 12 up to 24 months
- 4 ☐ 2 up to 5 years
- 5 ☐ 5 up to 10 years
- 6 ☐ 10 or more years

Many beneficiaries who are eligible for TRICARE also have the opportunity to obtain other civilian health insurance through their job or a family member's job, through COBRA, or through retirement coverage from a previous job, or from some other group. COBRA lets beneficiaries pay to keep their coverage temporarily when they leave their job.

5. **Do you currently have the opportunity to obtain civilian health insurance coverage for yourself through some civilian group?**

S13J01   See Note 1_J1

- 1 ☐ Yes
- 2 ☐ No ➜ *Go to Question 17*

6. **What options do you have for obtaining civilian coverage?**

MARK ALL THAT APPLY.

- A ☐ Through my current employer
- B ☐ Through COBRA from my previous employer
- C ☐ Through retirement coverage from my previous employer
- D ☐ Through a family member's current employer
- E ☐ Through COBRA from a family member's previous employer
- F ☐ Through retirement coverage from a family member's previous employer
- G ☐ Through another organization
- H ☐ Through a government program
- I ☐ Don't know

S13J02A-S13J02I

See Note 1_J1

7. **Are you alone or are you and others in your household now covered by a civilian policy?**

- 1 ☐ Yes, I alone
- 2 ☐ Yes, I and at least one other person in my household are covered
- 4 ☐ No ➜ *Go to Question 10*

S13J03   See Notes 1_J1 and 1_J2

8. **For your civilian coverage, do you or your family member pay all or part of the insurance premium?**

- 1 ☐ Yes, I or my family members pay all of the premium
- 2 ☐ Yes, I or my family members pay part of the premium
- 3 ☐ No, coverage is available at no cost ➜ *Go to Question 10*
- -5 ☐ Don't know

S13J04

See Notes 1_J1,1_J2, and 1_J3

2

9. How much per month do you or your family member pay for this coverage?

Please write your response in dollars on the lines provided, then check the matching box below in each column. For example, if you pay $456 per month, you would put a "4" on the first line, a "5" on the second line and "6" on the third line, and then check the box next to the "4" in the first column, next to the "5" in the second column and next to the "6" in the third column.

For example:

Dollars		
4	**5**	**6**
☐0	☐0	☐0
☐1	☐1	☐1
☐2	☐2	☐2
☐3	☐3	☐3
☑4	☐4	☐4
☐5	☑5	☐5
☐6	☐6	☑6
☐7	☐7	☐7
☐8	☐8	☐8
☐9	☐9	☐9

If you do not know the exact amount, please indicate the approximate amount.

Your Answer:

Dollars		
☐0	☐0	☐0
☐1	☐1	☐1
☐2	☐2	☐2
☐3	☐3	☐3
☐4	☐4	☐4
☐5	☐5	☐5
☐6	☐6	☐6
☐7	☐7	☐7
☐8	☐8	☐8
☐9	☐9	☐9

1000 ☐ $1000 or more
-5 ☐ Don't know

S13J05

See Notes 1_J1,1_J2, and 1_J3

10. Have you used civilian coverage for any of your health care in the past 12 months?

1 ☐ Yes ➔ *Go to Question 12*
2 ☐ No

S13J06

See Notes 1_J1 and 1_J4

11. Why haven't you used civilian coverage?

MARK ALL THAT APPLY.

A ☐ Civilian coverage is not available to me
B ☐ I have a better choice of doctors with TRICARE
F ☐ My personal doctor is only available to me through TRICARE
I ☐ I prefer to use military doctors
J ☐ I prefer military hospitals
G ☐ I want to be sure I can always use military health care
D ☐ I get better customer service with TRICARE
E ☐ Civilian benefits are poor compared to TRICARE
C ☐ I do not want to pay the premium for civilian coverage
M ☐ My employer pays a bonus for not taking employee coverage
N ☐ My family member's employer pays a bonus for not taking employee coverage
H ☐ I pay less for TRICARE than I would for civilian care
O ☐ I have access to better quality care through TRICARE
K ☐ I have not needed health care
L ☐ Another reason

S13J07A-S13J07O

See Notes 1_J1 and 1_J4

12. Have you used TRICARE for any health care (except for prescription drugs) in the past 12 months?

1 ☐ Yes ➔ *Go to Question 14*
2 ☐ No

S13J08

See Notes 1_J1 and 1_J5

13. Why haven't you used TRICARE?

MARK ALL THAT APPLY.

A ☐ I have a greater choice of doctors with my civilian plan
D ☐ My personal doctor is not available to me through TRICARE
I ☐ I prefer civilian doctors
J ☐ I prefer civilian hospitals
H ☐ There are no military facilities near me
C ☐ I get better customer service with civilian plans
E ☐ TRICARE benefits are poor compared to my civilian plan
F ☐ It is easier for me to get care through my civilian plan
B ☐ I do not want to pay the premium for TRICARE
G ☐ I pay less for civilian care than I would for TRICARE
K ☐ I have not needed health care
L ☐ Another reason

S13J09A-S13J09L

See Notes 1_J1 and 1_J5

14. Have you dropped civilian coverage in the past 12 months?

1 ☐ Yes
2 ☐ No ➔ *Go to Question 17*

S13J10

See Notes 1_J1 and 1_J6

3

15. **Which of the following are reasons you dropped civilian coverage in the past 12 months?**

MARK ALL THAT APPLY.

S13J13A-S13J13N

See Notes 1_J1 and 1_J6

- A ☐ You lost job
- B ☐ Your husband/wife/parent lost job
- C ☐ You changed jobs
- D ☐ Your husband/wife/parent changed jobs
- E ☐ You retired from a job
- F ☐ Your husband/wife/parent retired from a job
- G ☐ Moved to new location
- H ☐ You/your husband/wife/parent are/is Select Reserves and became active
- I ☐ You/your husband/wife/parent are/is a Reservist and returned to Select Reserve
- J ☐ Employer changed plans
- K ☐ Found a less expensive health plan
- L ☐ Married, divorced, or widowed
- M ☐ Went on Medicare
- N ☐ Problems with health plans

16. **Can you explain the MAIN reason you dropped civilian coverage in the past 12 months?**

MARK ONLY ONE ANSWER.

S13J14

See Notes 1_J1 and 1_J6

- 1 ☐ You lost job
- 2 ☐ Your husband/wife/parent lost job
- 3 ☐ You changed jobs
- 4 ☐ Your husband/wife/parent changed jobs
- 5 ☐ You retired from a job
- 6 ☐ Your husband/wife/parent retired from a job
- 7 ☐ Moved to new location
- 8 ☐ You/your husband/wife/parent are/is Select Reserves and became active
- 9 ☐ You/your husband/wife/parent are/is a Reservist and returned to Select Reserve
- 10 ☐ Employer changed plans
- 11 ☐ Found a less expensive health plan
- 12 ☐ Married, divorced, or widowed
- 13 ☐ Went on Medicare
- 14 ☐ Problems with health plans

These questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

17. **In the last 12 months, where did you go most often for your health care?**

H13005

See Note 1_AC1

MARK ONLY ONE ANSWER.

- 1 ☐ A military facility – This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
- 2 ☐ A civilian facility – This includes: Doctor's office, Clinic, Hospital, Civilian TRICARE contractor
- 3 ☐ Uniformed Services Family Health Plan facility (USFHP)
- 4 ☐ Veterans Affairs (VA) clinic or hospital
- 5 ☐ I went to none of the listed types of facilities in the last 12 months ➔ *Go to Question 23*

18. **In the last 12 months, have you missed a scheduled appointment with a provider at this facility?**

- 1 ☐ Yes
- 2 ☐ No ➔ *Go to Question 20*

S13AC01

See Notes 1_AC1 and 1_AC2

19. **Why did you miss these appointments?**

MARK ALL THAT APPLY.

- A ☐ Forgot about appointment
- B ☐ Felt better
- C ☐ Felt worse
- D ☐ Got care somewhere else
- E ☐ Scheduling conflict or other commitments
- F ☐ Difficulty getting to facility
- G ☐ Other

S13AC02A-S13AC02G

See Notes 1_AC1 and 1_AC2

20. **In the last 12 months, did you cancel or reschedule an appointment with a provider at this facility?**

- 1 ☐ Yes
- 2 ☐ No ➔ *Go to Question 23*

S13AC03

See Notes 1_AC1 and 1_AC3

21. **In the last 12 months, about how many appointments did you cancel or reschedule at this facility?**

- 1 ☐ 1 to 2 appointments
- 2 ☐ 3 to 5 appointments
- 3 ☐ 6 or more appointments

S13AC04

See Notes 1_AC1 and 1_AC3

4

22. **Why did you cancel or reschedule these appointments?**

    MARK ALL THAT APPLY.

    A ☐ Forgot about appointment
    B ☐ Felt better
    C ☐ Felt worse
    D ☐ Got care somewhere else
    E ☐ Scheduling conflict or other commitments
    F ☐ Difficulty getting to facility
    G ☐ Other

    S13AC05A-S13AC05G

    See Notes 1_AC1 and 1_AC3

23. In the last 12 months, did you have an illness, injury, or condition that <u>needed care right away</u> in a clinic, emergency room, or doctor's office?

    H13006

    1 ☐ Yes
    2 ☐ No ➜ *Go to Question 26*   See Note 2

24. In the last 12 months, when you <u>needed care right away</u>, how often did you get care as soon as you thought you needed?

    H13007

    1 ☐ Never
    2 ☐ Sometimes   See Note 2
    3 ☐ Usually
    4 ☐ Always
    -6 ☐ I didn't need care right away for an illness, injury or condition in the last 12 months

25. In the last 12 months, when you <u>needed care right away</u> for an illness, injury, or condition, how long did you usually have to wait between trying to get care and actually seeing a provider?

    H13008

    1 ☐ Same day
    2 ☐ 1 day   See Note 2
    3 ☐ 2 days
    4 ☐ 3 days
    5 ☐ 4-7 days
    6 ☐ 8-14 days
    7 ☐ 15 days or longer
    -6 ☐ I didn't need care right away for an illness, injury or condition in the last 12 months

26. In the last 12 months, not counting the times you needed health care right away, did you make any <u>appointments</u> for your health care at a doctor's office or clinic?

    H13009

    1 ☐ Yes
    2 ☐ No ➜ *Go to Question 29*   See Note 3

27. In the last 12 months, <u>not</u> counting times you needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought you needed?

    H13010

    See Note 3

    1 ☐ Never
    2 ☐ Sometimes
    3 ☐ Usually
    4 ☐ Always
    -6 ☐ I had no appointments in the last 12 months

28. In the last 12 months, not counting the times you needed health care right away, how many <u>days</u> did you usually have to wait between making an <u>appointment</u> and actually <u>seeing a provider</u>?

    H13011

    See Note 3

    1 ☐ Same day
    2 ☐ 1 day
    3 ☐ 2-3 days
    4 ☐ 4-7 days
    5 ☐ 8-14 days
    6 ☐ 15-30 days
    7 ☐ 31 days or longer
    -6 ☐ I had no appointments in the last 12 months

29. In the last 12 months, how many times did you go to an <u>emergency room</u> to get care for yourself?

    H13012

    1 ☐ None
    2 ☐ 1
    3 ☐ 2
    4 ☐ 3
    5 ☐ 4
    6 ☐ 5 to 9
    7 ☐ 10 or more

30. In the last 12 months (not counting times you went to an emergency room), how many times did you go to a <u>doctor's office or clinic</u> to get health care for yourself?

    1 ☐ None ➜ *Go to Question 36*
    2 ☐ 1   H13013
    3 ☐ 2
    4 ☐ 3   See Note 4
    5 ☐ 4
    6 ☐ 5 to 9
    7 ☐ 10 or more

31. In the last 12 months, how often did you and a doctor or other health provider talk about specific things you could do to prevent illness?

    H13014

    1 ☐ Never
    2 ☐ Sometimes   See Note 4
    3 ☐ Usually
    4 ☐ Always

32. Choices for your treatment or health care can include choices about medicine, surgery, or other treatment. In the last 12 months, did a doctor or other health provider tell you there was more than one choice for your treatment or health care?

| H13015 | See Notes 4 and 5 |

1 ☐ Yes
2 ☐ No ➔ *Go to Question 35*

33. In the last 12 months, did a doctor or other health provider talk with you about the pros and cons of each choice for your treatment or health care?

| H13016 |
| See Notes 4 and 5 |

1 ☐ Definitely yes
2 ☐ Somewhat yes
3 ☐ Somewhat no
4 ☐ Definitely no

34. In the last 12 months, when there was more than one choice for your treatment or health care, did a doctor or other health provider ask which choice you thought was best for you?

| H13017 |
| See Notes 4 and 5 |

1 ☐ Definitely yes
2 ☐ Somewhat yes
3 ☐ Somewhat no
4 ☐ Definitely no

35. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?

| H13018 |
| See Note 4 |

0 ☐ 0 Worst health care possible
1 ☐ 1
2 ☐ 2
3 ☐ 3
4 ☐ 4
5 ☐ 5
6 ☐ 6
7 ☐ 7
8 ☐ 8
9 ☐ 9
10 ☐ 10 Best health care possible
-6 ☐ I had no visits in the last 12 months

YOUR PERSONAL DOCTOR

36. A personal doctor is the one you would see if you need a checkup, want advice about a health problem, or get sick or hurt. Do you have a personal doctor?

| H13019 | See Note 6 |

1 ☐ Yes
2 ☐ No ➔ *Go to Question 46*

37. In the last 12 months, how many times did you visit your personal doctor to get care for yourself?

0 ☐ None ➔ *Go to Question 44*
1 ☐ 1
2 ☐ 2
3 ☐ 3
4 ☐ 4
5 ☐ 5 to 9
6 ☐ 10 or more

| H13020 |
| See Notes 6 and 7 |

38. In the last 12 months, how often did your personal doctor listen carefully to you?

| H13021 |
| See Notes 6 and 7 |

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I had no visits in the last 12 months

39. In the last 12 months, how often did your personal doctor explain things in a way that was easy to understand?

| H13022 |
| See Notes 6 and 7 |

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I had no visits in the last 12 months

40. In the last 12 months, how often did your personal doctor show respect for what you had to say?

| H13023 |
| See Notes 6 and 7 |

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I had no visits in the last 12 months

41. In the last 12 months, how often did your personal doctor spend enough time with you?

| H13024 |
| See Notes 6 and 7 |

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I had no visits in the last 12 months

42. In the last 12 months, did you get care from a doctor or other health provider besides your personal doctor?

| H13025 | See Notes 6, 7, and 8 |

1 ☐ Yes
2 ☐ No ➔ *Go to Question 44*

43. In the last 12 months, how often did your personal doctor seem informed and up-to-date about the care you got from these doctors or other health providers?

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always

> H13026
>
> See Notes 6, 7, and 8

44. Using any number from 0 to 10, where 0 is the worst personal doctor possible and 10 is the best personal doctor possible, what number would you use to rate your personal doctor?

0 ☐ 0 Worst personal doctor possible
1 ☐ 1
2 ☐ 2
3 ☐ 3
4 ☐ 4
5 ☐ 5
6 ☐ 6
7 ☐ 7
8 ☐ 8
9 ☐ 9
10 ☐ 10 Best personal doctor possible
-6 ☐ I don't have a personal doctor

> H13027
>
> See Note 6

45. Did you have the same personal doctor <u>before</u> you joined this health plan?

> S13009   See Notes 6 and 8_01

1 ☐ Yes ➜ *Go to Question 47*
2 ☐ No

46. Since you joined your health plan, how much of a problem, if any, was it to get a personal doctor you are happy with?

1 ☐ A big problem
2 ☐ A small problem
3 ☐ Not a problem

> S13010
>
> See Note 8_01

GETTING HEALTH CARE FROM A SPECIALIST

When you answer the next questions, <u>do not</u> include dental visits or care you got when you stayed overnight in a hospital.

47. <u>Specialists</u> are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and other doctors who specialize in one area of health care.

In the last 12 months, did you try to make any appointments to see a specialist?

> H13028   See Note 9

1 ☐ Yes
2 ☐ No ➜ *Go to Question 51*

48. In the last 12 months, how often was it easy to get appointments with specialists?

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I didn't need a specialist in the last 12 months

> H13029
>
> See Note 9

49. How many specialists have you seen in the last 12 months?

0 ☐ None ➜ *Go to Question 51*
1 ☐ 1 specialist
2 ☐ 2
3 ☐ 3
4 ☐ 4
5 ☐ 5 or more specialists

> H13030
>
> See Notes 9 and 10

50. We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?

0 ☐ 0 Worst specialist possible
1 ☐ 1
2 ☐ 2
3 ☐ 3
4 ☐ 4
5 ☐ 5
6 ☐ 6
7 ☐ 7
8 ☐ 8
9 ☐ 9
10 ☐ 10 Best specialist possible
-6 ☐ I didn't see a specialist in the last 12 months

> H13031
>
> See Notes 9 and 10

51. In general, how would you rate your overall <u>mental</u> or <u>emotional health</u>?

1 ☐ Excellent
2 ☐ Very good
3 ☐ Good
4 ☐ Fair
5 ☐ Poor

> S13B01

52. In the last 12 months, did you need any treatment or counseling for a <u>personal or family problem</u>?

1 ☐ Yes
2 ☐ No ➜ *Go to Question 55*

> S13B02
>
> See Note 10_B1

53. In the last 12 months, how much of a problem, if any, was it to get the <u>treatment or counseling</u> you needed through your health plan?

1 ☐ A big problem
2 ☐ A small problem
3 ☐ Not a problem

> S13B03
>
> See Note 10_B1

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54. Using <u>any number from 0 to 10</u>, where 0 is the worst treatment or counseling possible and 10 is the best treatment or counseling possible, what number would you use to rate your treatment or counseling in the last 12 months?

- 0 ☐   0 Worst treatment or counseling possible
- 1 ☐   1
- 2 ☐   2 | S13B04 |
- 3 ☐   3
- 4 ☐   4 | See Note 10_B1 |
- 5 ☐   5
- 6 ☐   6
- 7 ☐   7
- 8 ☐   8
- 9 ☐   9
- 10 ☐   10 Best treatment or counseling possible
- -6 ☐   I had no treatment or counseling in the last 12 months

YOUR HEALTH PLAN

The next questions ask about your experience with your health plan. By your health plan, we mean the health plan you marked in Question 3.

55. In the last 12 months, did you try to get any kind of care, tests, or treatment through your health plan?

| H13032 | See Note 11 |

- 1 ☐ Yes
- 2 ☐ No   ➜ *Go to Question 57*

56. In the last 12 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?

| H13033 |
| See Note 11 |

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always
- -6 ☐ I didn't need care, tests, or treatment through my health plan in the last 12 months

57. In the last 12 months, did you look for any information in written materials or on the Internet about how your health plan works?

| H13034 | See Note 12 |

- 1 ☐ Yes
- 2 ☐ No   ➜ *Go to Question 59*

58. In the last 12 months, how often did the written material or the Internet provide the information you needed about how your plan works?

| H13035 |
| See Note 12 |

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always
- -6 ☐ I didn't look for information from my health plan in the last 12 months

59. Sometimes people need services or equipment beyond what is provided in a regular or routine office visit, such as care from a specialist, physical therapy, a hearing aid, or oxygen.

In the last 12 months, did you look for information from your health plan on how much you would have to pay for a health care service or equipment?

- 1 ☐ Yes
- 2 ☐ No   ➜ *Go to Question 61*

| H13036 | See Note 13 |

60. In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for a health care service or equipment?

- 1 ☐ Never | H13037 |
- 2 ☐ Sometimes
- 3 ☐ Usually | See Note 13 |
- 4 ☐ Always
- -6 ☐ I didn't need a health care service or equipment from my health plan in the last 12 months

61. In some health plans, the amount you pay for a prescription medicine can be different for different medicines, or can be different for prescriptions filled by mail instead of at the pharmacy.

In the last 12 months, did you look for information from your health plan on how much you would have to pay for specific prescription medicines?

| H13038 | See Note 14 |

- 1 ☐ Yes
- 2 ☐ No   ➜ *Go to Question 63*

62. In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for specific prescription medications?

- 1 ☐ Never | H13039 |
- 2 ☐ Sometimes
- 3 ☐ Usually | See Note 14 |
- 4 ☐ Always
- -6 ☐ I didn't need prescription medications from my health plan in the last 12 months

63. In the last 12 months, did you try to get information or help from your health plan's customer service?

| H13040 | See Note 15 |

- 1 ☐ Yes
- 2 ☐ No   ➜ *Go to Question 66*

64. In the last 12 months, how often did your health plan's customer service give you the information or help you needed?

| H13041 |

- 1 ☐ Never
- 2 ☐ Sometimes | See Note 15 |
- 3 ☐ Usually
- 4 ☐ Always
- -6 ☐ I didn't call my health plan's customer service in the last 12 months

65. In the last 12 months, how often did your health plan's customer service staff treat you with courtesy and respect?

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always
- -6 ☐ I didn't call my health plan's customer service in the last 12 months

| H13042 |
| See Note 15 |

66. In the last 12 months, did your health plan give you any forms to fill out?

| H13043 | See Note 16 |

- 1 ☐ Yes
- 2 ☐ No ➔ *Go to Question 68*

67. In the last 12 months, how often were the forms from your health plan easy to fill out?

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always
- -6 ☐ I didn't have any experiences with paperwork for my health plan in the last 12 months

| H13044 |
| See Note 16 |

68. Claims are sent to a health plan for payment. You may send in the claims yourself, or doctors, hospitals, or others may do this for you. In the last 12 months, did you or anyone else send in any claims to your health plan?

| H13045 | See Note 17 |

- 1 ☐ Yes
- 2 ☐ No ➔ *Go to Question 71*
- -5 ☐ Don't know ➔ *Go to Question 71*

69. In the last 12 months, how often did your health plan handle your claims quickly?

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always
- -5 ☐ Don't know
- -6 ☐ No claims were sent for me in the last 12 months

| H13046 |
| See Note 17 |

70. In the last 12 months, how often did your health plan handle your claims correctly?

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always
- -5 ☐ Don't know
- -6 ☐ No claims were sent for me in the last 12 months

| H13047 |
| See Note 17 |

71. Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?

- 0 ☐ 0 Worst health plan possible
- 1 ☐ 1
- 2 ☐ 2
- 3 ☐ 3
- 4 ☐ 4
- 5 ☐ 5
- 6 ☐ 6
- 7 ☐ 7
- 8 ☐ 8
- 9 ☐ 9
- 10 ☐ 10 Best health plan possible

| H13048 |

PREVENTIVE CARE

Preventive care is medical care you receive that is intended to maintain your good health or prevent a future medical problem. A physical or blood pressure screening are examples of preventive care.

72. When did you last have a blood pressure reading?

- 3 ☐ Less than 12 months ago
- 2 ☐ 1 to 2 years ago
- 1 ☐ More than 2 years ago

| H13049 |

73. Do you know if your blood pressure is too high?

- 1 ☐ Yes, it is too high
- 2 ☐ No, it is not too high
- 3 ☐ Don't know

| H13050 |

74. When did you last have a flu shot?

- 4 ☐ Less than 12 months ago
- 3 ☐ 1-2 years ago
- 2 ☐ More than 2 years ago
- 1 ☐ Never had a flu shot

| H13051 |

75. Have you ever <u>smoked</u> at least 100 cigarettes in your entire life?

- 1 ☐ Yes
- 2 ☐ No
- -5 ☐ Don't know

| H13052 |

76. Do you now <u>smoke cigarettes</u> or <u>use tobacco</u> every day, some days or not at all?

- 4 ☐ Every day ➔ *Go to Question 77*
- 3 ☐ Some days ➔ *Go to Question 77*
- 2 ☐ Not at all ➔ *Go to Question 81*
- -5 ☐ Don't know ➔ *Go to Question 81*

| H13053 | See Note 18 |

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77. In the last 12 months, how often were you advised to quit smoking or using tobacco by a doctor or other health provider in your plan?

H13054	
See Note 18	

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always

78. In the last 12 months, how often was medication recommended or discussed by a doctor or other health provider to assist you with quitting smoking or using tobacco? *Examples of medication are: nicotine gum, patch, nasal spray, inhaler, or prescription medication.*

H13055
See Note 18

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always

79. In the last 12 months, how often did your doctor or other health provider discuss or provide methods and strategies other than medication to assist you with quitting smoking or using tobacco? *Examples of methods and strategies are: telephone helpline, individual or group counseling, or cessation program.*

H13056
See Note 18

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always

80. On the days you smoke or use tobacco products, what type of product do you smoke or use?

MARK ALL THAT APPLY.

H13057A-H13057D
See Note 18

A ☐ Cigarettes
B ☐ Dip, chewing tobacco, snuff or snus
C ☐ Cigars
D ☐ Pipes, bidis, or kreteks *(Pipes include hookahs. Bidis are small, brown, hand-rolled cigarettes from India and other southeast Asian countries. Kreteks are clove cigarettes made in Indonesia that contain clove extract and tobacco.)*

81. Are you male or female?

H13058	See Note 19A

1 ☐ Male ➜ *Go to Question 88*
2 ☐ Female

82. When did you last have a Pap smear test?

H13059B
See Notes 19A and 19B

6 ☐ Within the last 12 months
5 ☐ 1 to 2 years ago
4 ☐ More than 2 but less than 3 years ago
3 ☐ More than 3 but less than 5 years ago
2 ☐ 5 or more years ago
1 ☐ Never had a Pap smear test

83. Are you under age 40?

H13060
See Notes 19A, 19B, and 20

1 ☐ Yes ➜ *Go to Question 85*
2 ☐ No

84. When was the last time your breasts were checked by mammography?

H13061	See Notes 19A, 19B, and 20

5 ☐ Within the last 12 months
4 ☐ 1 to 2 years ago
3 ☐ More than 2 years ago but less than 5 years ago
2 ☐ 5 or more years ago
1 ☐ Never had a mammogram

85. Have you been pregnant in the last 12 months or are you pregnant now?

H13062	See Notes 19A,19B, and 21

1 ☐ Yes, I am currently pregnant ➜ *Go to Question 86*
2 ☐ No, I am not currently pregnant, but have been pregnant in the past 12 months ➜ *Go to Question 87*
3 ☐ No, I am not currently pregnant, and have not been pregnant in the past 12 months ➜ *Go to Question 88*

86. In what trimester is your pregnancy?

H13063

1 ☐ First trimester (up to 12 weeks after 1st day of last period) ➜ *Go to Question 88*
2 ☐ Second trimester (13th through 27th week)
3 ☐ Third trimester (28th week until delivery)

See Notes 19A,19B, and 21

87. In which trimester did you first receive prenatal care?

4 ☐ First trimester (up to 12 weeks after 1st day of last period)
3 ☐ Second trimester (13th through 27th week)
2 ☐ Third trimester (28th week until delivery)
1 ☐ Did not receive prenatal care

H13064	See Notes 19A,19B, and 21

ABOUT YOU

88. In general, how would you rate your overall health?

H13065

5 ☐ Excellent
4 ☐ Very good
3 ☐ Good
2 ☐ Fair
1 ☐ Poor

89. Are you limited in any way in any activities because of any impairment or health problem?

H13066

1 ☐ Yes
2 ☐ No

90. In the last 12 months, have you seen a doctor or other health provider 3 or more times for the same condition or problem?

1 ☐ Yes
2 ☐ No ➜ *Go to Question 92*

H13067	See Note 22

10

91. Is this a condition or problem that has lasted for at least 3 months? Do <u>not</u> include pregnancy or menopause.

- 1 ☐ Yes
- 2 ☐ No

| H13068 | See Note 22 |

92. Do you now need or take medicine prescribed by a doctor? Do <u>not</u> include birth control.

- 1 ☐ Yes
- 2 ☐ No → *Go to Question 94*

| H13069 | See Note 23 |

93. Is this medicine to treat a condition that has lasted for at least 3 months? Do <u>not</u> include pregnancy or menopause.

- 1 ☐ Yes
- 2 ☐ No

| H13070 | See Note 23 |

94. Have you ever had any experience that was so frightening, horrible, or upsetting that, <u>in the past month</u>…

MARK "YES" OR "NO" FOR EACH.

| S13B23-S13B26 |

		YES	NO
a.	You have had nightmares about it or thought about it when you did not want to?	1 ☐	2 ☐
b.	You tried hard not to think about it or went out of your way to avoid situations that reminded you of it?	1 ☐	2 ☐
c.	You have been constantly on guard, watchful, or easily startled?	1 ☐	2 ☐
d.	You felt numb or detached from others, activities, or your surroundings?	1 ☐	2 ☐

95. How tall are you without your shoes on?

Please give your answer in feet and inches. Please write one number in each box.

Example: 5 feet, 6 inches

| H13071F, H13071I |

| 5 | | 0 | 6 |

FEET   INCHES

Your height:

| | | | |

FEET   INCHES

96. How much do you weigh without your shoes on?

Please give your answer in pounds. Please write one number in each box.

Example: 152 pounds

| H13072 |

| 1 | 5 | 2 |

POUNDS

Your weight:

| | | |

POUNDS

97. What is the highest grade or level of school that you have completed?

| SREDA |

- 1 ☐ 8th grade or less
- 2 ☐ Some high school, but did not graduate
- 3 ☐ High school graduate or GED
- 4 ☐ Some college or 2-year degree
- 5 ☐ 4-year college graduate
- 6 ☐ More than 4-year college degree

98. Are you of Hispanic or Latino origin or descent?

(Mark "NO" if not Spanish/Hispanic/Latino.)

- A ☐ No, not Spanish, Hispanic, or Latino
- B ☐ Yes, Mexican, Mexican American, Chicano
- C ☐ Yes, Puerto Rican
- D ☐ Yes, Cuban
- E ☐ Yes, other Spanish, Hispanic, or Latino

| H13073A-H13073E, H13073 | See Note 24 |

99. What is your race?

(Mark ONE OR MORE races to indicate what you consider yourself to be.)

| SRRACEA-SRRACEE |

- A ☐ White
- B ☐ Black or African American
- C ☐ American Indian or Alaska Native
- D ☐ Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- E ☐ Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

100. What is your age now?

| SRAGE |

- 1 ☐ 18 to 24
- 2 ☐ 25 to 34
- 3 ☐ 35 to 44
- 4 ☐ 45 to 54
- 5 ☐ 55 to 64
- 6 ☐ 65 to 74
- 7 ☐ 75 or older

101. Are you currently covered by Medicare?

- 1 ☐ Yes
- 2 ☐ No ➜ *Go to Question 107*
- -5 ☐ Don't know ➜ *Go to Question 107*

| H13074 | See Note 25 |

102. Currently, are you covered by Medicare Part A? *Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part A helps pay for inpatient hospital care.*

- 1 ☐ Yes, I am now covered by Medicare Part A
- 2 ☐ No, I am not covered by Medicare Part A

| H13075 | See Note 25 |

103. Currently, are you covered by Medicare Part B? *Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.*

- 1 ☐ Yes, I am now covered by Medicare Part B
- 2 ☐ No, I am not covered by Medicare Part B

| H13076 | See Note 25 |

104. Medicare Advantage is the new name for Medicare Plus Choice plans. Are you enrolled in a Medicare Advantage plan? *This plan is also sometimes known as Medicare Part C.*

- 1 ☐ Yes
- 2 ☐ No
- -5 ☐ Don't know

| H13077 |
| See Note 25 |

105. Currently, are you covered by Medicare supplemental insurance? *Medicare supplemental insurance, also called Medigap or MediSup, is usually obtained from private insurance companies and covers some of the costs not paid for by Medicare.*

| H13078 | See Note 25 |

- 1 ☐ Yes, I am now covered by Medicare supplemental insurance
- 2 ☐ No, I am not covered by Medicare supplemental insurance

106. Are you enrolled in Medicare Part D, also known as the Medicare Prescription Drug Plan?

- 1 ☐ Yes
- 2 ☐ No
- -5 ☐ Don't know

| H13079 | See Note 25 |

107. Using a scale of 1 to 5, with 1 being "strongly disagree" and 5 being "strongly agree", how much do you agree with the following statement: In general, I am able to see my provider(s) when needed?

| S13011 |

- 1 ☐ 1 Strongly disagree
- 2 ☐ 2 Disagree
- 3 ☐ 3 Neither agree nor disagree
- 4 ☐ 4 Agree
- 5 ☐ 5 Strongly agree

108. Using a scale of 1 to 5, with 1 being "completely dissatisfied" and 5 being "completely satisfied", how satisfied are you, overall, with the health care you received during your last visit?

| S13014 |

- 1 ☐ 1 Completely dissatisfied
- 2 ☐ 2 Somewhat dissatisfied
- 3 ☐ 3 Neither satisfied nor dissatisfied
- 4 ☐ 4 Somewhat satisfied
- 5 ☐ 5 Completely satisfied

THANK YOU FOR TAKING THE TIME TO COMPLETE THE SURVEY! Your generous contribution will greatly aid efforts to improve the health of our military community.

Return your survey in the postage-paid envelope. If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (Health Affairs)
TMA/DHCAPE
c/o Synovate Survey Processing Center
PO Box 5030
Chicago, IL 60680-4138

APPENDIX A

ANNOTATED QUESTIONNAIRE – QUARTER III

Health Care Survey of DoD Beneficiaries

A world-wide survey of beneficiaries eligible for health care coverage through the military health system

April 2013

SURVEY INSTRUCTIONS

Answer <u>all</u> the questions by checking the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☒ Yes ➔ *Go to Question 12*
☐ No

Please return the completed questionnaire in the enclosed postage-paid envelope within <u>seven days.</u> If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (Health Affairs)
TMA/DHCAPE
c/o Ipsos Survey Processing Center
PO Box 5030
Chicago IL 60680-4138

SURVEY STARTS HERE

As an eligible TRICARE beneficiary, <u>please complete this survey even if you did not receive your health care from a military facility</u>.

Please recognize that some specific questions about TRICARE benefits may not apply to you, depending on your entitlement and particular TRICARE program.

This survey is about the health care of the person whose name appears on the cover letter. The questionnaire should be completed by that person. If you are not the addressee, please give this survey to that person.

1. Are you the person whose name appears on the cover letter?

   H13001

   1 ☐ Yes ➔ *Go to Question 2 on the next page*
   2 ☐ No ➔ Please give this questionnaire to the person addressed on the cover letter.

12-040276-01-03

2. **By which of the following health plans are you currently covered?**

   MARK ALL THAT APPLY.

   H13002A-H13002U

   Military Health Plans

   - A ☐ TRICARE Prime *(including TRICARE Prime Remote and TRICARE Overseas)*
   - C ☐ TRICARE Extra or Standard (CHAMPUS)
   - N ☐ TRICARE Plus
   - O ☐ TRICARE for Life
   - P ☐ TRICARE Supplemental Insurance
   - Q ☐ TRICARE Reserve Select
   - S ☐ TRICARE Retired Reserve
   - T ☐ TRICARE Young Adult
   - U ☐ Continued Health Care Benefit Program (CHCBP) *(a COBRA-like premium-based health care program)*

   Other Health Plans

   - F ☐ Medicare
   - G ☐ Federal Employees Health Benefit Program (FEHBP)
   - H ☐ Medicaid
   - I ☐ A civilian HMO *(such as Kaiser)*
   - J ☐ Other civilian health insurance *(such as Blue Cross)*
   - K ☐ Uniformed Services Family Health Plan (USFHP)
   - M ☐ The Veterans Administration (VA)
   - R ☐ Government health insurance from a country other than the US
   - L ☐ Not sure

3. **Which health plan did you use for all or most of your health care in the last 12 months?**

   H13003   See Note 1

   MARK ONLY ONE ANSWER.

   - 1 ☐ TRICARE Prime *(including TRICARE Prime Remote and TRICARE Overseas)*
   - 3 ☐ TRICARE Extra or Standard (CHAMPUS)
   - 11 ☐ TRICARE Plus
   - 12 ☐ TRICARE Reserve Select
   - 14 ☐ TRICARE Retired Reserve
   - 15 ☐ TRICARE Young Adult
   - 16 ☐ Continued Health Care Benefit Program (CHCBP) *(a COBRA-like premium-based health care program)*
   - 4 ☐ Medicare *(may include TRICARE for Life)*
   - 5 ☐ Federal Employees Health Benefit Program (FEHBP)
   - 6 ☐ Medicaid
   - 7 ☐ A civilian HMO *(such as Kaiser)*
   - 8 ☐ Other civilian health insurance *(such as Blue Cross)*
   - 9 ☐ Uniformed Services Family Health Plan (USFHP)
   - 10 ☐ The Veterans Administration (VA)
   - 13 ☐ Government health insurance from a country other than the US
   - -5 ☐ Not sure
   - -6 ☐ Did not use any health plan in the last 12 months ➜ *Go to Question 5*

For the remainder of this questionnaire, the term health plan refers to the plan you indicated in Question 3.

4. **How many months or years in a row have you been in this health plan?**

   H13004   See Note 1

   - 1 ☐ Less than 6 months
   - 2 ☐ 6 up to 12 months
   - 3 ☐ 12 up to 24 months
   - 4 ☐ 2 up to 5 years
   - 5 ☐ 5 up to 10 years
   - 6 ☐ 10 or more years

YOUR HEALTH CARE IN THE LAST 12 MONTHS

These questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

5. **In the last 12 months, where did you go most often for your health care?**

   H13005

   MARK ONLY ONE ANSWER.

   - 1 ☐ A military facility – This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
   - 2 ☐ A civilian facility – This includes: Doctor's office, Clinic, Hospital, Civilian TRICARE contractor
   - 3 ☐ Uniformed Services Family Health Plan facility (USFHP)
   - 4 ☐ Veterans Affairs (VA) clinic or hospital
   - 5 ☐ I went to none of the listed types of facilities in the last 12 months

6. **In the last 12 months, did you have an illness, injury, or condition that needed care right away in a clinic, emergency room, or doctor's office?**

   H13006

   - 1 ☐ Yes
   - 2 ☐ No ➜ *Go to Question 9*   See Note 2

7. **In the last 12 months, when you needed care right away, how often did you get care as soon as you thought you needed?**

   H13007   See Note 2

   - 1 ☐ Never
   - 2 ☐ Sometimes
   - 3 ☐ Usually
   - 4 ☐ Always
   - -6 ☐ I didn't need care right away for an illness, injury or condition in the last 12 months

2

8. In the last 12 months, when you <u>needed care right away</u> for an illness, injury, or condition, how long did you usually have to wait between trying to get care and actually seeing a provider?

H13008

See Note 2

1 ☐ Same day
2 ☐ 1 day
3 ☐ 2 days
4 ☐ 3 days
5 ☐ 4-7 days
6 ☐ 8-14 days
7 ☐ 15 days or longer
-6 ☐ I didn't need care right away for an illness, injury or condition in the last 12 months

9. In the last 12 months, not counting the times you needed health care right away, did you make any <u>appointments</u> for your health care at a doctor's office or clinic?

H13009

See Note 3

1 ☐ Yes
2 ☐ No ➔ *Go to Question 12*

10. In the last 12 months, <u>not</u> counting times you needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought you needed?

H13010

See Note 3

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I had no appointments in the last 12 months

11. In the last 12 months, not counting the times you needed health care right away, how many <u>days</u> did you usually have to wait between making an <u>appointment</u> and actually <u>seeing a provider</u>?

H13011

See Note 3

1 ☐ Same day
2 ☐ 1 day
3 ☐ 2-3 days
4 ☐ 4-7 days
5 ☐ 8-14 days
6 ☐ 15-30 days
7 ☐ 31 days or longer
-6 ☐ I had no appointments in the last 12 months

12. In the last 12 months, how many times did you go to an <u>emergency room</u> to get care for yourself?

H13012

1 ☐ None
2 ☐ 1
3 ☐ 2
4 ☐ 3
5 ☐ 4
6 ☐ 5 to 9
7 ☐ 10 or more

13. In the last 12 months (not counting times you went to an emergency room), how many times did you go to a <u>doctor's office or clinic</u> to get health care for yourself?

H13013

See Note 4

1 ☐ None ➔ *Go to Question 19*
2 ☐ 1
3 ☐ 2
4 ☐ 3
5 ☐ 4
6 ☐ 5 to 9
7 ☐ 10 or more

14. In the last 12 months, how often did you and a doctor or other health provider talk about specific things you could do to prevent illness?

H13014

See Note 4

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always

15. Choices for your treatment or health care can include choices about medicine, surgery, or other treatment. In the last 12 months, did a doctor or other health provider tell you there was more than one choice for your treatment or health care?

H13015 | See Notes 4 and 5

1 ☐ Yes
2 ☐ No ➔ *Go to Question 18*

16. In the last 12 months, did a doctor or other health provider talk with you about the pros and cons of each choice for your treatment or health care?

H13016

See Notes 4 and 5

1 ☐ Definitely yes
2 ☐ Somewhat yes
3 ☐ Somewhat no
4 ☐ Definitely no

17. In the last 12 months, when there was more than one choice for your treatment or health care, did a doctor or other health provider ask which choice you thought was best for you?

H13017

See Notes 4 and 5

1 ☐ Definitely yes
2 ☐ Somewhat yes
3 ☐ Somewhat no
4 ☐ Definitely no

3

18. Using <u>any number from 0 to 10</u>, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?

- 0 ☐   0   Worst health care possible
- 1 ☐   1
- 2 ☐   2
- 3 ☐   3
- 4 ☐   4
- 5 ☐   5
- 6 ☐   6
- 7 ☐   7
- 8 ☐   8
- 9 ☐   9
- 10 ☐   10   Best health care possible
- -6 ☐   I had no visits in the last 12 months

| H13018 |
| See Note 4 |

19. In the last 12 months, did you have a health problem for which you <u>needed special medical equipment</u>, such as a cane, a wheelchair, or oxygen equipment?

- 1 ☐   Yes
- 2 ☐   No   ➜   *Go to Question 21*

| S13C09 | See Note 5A1 |

20. In the last 12 months, how much of a problem, if any, was it to get the <u>special medical equipment</u> you needed through your health plan?

- 1 ☐   A big problem
- 2 ☐   A small problem
- 3 ☐   Not a problem
- -6 ☐   I didn't need any special medical equipment in the last 12 months

| S13C10 |
| See Note 5A1 |

21. In the last 12 months, did you have any health problems that needed <u>special therapy</u>, such as physical, occupational, or speech therapy?

- 1 ☐   Yes
- 2 ☐   No   ➜   *Go to Question 23*

| S13C11 | See Note 5A2 |

22. In the last 12 months, how much of a problem, if any, was it to get the <u>special therapy</u> you needed through your health plan?

- 1 ☐   A big problem
- 2 ☐   A small problem
- 3 ☐   Not a problem
- -6 ☐   I didn't need any special therapy in the last 12 months

| S13C12 |
| See Note 5A2 |

23. <u>Home health care</u> or assistance means home nursing, help with bathing or dressing, and help with basic household tasks.

In the last 12 months, <u>did you need someone to come into your home</u> to give you home health care or assistance?

- 1 ☐   Yes
- 2 ☐   No   ➜   *Go to Question 25*

| S13C13 | See Note 5A3 |

24. In the last 12 months, how much of a problem, if any, was it to get <u>the home health</u> care you needed through your health plan?

- 1 ☐   A big problem
- 2 ☐   A small problem
- 3 ☐   Not a problem
- -6 ☐   I didn't need home health care or assistance in the last 12 months

| S13C14 |
| See Note 5A3 |

YOUR PERSONAL DOCTOR

25. A personal doctor is the one you would see if you need a checkup, want advice about a health problem, or get sick or hurt. Do you have a personal doctor?

- 1 ☐   Yes
- 2 ☐   No   ➜   *Go to Question 35*

| H13019 | See Note 6 |

26. In the last 12 months, how many times did you visit your personal doctor to get care for yourself?

- 0 ☐   None   ➜   *Go to Question 33*
- 1 ☐   1
- 2 ☐   2
- 3 ☐   3
- 4 ☐   4
- 5 ☐   5 to 9
- 6 ☐   10 or more

| H13020 |
| See Notes 6 and 7 |

27. In the last 12 months, how often did your personal doctor listen carefully to you?

- 1 ☐   Never
- 2 ☐   Sometimes
- 3 ☐   Usually
- 4 ☐   Always
- -6 ☐   I had no visits in the last 12 months

| H13021 |
| See Notes 6 and 7 |

28. **In the last 12 months, how often did your personal doctor explain things in a way that was easy to understand?**

    1 ☐ Never
    2 ☐ Sometimes
    3 ☐ Usually
    4 ☐ Always
    -6 ☐ I had no visits in the last 12 months

H13022
See Notes 6 and 7

29. **In the last 12 months, how often did your personal doctor show respect for what you had to say?**

    1 ☐ Never
    2 ☐ Sometimes
    3 ☐ Usually
    4 ☐ Always
    -6 ☐ I had no visits in the last 12 months

H13023
See Notes 6 and 7

30. **In the last 12 months, how often did your personal doctor spend enough time with you?**

H13024
See Notes 6 and 7

    1 ☐ Never
    2 ☐ Sometimes
    3 ☐ Usually
    4 ☐ Always
    -6 ☐ I had no visits in the last 12 months

31. **In the last 12 months, did you get care from a doctor or other health provider besides your personal doctor?**

    1 ☐ Yes
    2 ☐ No ➔ *Go to Question 33*

H13025	See Notes 6, 7, and 8

32. **In the last 12 months, how often did your personal doctor seem informed and up-to-date about the care you got from these doctors or other health providers?**

    1 ☐ Never
    2 ☐ Sometimes
    3 ☐ Usually
    4 ☐ Always

H13026
See Notes 6, 7, and 8

33. **Using any number from 0 to 10, where 0 is the worst personal doctor possible and 10 is the best personal doctor possible, what number would you use to rate your personal doctor?**

    0 ☐ 0 Worst personal doctor possible
    1 ☐ 1
    2 ☐ 2
    3 ☐ 3
    4 ☐ 4
    5 ☐ 5
    6 ☐ 6
    7 ☐ 7
    8 ☐ 8
    9 ☐ 9
    10 ☐ 10 Best personal doctor possible
    -6 ☐ I don't have a personal doctor

H13027
See Note 6

34. **Did you have the same personal doctor before you joined this health plan?**

    1 ☐ Yes ➔ *Go to Question 36*
    2 ☐ No

S13009	See Notes 6 and 8_01

35. **Since you joined your health plan, how much of a problem, if any, was it to get a personal doctor you are happy with?**

    1 ☐ A big problem
    2 ☐ A small problem
    3 ☐ Not a problem

S13010
See Note 8_01

GETTING HEALTH CARE FROM A SPECIALIST

When you answer the next questions, do not include dental visits or care you got when you stayed overnight in a hospital.

36. **Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and other doctors who specialize in one area of health care.**

    In the last 12 months, did you try to make any appointments to see a specialist?

H13028	See Note 9

    1 ☐ Yes
    2 ☐ No ➔ *Go to Question 40*

37. **In the last 12 months, how often was it easy to get appointments with specialists?**

H13029
See Note 9

    1 ☐ Never
    2 ☐ Sometimes
    3 ☐ Usually
    4 ☐ Always
    -6 ☐ I didn't need a specialist in the last 12 months

38. How many specialists have you seen in the last 12 months?

- 0 ☐ None ➔ *Go to Question 40*
- 1 ☐ 1 specialist
- 2 ☐ 2
- 3 ☐ 3
- 4 ☐ 4
- 5 ☐ 5 or more specialists

H13030

See Notes 9 and 10

39. We want to know your rating of the specialist you saw most often in the last 12 months. **Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?**

- 0 ☐ 0 Worst specialist possible
- 1 ☐ 1
- 2 ☐ 2
- 3 ☐ 3
- 4 ☐ 4
- 5 ☐ 5
- 6 ☐ 6
- 7 ☐ 7
- 8 ☐ 8
- 9 ☐ 9
- 10 ☐ 10 Best specialist possible
- -6 ☐ I didn't see a specialist in the last 12 months

H13031

See Notes 9 and 10

40. **In general, how would you rate your overall mental or emotional health?**

- 1 ☐ Excellent
- 2 ☐ Very good
- 3 ☐ Good
- 4 ☐ Fair
- 5 ☐ Poor

S13B01

41. **In the last 12 months, did you need any treatment or counseling for a personal or family problem?**

- 1 ☐ Yes
- 2 ☐ No ➔ *Go to Question 44*

S13B02

See Note 10_B1

42. **In the last 12 months, how much of a problem, if any, was it to get the treatment or counseling you needed through your health plan?**

- 1 ☐ A big problem
- 2 ☐ A small problem
- 3 ☐ Not a problem

S13B03

See Note 10_B1

43. **Using any number from 0 to 10, where 0 is the worst treatment or counseling possible and 10 is the best treatment or counseling possible, what number would you use to rate your treatment or counseling in the last 12 months?**

- 0 ☐ 0 Worst treatment or counseling possible
- 1 ☐ 1
- 2 ☐ 2
- 3 ☐ 3
- 4 ☐ 4
- 5 ☐ 5
- 6 ☐ 6
- 7 ☐ 7
- 8 ☐ 8
- 9 ☐ 9
- 10 ☐ 10 Best treatment or counseling possible
- -6 ☐ I had no treatment or counseling in the last 12 months

S13B04

See Note 10_B1

YOUR HEALTH PLAN

The next questions ask about your experience with your health plan. By your health plan, we mean the health plan you marked in Question 3.

44. **In the last 12 months, did you try to get any kind of care, tests, or treatment through your health plan?**

- 1 ☐ Yes
- 2 ☐ No ➔ *Go to Question 46*

H13032   See Note 11

45. **In the last 12 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?**

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always
- -6 ☐ I didn't need care, tests, or treatment through my health plan in the last 12 months

H13033

See Note 11

46. **In the last 12 months, did you look for any information in written materials or on the Internet about how your health plan works?**

- 1 ☐ Yes
- 2 ☐ No ➔ *Go to Question 48*

H13034   See Note 12

47. In the last 12 months, how often did the written material or the Internet provide the information you needed about how your plan works?

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I didn't look for information from my health plan in the last 12 months

H13035

See Note 12

48. Sometimes people need services or equipment beyond what is provided in a regular or routine office visit, such as care from a specialist, physical therapy, a hearing aid, or oxygen.

In the last 12 months, did you look for information from your health plan on how much you would have to pay for a health care service or equipment?

1 ☐ Yes
2 ☐ No ➔ *Go to Question 50*

H13036 | See Note 13

49. In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for a health care service or equipment?

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I didn't need a health care service or equipment from my health plan in the last 12 months

H13037

See Note 13

50. In some health plans, the amount you pay for a prescription medicine can be different for different medicines, or can be different for prescriptions filled by mail instead of at the pharmacy.

In the last 12 months, did you look for information from your health plan on how much you would have to pay for specific prescription medicines?

1 ☐ Yes
2 ☐ No ➔ *Go to Question 52*

H13038 | See Note 14

51. In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for specific prescription medications?

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I didn't need prescription medications from my health plan in the last 12 months

H13039

See Note 14

52. In the last 12 months, did you try to get information or help from your health plan's customer service?

1 ☐ Yes
2 ☐ No ➔ *Go to Question 55*

H13040 | See Note 15

53. In the last 12 months, how often did your health plan's customer service give you the information or help you needed?

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I didn't call my health plan's customer service in the last 12 months

H13041

See Note 15

54. In the last 12 months, how often did your health plan's customer service staff treat you with courtesy and respect?

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I didn't call my health plan's customer service in the last 12 months

H13042

See Note 15

55. In the last 12 months, did your health plan give you any forms to fill out?

1 ☐ Yes
2 ☐ No ➔ *Go to Question 57*

H13043 | See Note 16

56. In the last 12 months, how often were the forms from your health plan easy to fill out?

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-6 ☐ I didn't have any experiences with paperwork for my health plan in the last 12 months

H13044

See Note 16

57. Claims are sent to a health plan for payment. You may send in the claims yourself, or doctors, hospitals, or others may do this for you. In the last 12 months, did you or anyone else send in any claims to your health plan?

1 ☐ Yes
2 ☐ No ➔ *Go to Question 60*
-5 ☐ Don't know ➔ *Go to Question 60*

H13045 | See Note 17

58. In the last 12 months, how often did your health plan handle your claims quickly?

| H13046 |
| See Note 17 |

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-5 ☐ Don't know
-6 ☐ No claims were sent for me in the last 12 months

59. In the last 12 months, how often did your health plan handle your claims correctly?

| H13047 |
| See Note 17 |

1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always
-5 ☐ Don't know
-6 ☐ No claims were sent for me in the last 12 months

60. Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?

| H13048 |

0 ☐ 0 Worst health plan possible
1 ☐ 1
2 ☐ 2
3 ☐ 3
4 ☐ 4
5 ☐ 5
6 ☐ 6
7 ☐ 7
8 ☐ 8
9 ☐ 9
10 ☐ 10 Best health plan possible

PREVENTIVE CARE

Preventive care is medical care you receive that is intended to maintain your good health or prevent a future medical problem. A physical or blood pressure screening are examples of preventive care.

61. When did you last have a blood pressure reading?

| H13049 |

3 ☐ Less than 12 months ago
2 ☐ 1 to 2 years ago
1 ☐ More than 2 years ago

62. Do you know if your blood pressure is too high?

| H13050 |

1 ☐ Yes, it is too high
2 ☐ No, it is not too high
3 ☐ Don't know

63. Are you under age 50?

1 ☐ Yes ➔ *Go to Question 69*
2 ☐ No

| S13Q08 | See Note 17_Q0 |

8

The next questions are about different kinds of tests for colon cancer. Colon cancer tests include blood stool tests, colonoscopy, and sigmoidoscopy.

64. A blood stool test is a test that you do at home using a special kit or cards provided by a doctor or other health professional to determine whether the stool contains blood. Have you ever had this test using a home kit?

1 ☐ Yes
2 ☐ No ➔ *Go to Question 66*
-5 ☐ Don't know ➔ *Go to Question 66*

| S13Q01 | See Notes 17_Q0 and 17_Q1 |

65. How long has it been since you had your last blood stool test using a home kit?

1 ☐ Less than 12 months ago
2 ☐ At least one year but less than 2 years ago
3 ☐ At least 2 years but less than 5 years ago
4 ☐ 5 or more years ago
-6 ☐ Never had a blood stool test
-5 ☐ Don't know

| S13Q02 | See Notes 17_Q0 and 17_Q1 |

66. Sigmoidoscopy and colonoscopy are exams in which a lighted tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you had either of these exams?

1 ☐ Yes
2 ☐ No ➔ *Go to Question 69*
-5 ☐ Don't know ➔ *Go to Question 69*

| S13Q03 | See Notes 17_Q0 and 17_Q2 |

67. A sigmoidoscopy is limited to the lower part of the colon and is usually done without anesthesia. How long has it been since you had your last sigmoidoscopy?

1 ☐ Less than 12 months ago
2 ☐ At least one year but less than 2 years ago
3 ☐ At least 2 years but less than 5 years ago
4 ☐ 5 or more years ago
-6 ☐ Never had a sigmoidoscopy
-5 ☐ Don't know

| S13Q04 | See Notes 17_Q0 and 17_Q2 |

68. For a colonoscopy the entire colon is examined and patients usually receive medication in their veins to relax them and make them feel sleepy. How long has it been since you had your last colonoscopy?

1 ☐ Less than 12 months ago
2 ☐ At least one year but less than 2 years ago
3 ☐ At least 2 years but less than 5 years ago
4 ☐ At least 5 years but less than 10 years ago
5 ☐ 10 or more years ago
-6 ☐ Never had a colonoscopy
-5 ☐ Don't know

| S13Q05 | See Notes 17_Q0 and 17_Q2 |

69. When did you last have a flu shot?

- 4 ☐ Less than 12 months ago
- 3 ☐ 1-2 years ago
- 2 ☐ More than 2 years ago
- 1 ☐ Never had a flu shot

H13051

70. Have you ever <u>smoked</u> at least 100 cigarettes in your entire life?

- 1 ☐ Yes
- 2 ☐ No
- -5 ☐ Don't know

H13052

71. Do you now <u>smoke cigarettes</u> or <u>use tobacco</u> every day, some days or not at all?

- 4 ☐ Every day ➜ *Go to Question 72*
- 3 ☐ Some days ➜ *Go to Question 72*
- 2 ☐ Not at all ➜ *Go to Question 76*
- -5 ☐ Don't know ➜ *Go to Question 76*

H13053 | See Note 18

72. In the last 12 months, how often were you advised to quit smoking or using tobacco by a doctor or other health provider in your plan?

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always

H13054

See Note 18

73. In the last 12 months, how often was medication recommended or discussed by a doctor or health provider to assist you with quitting smoking or using tobacco? *Examples of medication are: nicotine gum, patch, nasal spray, inhaler, or prescription medication.*

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always

H13055

See Note 18

74. In the last 12 months, how often did your doctor or health provider discuss or provide methods and strategies other than medication to assist you with quitting smoking or using tobacco? *Examples of methods and strategies are: telephone helpline, individual or group counseling, or cessation program.*

- 1 ☐ Never
- 2 ☐ Sometimes
- 3 ☐ Usually
- 4 ☐ Always

H13056

See Note 18

75. On the days you smoke or use tobacco products, what type of product do you smoke or use?

MARK ALL THAT APPLY.

H13057A-H13057D

See Note 18

- A ☐ Cigarettes
- B ☐ Dip, chewing tobacco, snuff or snus
- C ☐ Cigars
- D ☐ Pipes, bidis, or kreteks *(Pipes include hookahs. Bidis are small, brown, hand-rolled cigarettes from India and other southeast Asian countries. Kreteks are clove cigarettes made in Indonesia that contain clove extract and tobacco.)*

76. Are you male or female?

H13058 | See Note 19A

- 1 ☐ Male ➜ *Go to Question 83*
- 2 ☐ Female

77. When did you last have a Pap smear test?

H13059B

See Notes 19A and 19B

- 6 ☐ Within the last 12 months
- 5 ☐ 1 to 2 years ago
- 4 ☐ More than 2 but less than 3 years ago
- 3 ☐ More than 3 but less than 5 years ago
- 2 ☐ 5 or more years ago
- 1 ☐ Never had a Pap smear test

78. Are you under age 40?

- 1 ☐ Yes ➜ *Go to Question 80*
- 2 ☐ No

H13060

See Notes 19A, 19B, and 20

79. When was the last time your breasts were checked by mammography?

H13061 | See Notes 19A, 19B, and 20

- 5 ☐ Within the last 12 months
- 4 ☐ 1 to 2 years ago
- 3 ☐ More than 2 years ago but less than 5 years ago
- 2 ☐ 5 or more years ago
- 1 ☐ Never had a mammogram

80. Have you been pregnant in the last 12 months or are you pregnant now?

H13062 | See Notes 19A,19B, and 21

- 1 ☐ Yes, I am currently pregnant ➜ *Go to Question 81*
- 2 ☐ No, I am not currently pregnant, but have been pregnant in the past 12 months ➜ *Go to Question 82*
- 3 ☐ No, I am not currently pregnant, and have not been pregnant in the past 12 months ➜ *Go to Question 83*

81. In what trimester is your pregnancy?

H13063

- 1 ☐ First trimester (up to 12 weeks after 1st day of last period) ➜ *Go to Question 83*
- 2 ☐ Second trimester (13th through 27th week)
- 3 ☐ Third trimester (28th week until delivery)

See Notes 19A,19B, and 21

82. In which trimester did you first receive prenatal care?

- 4 ☐ First trimester (up to 12 weeks after 1st day of last period)
- 3 ☐ Second trimester (13th through 27th week)
- 2 ☐ Third trimester (28th week until delivery)
- 1 ☐ Did not receive prenatal care

H13064	See Notes 19A,19B, and 21

ABOUT YOU

83. In general, how would you rate your overall health?

- 5 ☐ Excellent
- 4 ☐ Very good
- 3 ☐ Good
- 2 ☐ Fair
- 1 ☐ Poor

H13065

84. Are you limited in any way in any activities because of any impairment or health problem?

- 1 ☐ Yes
- 2 ☐ No

H13066

85. In the last 12 months, have you seen a doctor or other health provider 3 or more times for the same condition or problem?

- 1 ☐ Yes
- 2 ☐ No ➔ *Go to Question 87*

H13067	See Note 22

86. Is this a condition or problem that has lasted for at least 3 months? Do not include pregnancy or menopause.

- 1 ☐ Yes
- 2 ☐ No

H13068	See Note 22

87. Do you now need or take medicine prescribed by a doctor? Do not include birth control.

- 1 ☐ Yes
- 2 ☐ No ➔ *Go to Question 89*

H13069	See Note 23

88. Is this medicine to treat a condition that has lasted for at least 3 months? Do not include pregnancy or menopause.

- 1 ☐ Yes
- 2 ☐ No

H13070	See Note 23

89. Have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month…

MARK "YES" OR "NO" FOR EACH.   S13B23-S13B26

		YES	NO
a.	You have had nightmares about it or thought about it when you did not want to?	1 ☐	2 ☐
b.	You tried hard not to think about it or went out of your way to avoid situations that reminded you of it?	1 ☐	2 ☐
c.	You have been constantly on guard, watchful, or easily startled?	1 ☐	2 ☐
d.	You felt numb or detached from others, activities, or your surroundings?	1 ☐	2 ☐

90. How tall are you without your shoes on?

Please give your answer in feet and inches. Please write one number in each box.

Example: 5 feet, 6 inches   H13071F, H13071I

5	0	6

FEET   INCHES

Your height:

FEET   INCHES

91. How much do you weigh without your shoes on?

Please give your answer in pounds. Please write one number in each box.

Example: 152 pounds   H13072

1	5	2

POUNDS

Your weight:

POUNDS

10

92. What is the highest grade or level of school that you have completed?

SREDA

- 1 ☐ 8th grade or less
- 2 ☐ Some high school, but did not graduate
- 3 ☐ High school graduate or GED
- 4 ☐ Some college or 2-year degree
- 5 ☐ 4-year college graduate
- 6 ☐ More than 4-year college degree

93. Are you of Hispanic or Latino origin or descent?

(Mark "NO" if not Spanish/Hispanic/Latino.)

- A ☐ No, not Spanish, Hispanic, or Latino
- B ☐ Yes, Mexican, Mexican American, Chicano
- C ☐ Yes, Puerto Rican
- D ☐ Yes, Cuban
- E ☐ Yes, other Spanish, Hispanic, or Latino

H13073A-H13073E, H13073 | See Note 24

94. What is your race?

(Mark ONE OR MORE races to indicate what you consider yourself to be.)

SRRACEA-SRRACEE

- A ☐ White
- B ☐ Black or African American
- C ☐ American Indian or Alaska Native
- D ☐ Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- E ☐ Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

95. What is your age now?

SRAGE

- 1 ☐ 18 to 24
- 2 ☐ 25 to 34
- 3 ☐ 35 to 44
- 4 ☐ 45 to 54
- 5 ☐ 55 to 64
- 6 ☐ 65 to 74
- 7 ☐ 75 or older

96. Are you currently covered by Medicare?

- 1 ☐ Yes
- 2 ☐ No ➜ *Go to Question 102*
- -5 ☐ Don't know ➜ *Go to Question 102*

H13074 | See Note 25

97. Currently, are you covered by Medicare Part A? *Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part A helps pay for inpatient hospital care.*

- 1 ☐ Yes, I am now covered by Medicare Part A
- 2 ☐ No, I am not covered by Medicare Part A

H13075 | See Note 25

98. Currently, are you covered by Medicare Part B? *Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.*

- 1 ☐ Yes, I am now covered by Medicare Part B
- 2 ☐ No, I am not covered by Medicare Part B

H13076 | See Note 25

99. Medicare Advantage is the new name for Medicare Plus Choice plans. Are you enrolled in a Medicare Advantage plan? *This plan is also sometimes known as Medicare Part C.*

- 1 ☐ Yes
- 2 ☐ No
- -5 ☐ Don't know

H13077

See Note 25

100. Currently, are you covered by Medicare supplemental insurance? *Medicare supplemental insurance, also called Medigap or MediSup, is usually obtained from private insurance companies and covers some of the costs not paid for by Medicare.*

H13078 | See Note 25

- 1 ☐ Yes, I am now covered by Medicare supplemental insurance
- 2 ☐ No, I am not covered by Medicare supplemental insurance

101. Are you enrolled in Medicare Part D, also known as the Medicare Prescription Drug Plan?

- 1 ☐ Yes
- 2 ☐ No
- -5 ☐ Don't know

H13079 | See Note 25

102. Using a scale of 1 to 5, with 1 being "strongly disagree" and 5 being "strongly agree", how much do you agree with the following statement: In general, I am able to see my provider(s) when needed?

S13011

- 1 ☐ 1 Strongly disagree
- 2 ☐ 2 Disagree
- 3 ☐ 3 Neither agree nor disagree
- 4 ☐ 4 Agree
- 5 ☐ 5 Strongly agree

103. Using a scale of 1 to 5, with 1 being "completely dissatisfied" and 5 being "completely satisfied", how satisfied are you, overall, with the health care you received during your last visit?

S13014

- 1 ☐ 1 Completely dissatisfied
- 2 ☐ 2 Somewhat dissatisfied
- 3 ☐ 3 Neither satisfied nor dissatisfied
- 4 ☐ 4 Somewhat satisfied
- 5 ☐ 5 Completely satisfied

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> c/o Ipsos Survey Processing Center
> PO Box 5030
> Chicago, IL 60680-4138

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Toll-free phone (in the US, Puerto Rico and Canada): **1-877-236-2390**, available 24 hours a day
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APPENDIX B

CODING SCHEME AND CODING TABLES – QUARTER I

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2013 HEALTH CARE SURVEY OF DOD BENEFICIARIES (HCSDB)
CODING SCHEME AND CODING TABLES

BASIC SAS AND ASCII/EBCDIC MISSING DATA AND NOT APPLICABLE CODES

SAS	ASCII/EBCDIC	
Numeric	Numeric	Description
.	-9	No response
.O	-7	Out of range error
.N	-6	Not applicable or valid skip
.D	-5	Scalable response of "don't know" or "not sure"
.I	-4	Incomplete grid error
.C	-1	Question should have been skipped

Missing values '.' and incomplete grids '.I' are encoded prior to implementation of the Coding Scheme Notes (see below).

Coding Table for Note 1_Q1:
H13003, H13004, S13AA01, S13AA02A-S13AA02W, S13AA03, S13AA04A-S13AA04E,S13AA05

N1_Q1	H13003 is:	H13004 is:	S13AA01-S13AA05 are:	H13003 is coded as:	H13004 is coded as:	S13AA01-S13AA05 are coded as:	*
1	1-16: Health plan or -5: not sure	1- 3: <2 years or missing response	Any value	Stands as original value	Stands as original value	Stands as original value	
2	1-16: Health plan or -5: not sure	4- 6: >=2 years	Any value	Stands as original value	Stands as original value	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F
3	-6: No usage in past 12 months	Any value	Any value	Stands as original value	.N: Valid skip if missing .C: question should be skipped if marked	Stand as original value	F
4	Missing response	1-3: <2 years or missing response	Any value	Stands as original value	Stands as original value	Stands as original value	
5	Missing response	4-6: >=2 years	Any value	Stands as original value	Stands as original value	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 1_AA1:
S13AA01, S13AA02A-S13AA02W, S13AA03, S13AA04A-S13AA04E, S13AA05

N1_AA1	S13AA01 is:	S13AA02A-S13AA05 are:	S13AA01 is coded as:	S13AA02A-S13AA05 are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip; .C: question should be skipped	Stands as original value	Stand as original value	
2	1-16: Health plan or -5: not sure	Any value	Stands as original value	Stand as original value	
3	-6: No prior health plan	At least one is "marked"	.: Missing	Stand as original value	B
4	-6: No prior health plan	"All are blank, NA, or don't know"	.N: Valid skip	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F
5	Missing response	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "All are blank, NA, or don't know" in Coding Table for Note1_AA1:
Responses to S13AA02A-S13AA02W are all missing or unmarked, and responses to S13AA03-S13AA05 are all missing, don't know, or NA.

Definition of "marked" in Coding Table for Note 1_AA1:
Any pattern of marks outside the definition "All are blank, NA, or don't know".

Coding Table for Note 2:
H13006, H13007, H13008

N2	H13006 is:	H13007-H13008 are:	H13006 is coded as:	H13007-H13008 are coded as:	*
1	1: Yes	"All are blank"	Stands as original value	Stand as original value	
2	1: Yes or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	1: Yes	"One marked, and one NA"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
4	1: Yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: No	"One marked, and one NA"	Stands as original value	.C: Question should be skipped if marked	F
6	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
7	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
8	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 2:
Responses to H13007-H13008 are all missing.

Definition of "blank or NA" in Coding Table for Note 2:
All of the following are true: H13007-H13008 are a combination of not applicable (-6) or missing.

Definition of "one marked and one NA" in Coding Table for Note 2:
H13007-H13008 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 2:
Any pattern of marks outside the definitions "all are blank", "one marked and one NA", and "blank or NA".

Coding Table for Note 3:
H13009, H13010, H13011

N3	H13009 is:	H13010-H13011 are:	H13009 is coded as:	H13010-H13011 are coded as:	*
1	1: Yes	"All are blank"	Stands as original value	Stand as original value	
2	1: Yes or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	1: Yes	"One marked and one NA"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
4	1: Yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: No	"One marked and one NA"	Stands as original value	.C: Question should be skipped if marked	F
6	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
7	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
8	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 3:
Responses to H13010-H13011 are all missing.

Definition of "blank or NA" in Coding Table for Note 3:
All of the following are true: H13010-H13011 are a combination of not applicable (-6) or missing.

Definition of "one marked and one NA" in Coding Table for Note 3:
H13010-H13011 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 3:
Any pattern of marks outside the definitions "all are blank", "one marked and one NA", and "blank or NA".

Coding Table for Note 4:
H13013, H13014-H13018

N4	H13013 is:	H13014-H13018 are:	H13013 is coded as:	H13014-H13018 are coded as:	*
1	1: None	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
2	2-7: Visits, or .: missing	"Blank or NA"	1: None	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2-7: Visits	At least one is "marked" or "all are blank"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
4	.: Missing	"All are blank"	Stands as original value	Stand as original value	
5	.: Missing	At least one is "marked"	Stands as original value	.: Missing if –6; stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 4:
Responses to H13014-H13018 are all missing.

Definition of "blank or NA" in Coding Table for Note 4:
All of the following are true: H13014-H13018 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 4:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 5:
H13015, H13016-H13017

N5	H13015 is:	H13016 is:	H13017 is:	H13015 is coded as:	H13016 is coded as:	H13017 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
3	2: No or .: missing	1: Definitely yes 2: somewhat yes	Any value	1: Yes	Stands as original value	Stands as original value	B
4	2: No or .: missing	3: Somewhat no, 4: definitely no, or .: missing	1: Definitely yes 2: somewhat yes	1: Yes	Stands as original value	Stands as original value	B
5	2: No	3: Somewhat no, 4: definitely no, or .: missing	3: Somewhat no, 4: definitely no, or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing	3: Somewhat no, 4: definitely no, or .: missing	3: Somewhat no, 4: definitely no, or .: missing	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 6:
H13019, H13020-H13027, S13009

N6	H13019 is:	H13020-H13024 are:	H13025-H13026, S13009 are:	H13027 is:	H13019 is coded as:	H13020-H13026, S13009 are coded as:	H13027 is coded as:	*
1	1: Yes	Any value	Any value	Any value	Stands as original value	Stand as original value	.: Missing if –6; stands as original value otherwise	F
2	2: No or .: missing	Any value	Any value	0-10	1: Yes	Stand as original value	Stands as original value	B
3	2: No or .: missing	At least one is "marked"	Any value	.: Missing	1: Yes	Stand as original value	Stands as original value	B
4	2: No	At least one is "marked"	Any value	-6: No personal doctor	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.C: Question should be skipped	F
5	2: No	"Blank or NA"	Any value	-6: No personal doctor or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing	Any value	Any value	-6: No personal doctor	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	.C: Question should be skipped	B F
7	.: Missing	"Blank or NA"	Any value	.: Missing	Stands as original value	Stand as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "blank or NA" in Coding Table for Note 6:
All of the following are true: H13020 is either 0: None or missing and H13021-H13024 are either not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 6:
Any pattern of marks for H13020-H13024 outside the definition "blank or NA".

Coding Table for Note 7:
H13020, H13021-H13026

N7	H13020 is:	H13021-H13024 are:	H13025-H13026 are:	H13020 is coded as:	H13021-H13026 are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Any value	Stands as original value	Stand as original value	
2	0: None	Any value	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	1-6: Visits, or .: missing	"Blank or NA"	Any value	0: None	.N: Valid skip if missing; .C: question should be skipped if marked	B F
4	1-6: Visits, or .: missing	At least one is "marked" or "all are blank"	Any value	Stands as original value	.: Missing if –6; stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 7:
Responses to H13021-H13024 are all missing.

Definition of "blank or NA" in Coding Table for Note 7:
Responses to H13021-H13024 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 7:
Any pattern of marks for H13021-H13024 outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 8:
H13025, H13026

N8	H13025 is:	H13026 is:	H13025 is coded as:	H13026 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	Stands as original value	
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	.: Missing	Stands as original value	.N: Valid skip	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 8_01:
S13009, S13010

N8_01	S13009 is:	S13010 is:	S13009 is coded as:	S13010 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	Any value	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: No	Any value	Stands as original value	Stands as original value	
4	.: Missing	Any value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 9:
H13028, H13029-H13031

N9	H13028 is:	H13029-H13031 are:	H13028 is coded as:	H13029 is coded as:	H13030-H13031 are coded as:	*
1	1: Yes	Any value	Stands as original value	.: Missing if –6; stands as original value otherwise	Stand as original value	F
2	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stands as original value otherwise	Stand as original value	B
3	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	.: Missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	B F
5	.: Missing	"All are blank"	Stands as original value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 9:
Responses to H13029-H13031 are all missing.

Definition of "blank or NA" in Coding Table for Note 9:
All of the following are true: H13029 and H13031 are a combination of not applicable (-6) or missing. H13030 is either missing or 0: None.

Definition of "marked" in Coding Table for Note 9:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 10:
H13030, H13031

N10	H13030 is:	H13031 is:	H13030 is coded as:	H13031 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	1-5: Specialists	0-10 or .: missing	Stands as original value	Stands as original value	
3	1-5: Specialists or .: missing	-6: Didn't see a specialist in the last 12 months	0: None	.C: Question should be skipped	B F
4	0: None	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	0-10 or .: missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10_B1:
S13B02, S13B03-S13B04

N10_B1	S13B02 is:	S13B03-S13B04 are:	S13B02 is coded as:	S13B03-S13B04 are coded as:	*
1	1: Yes	Any value	Stands as original value	.: Missing if –6; stand as original value otherwise	F
2	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
3	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	.: Missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
5	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10_B1:
Responses to S13B03-S13B04 are all missing.

Definition of "blank or NA" in Coding Table for Note 10_B1:
All of the following are true: S13B03-S13B04 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 10_B1:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 11:
H13032, H13033

N11	H13032 is:	H13033 is:	H13032 is coded as:	H13033 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need care, tests, or treatment	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	–6: Didn't need care, tests, or treatment or .: missing	Stands as original value	.N: Valid skip if missing; .C: Question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 12:
H13034, H13035

N12	H13034 is:	H13035 is:	H13034 is coded as:	H13035 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't look for information	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't look for information or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 13:
H13036, H13037

N13	H13036 is:	H13037 is:	H13036 is coded as:	H13037 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need service or equipment	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't need service or equipment or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 14:
H13038, H13039

N14	H13038 is:	H13039 is:	H13038 is coded as:	H13039 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need prescription meds	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't need prescription meds or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15:
H13040, H13041-H13042

N15	H13040 is:	H13041-H13042 are:	H13040 is coded as:	H13041-H13042 are coded as:	*
1	1: Yes	At least one is "marked" or "all are blank"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
2	1: Yes or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
4	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 15:
Responses to H13041-H13042 are all missing.

Definition of "blank or NA" in Coding Table for Note 15:
All of the following are true: H13041-H13042 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 15:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 16:
H13043, H13044

N16	H13043 is:	H13044 is:	H13043 is coded as:	H13044 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't receive forms to fill out	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't receive forms to fill out or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 17:
H13045, H13046-H13047

N17	H13045 is:	H13046-H13047 are:	H13045 is coded as:	H13046-H13047 are coded as:	*
1	1: Yes	At least one is "marked", "all are blank" or "blank or don't know"	Stands as original value	.: Missing if –6; stands as original value otherwise	F
2	1: Yes, -5: don't know or .: missing	"Blank or NA" or "NA or don't know"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2: No, -5: don't know or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stands as original value otherwise	B F
4	2: No	None are "marked"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	-5: Don't know	"Blank or don't know" or "all are blank"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing	"Blank or don't know" or "all are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 17:
Responses to H13046-H13047 are all missing.

Definition of "blank or NA" in Coding Table for Note 17:
Responses to H13046-H13047 are either all not applicable (-6) or a combination of missing and not applicable (-6).

Definition of "blank or don't know" in Coding Table for Note 17:
Responses to H13046-H13047 are either all don't know (-5) or a combination of missing and don't know (-5).

Definition of "NA or don't know" in Coding Table for Note 17:
Responses to H13046-H13047 are a combination of not applicable (-6) and don't know (-5).

Definition of "marked" in Coding Table for Note 17:
Any pattern of marks outside the definitions "all are blank," "blank or NA," "blank or don't know," or "NA or don't know".

Coding Table for Note 18:
H13053, H13054-H13056, H13057A-H13057D

N18	H13053 is:	H13054-H13056 are:	H13057A-H13057D are:	H13053 is coded as:	H13054- H13056, H13057A-H13057D are coded as:	*
1	3: Some days, 4: every day, or .: missing	Any value	Any value	Stands as original value	Stand as original value	
2	2: Not at all or -5: don't know	Any value	"All are unmarked"	Stands as original value	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F
3	2: Not at all	Any value	At least one is "marked"	.: Missing	Stand as original value	B
4	-5: Don't know	Any value	At least one is "marked"	Stands as original value	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are unmarked" in Coding Table for Note 18:
Responses to H13057A-H13057D are all missing or unmarked.

Definition of "marked" in Coding Table for Note 18:
Any pattern of marks outside the definition "all are unmarked"

Coding Table for Note 19:

Note 19 (Part A)
H13058, H13059B, H13060-H13064

N19A	H13058 is :	SEX is:	H13059B--H13064 are:	XSEXA is coded as:
1	.: Missing	F	Any marked	2: Female
2	.: Missing	F	All missing	2: Female
3	.: Missing	M	Any marked	1: Male
4	.: Missing	M	All missing	1: Male
5	.: Missing	Z or .: missing	Any marked	2: Female
6	.: Missing	Z	All missing	.: Missing
7	.: Missing	.: Missing	All missing	.: Missing
8	1: Male	Any value	All missing	1: Male
9	1: Male	F	Any marked	2: Female
10	1: Male	M, Z, or .: missing	Any marked	1: Male
11	2: Female	Any value	Any marked	2: Female
12	2: Female	M	All missing	1: Male
13	2: Female	F, Z, or .: missing	All missing	2: Female

SEX (PNSEXCD) is the gender from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

XSEXA is the recoded gender variable after taking into account the self-reported response (H13058), any responses to gender-specific questions, and the gender of the sample beneficiary from DEERS.

Note 19 (Part B):
H13059B, H13060-H13064

N19B	XSEXA is:	H13059B--H13064 are:	H13059B--H13064 are coded as:	*
1	1: Male	"All are blank"	.N: Valid skip	F
2	1: Male	At least one is "marked"	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: Female	"All are blank" or at least one is "marked"	Stand as original value	
4	.: Missing	"All are blank" or at least one is "marked"	Missing value	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 19b:
All variables H13059B--H13064 are missing.

Definition of "marked" in Coding Table for Note 19b:
Any pattern of marks outside the definition "all are blank".

Coding Table for Note 20
XSEXA, AGE, H13060, H13061

N20	XSEXA is:	AGE is:	H13060 is:	H13061 is:	H13060 is coded as:	H13061 is coded as:	*
1	1: Male	Any value	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	2: Female	Any value	2: 40 or over	Any value	Stands as original value	Stands as original value	
3	2: Female	Any value	1: Under 40	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	2: Female	Any value	.: Missing	Marked	2: >= 40	Stands as original value	B
5	2: Female	< 40	.: Missing	.: Missing	1: < 40	.N: Valid skip	F B
6	2: Female	>=40	.: Missing	.: Missing	2: >= 40	Stands as original value	B
7	2: Female	.: Missing	.: Missing	.: Missing	Stands as original value	Stands as original value	
8	.: Missing	Any value	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

AGE (DAGEQY) is from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

Coding Table for Note 21:
XSEXA, H13062-H13064

N21	XSEXA is:	H13062 is:	H13063 is:	H13064 is:	H13062 is coded as:	H13063 is coded as:	H13064 is coded as:	*
1	1: Male	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
2	2: Female	1: Pregnant now	1: First trimester	Any value	Stands as original value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: Female	1: Pregnant now	2: Second trimester	2: Third trimester	Stands as original value	Stands as original value	.: Missing	F
4	2: Female	1: Pregnant now	2: Second trimester	4: First trimester, 3: second trimester, 1: did not receive prenatal care, or .: missing	Stands as original value	Stands as original value	Stands as original value	
5	2: Female	1: Pregnant now	3: Third trimester or .: missing	Any value	Stands as original value	Stands as original value	Stands as original value	
6	2: Female	2: Pregnant in last 12 months	Any value	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	Stands as original value	F
7	2: Female	3: Not pregnant in past 12 months	Any value	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
8	2: Female	.: Missing	1: First trimester	Any value	1: Pregnant now	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	B F
9	2: Female	.: Missing	2: Second trimester	2: Third trimester	1: Pregnant now	Stands as original value	.: Missing	B F
10	2: Female	.: Missing	2: Second trimester	4: First trimester, 3: second trimester, 1: did not receive prenatal care, or .: missing	1: Pregnant now	Stands as original value	Stands as original value	B
11	2: Female	.: Missing	3: Third trimester	Any value	1: Pregnant now	Stands as original value	Stands as original value	B
12	2: Female	.: Missing	.: Missing	Any value	Stands as original value	Stands as original value	Stands as original value	F
13	.: Missing	.: Missing	Marked or .: missing	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F)

Coding Table for Note 22:
H13067, H13068

N22	H13067 is:	H13068 is:	H13067 is coded as:	H13068 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or .: missing	1: Yes or 2: no	1: Yes	Stands as original value	B
3	2: No	.: Missing	Stands as original value	.N: Valid skip	F
4	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 23:
H13069, H13070

N23	H13069 is:	H13070 is:	H13069 is coded as:	H13070 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or .: missing	1: Yes or 2: no	1: Yes	Stands as original value	B
3	2: No	.: Missing	Stands as original value	.N: Valid skip	F
4	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 24:
H13073, H13073A-H13073E

N24	H13073A is:	H13073B is:	H13073C is:	H13073D is:	H13073E is:	H13073 is coded as:	H13073A-E are coded as:	*
1	Any value	1: Marked	Any value	Any value	Any value	2: Yes, Mexican, Mexican American, Chicano	Stand as original value	F
2	Any value	2: Unmarked	Any value	Any value	1: Marked	5: Yes, other Spanish, Hispanic, or Latino	Stand as original value	F
3	Any value	2: Unmarked	1: Marked	Any value	2: Unmarked	3: Yes, Puerto Rican	Stand as original value	F
4	Any value	2: Unmarked	2: Unmarked	1: Marked	2: Unmarked	4: Yes, Cuban	Stand as original value	F
5	1: Marked	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	1: No, not Spanish, Hispanic, or Latino	Stand as original value	F
6	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	.: Missing	Stand as original value	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 25:
H13074, H13075-H13079

N25	H13074 is:	H13075-H13079 are:	H13074 is coded as:	H13075-H13079 are coded as:	*
1	1: Yes	Any value	Stands as original value	Stand as original value	
2	2: No or -5: don't know	"All are uncovered/unknown"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: No, -5: don't know, or .: missing	At least one is "covered"	1: Yes	Stand as original value	B
4	.: Missing	"All are uncovered/unknown"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are uncovered/unknown" in Coding Table for Note 25:
Responses to H13075-H13079 are all 2: no, -5: don't know, or missing.

Definition of "covered" in Coding Table for Note 25:
Any pattern of marks outside the definition "all are uncovered/unknown".

APPENDIX B

CODING SCHEME AND CODING TABLES – QUARTER II

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2013 HEALTH CARE SURVEY OF DOD BENEFICIARIES (HCSDB)
CODING SCHEME AND CODING TABLES

BASIC SAS AND ASCII/EBCDIC MISSING DATA AND NOT APPLICABLE CODES

SAS	ASCII/EBCDIC	
Numeric	Numeric	Description
.	-9	No response
.O	-7	Out of range error
.N	-6	Not applicable or valid skip
.D	-5	Scalable response of "don't know" or "not sure"
.I	-4	Incomplete grid error
.C	-1	Question should have been skipped

Missing values '.' and incomplete grids '.I' are encoded prior to implementation of the Coding Scheme Notes (see below).

Coding Table for Note 1:
H13003, H13004

N1	H13003 is:	H13004 is:	H13003 is coded as:	H13004 is coded as:	*
1	1-16: Health plan or -5: Not sure	Marked or missing response	Stands as original value	Stands as original value	
2	-6: No usage in past 12 months	Marked response	Stands as original value	.C: Question should be skipped	F
3	-6: No usage in past 12 months	Missing response	Stands as original value	.N: Valid skip	F
4	Missing response	Marked or missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 1_J1:
S13J01, S13J02A-S13J02I, S13J03-S13J06, S13J07A-S13J07O, S13J08, S13J09A-S13J09L, S13J10, S13J13A-S13J13N, S13J14

N1_J1	S13J01 is:	S13J02A-S13J02H are:	S13J02I, S13J03-S13J06, S13J07A-S13J07O, S13J08, S13J09A-S13J09L, S13J10, S13J13A-S13J13N, S13J14 are:	S13J01 is coded as:	S13J02A-S13J02H are coded as:	S13J02I, S13J03-S13J06, S13J07A-S13J07O, S13J08, S13J09A-S13J09L, S13J10, S13J13A-S13J13N, S13J14 are coded as:	*
1	1: Yes	Any value	Any value	Stands as original value	Stand as original value	Stand as original value	
2	2: No or .: missing	At least one value is 1: marked	Any value	1: Yes	Stand as original value	Stand as original value	B
3	2: No	All values are 2: unmarked or missing response	Any value	Stands as original value	.N: Valid skip	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F
4	.: Missing	All values are 2: unmarked or missing response	At least one is "marked"	1: Yes	Stand as original value	Stand as original value	B
5	.: Missing	All values are 2: unmarked or missing response	"All are blank or don't know"	Stands as original value	.: Missing	.: Missing if 2: unmarked; stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank or don't know" in Coding Table for Note 1_J1:
Responses to S13J03-S13J06, S13J07A-S13J07O, S13J08, S13J09A-S13J09L, S13J10, S13J13A-S13J13N, and S13J14
are all missing or unmarked or -5:don't know. (Because the 1: marked value for S13J02I indicates a "don't know"
response, it does not matter if S13J02I is marked, unmarked, or missing).

Definition of "marked" in Coding Table for Note 1_J1:
Any pattern of marks outside the definition "all are blank or don't know".

Coding Table for Note 1_J2:
S13J03-S13J05

N1_J2	S13J03 is:	S13J04-S13J05 are:	S13J03 is coded as:	S13J04-S13J05 are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stand as original value	
2	1-2: Yes	Any value	Stands as original value	Stand as original value	
3	4: No	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	.: Missing	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 1_J3:
S13J04, S13J05

N1_J3	S13J04 is:	S13J05 are:	S13J04 is coded as:	S13J05 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	1, 2: Yes, -5: don't know, or .: missing	1-1000, don't know, or .: missing	Stands as original value	Stands as original value	
3	1, 2: Yes, -5: don't know, or .: missing	0	3: No	.C: Question should be skipped	B F
4	3: No	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 1_J4:
S13J06, S13J07A- S13J07O

N1_J4	S13J06 is:	S13J07A- S13J07O are:	S13J06 is coded as:	S13J07A- S13J07O are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stand as original value	
2	1: Yes or .: missing	At least one is "marked"	2: No	Stand as original value	B
3	1: Yes	"All are blank"	Stands as original value	.N: Valid skip	F
4	2: No	Any value	Stands as original value	Stand as original value	
5	.: Missing	"All are blank"	Stands as original value	.: Missing	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 1_J4:
Responses to S13J07A- S13J07O are all missing or unmarked.

Definition of "marked" in Coding Table for Note 1_J4:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 1_J5:
S13J08, S13J09A- S13J09L

N1_J5	S13J08 is:	S13J09A- S13J09L are:	S13J08 is coded as:	S13J09A- S13J09L are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stand as original value	
2	1: Yes or .: missing	At least one is "marked"	2: No	Stand as original value	B
3	1: Yes	"All are blank"	Stands as original value	.N: Valid skip	F
4	2: No	Any value	Stands as original value	Stand as original value	
5	.: Missing	"All are blank"	Stands as original value	.: Missing	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 1_J5:
Responses to S13J09A- S13J09L are all missing or unmarked.

Definition of "marked" in Coding Table for Note 1_J5:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 1_J6:
S13J10, S13J13A- S13J13N, S13J14

N1_J6	S13J10 is:	S13J13A- S13J13N, S13J14 are:	S13J10 is coded as:	S13J13A- S13J13N, S13J14 are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stand as original value	
2	1: Yes	Any value	Stands as original value	Stand as original value	
3	2: No or .: missing	At least one is "marked"	1: Yes	Stand as original value	B
4	2: No	"All are blank"	Stands as original value	.N: Valid skip	F
5	.: Missing	"All are blank"	Stands as original value	.: Missing	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 1_J6:
Responses to S13J13A-S13J13N and S13J14 are all missing or unmarked.

Definition of "marked" in Coding Table for Note 1_J6:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 1_AC1:
H13005, S13AC01, S13AC02A-S13AC02G, S13AC03, S13AC04, S13AC05A-S13AC05G

N1_AC1	H13005 is:	S13AC01, S13AC02A-S13AC02G,S13AC03, S13AC04, S13AC05A-S13AC05G are:	H13005 is coded as:	S13AC01, S13AC02A-S13AC02G,S13AC03, S13AC04, S13AC05A-S13AC05G are coded as:	*
1	1-4: Facility type or .: missing	Any value	Stands as original value	Stand as original value	
2	5: None of the facility types	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 1_AC2:
S13AC01, S13AC02A- S13AC02G

N1_AC2	S13AC01 is:	S13AC02A-S13AC02G are:	S13AC01 is coded as:	S13AC02A- S13AC02G are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stand as original value	
2	1: Yes	Any value	Stands as original value	Stand as original value	
3	2: No or .: missing	At least one is "marked"	1: Yes	Stand as original value	B
4	2: No	"All are blank"	Stands as original value	.N: Valid skip	F
5	.: Missing	"All are blank"	Stands as original value	.: Missing	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 1_AC2:
Responses to S13AC02A-S13AC02G are all missing or unmarked.

Definition of "marked" in Coding Table for Note 1_AC2:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 1_AC3:
S13AC03, S13AC04, S13AC05A- S13AC05G

N1_AC3	S13AC03 is:	S13AC04, S13AC05A-S13AC05G are:	S13AC03 is coded as:	S13AC04, S13AC05A-S13AC05G are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stand as original value	
2	1: Yes	Any value	Stands as original value	Stand as original value	
3	2: No or .: missing	At least one is "marked"	1: Yes	Stand as original value	B
4	2: No	"All are blank"	Stands as original value	.N: Valid skip	F
5	.: Missing	"All are blank"	Stands as original value	.: Missing	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 1_AC3:
Responses to S13AC04 and S13AC05A-S13AC05G are all missing or unmarked.

Definition of "marked" in Coding Table for Note 1_AC3:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 2:
H13006, H13007, H13008

N2	H13006 is:	H13007-H13008 are:	H13006 is coded as:	H13007-H13008 are coded as:	*
1	1: Yes	"All are blank"	Stands as original value	Stand as original value	
2	1: Yes or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	1: Yes	"One marked, and one NA"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
4	1: Yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: No	"One marked, and one NA"	Stands as original value	.C: Question should be skipped if marked	F
6	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
7	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
8	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 2:
Responses to H13007-H13008 are all missing.

Definition of "blank or NA" in Coding Table for Note 2:
All of the following are true: H13007-H13008 are a combination of not applicable (-6) or missing.

Definition of "one marked and one NA" in Coding Table for Note 2:
H13007-H13008 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 2:
Any pattern of marks outside the definitions "all are blank", "one marked and one NA", and "blank or NA".

Coding Table for Note 3:
H13009, H13010, H13011

N3	H13009 is:	H13010-H13011 are:	H13009 is coded as:	H13010-H13011 are coded as:	*
1	1: Yes	"All are blank"	Stands as original value	Stand as original value	
2	1: Yes or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	1: Yes	"One marked and one NA"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
4	1: Yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: No	"One marked and one NA"	Stands as original value	.C: Question should be skipped if marked	F
6	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
7	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
8	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 3:
Responses to H13010-H13011 are all missing.

Definition of "blank or NA" in Coding Table for Note 3:
All of the following are true: H13010-H13011 are a combination of not applicable (-6) or missing.

Definition of "one marked and one NA" in Coding Table for Note 3:
H13010-H13011 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 3:
Any pattern of marks outside the definitions "all are blank", "one marked and one NA", and "blank or NA".

Coding Table for Note 4:
H13013, H13014-H13018

N4	H13013 is:	H13014-H13018 are:	H13013 is coded as:	H13014-H13018 are coded as:	*
1	1: None	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
2	2-7: Visits, or .: missing	"Blank or NA"	1: None	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2-7: Visits	At least one is "marked" or "all are blank"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
4	.: Missing	"All are blank"	Stands as original value	Stand as original value	
5	.: Missing	At least one is "marked"	Stands as original value	.: Missing if –6; stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 4:
Responses to H13014-H13018 are all missing.

Definition of "blank or NA" in Coding Table for Note 4:
All of the following are true: H13014-H13018 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 4:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 5:
H13015, H13016-H13017

N5	H13015 is:	H13016 is:	H13017 is:	H13015 is coded as:	H13016 is coded as:	H13017 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
3	2: No or .: missing	1: Definitely yes 2: somewhat yes	Any value	1: Yes	Stands as original value	Stands as original value	B
4	2: No or .: missing	3: Somewhat no, 4: definitely no, or .: missing	1: Definitely yes 2: somewhat yes	1: Yes	Stands as original value	Stands as original value	B
5	2: No	3: Somewhat no, 4: definitely no, or .: missing	3: Somewhat no, 4: definitely no, or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing	3: Somewhat no, 4: definitely no, or .: missing	3: Somewhat no, 4: definitely no, or .: missing	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 6:
H13019, H13020-H13027, S13009

N6	H13019 is:	H13020-H13024 are:	H13025-H13026, S13009 are:	H13027 is:	H13019 is coded as:	H13020-H13026, S13009 are coded as:	H13027 is coded as:	*
1	1: Yes	Any value	Any value	Any value	Stands as original value	Stand as original value	.: Missing if –6; stands as original value otherwise	F
2	2: No or .: missing	Any value	Any value	0-10	1: Yes	Stand as original value	Stands as original value	B
3	2: No or .: missing	At least one is "marked"	Any value	.: Missing	1: Yes	Stand as original value	Stands as original value	B
4	2: No	At least one is "marked"	Any value	-6: No personal doctor	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.C: Question should be skipped	F
5	2: No	"Blank or NA"	Any value	-6: No personal doctor or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing	Any value	Any value	-6: No personal doctor	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	.C: Question should be skipped	B F
7	.: Missing	"Blank or NA"	Any value	.: Missing	Stands as original value	Stand as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "blank or NA" in Coding Table for Note 6:
All of the following are true: H13020 is either 0: None or missing and H13021-H13024 are either not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 6:
Any pattern of marks for H13020-H13024 outside the definition "blank or NA".

Coding Table for Note 7:
H13020, H13021-H13026

N7	H13020 is:	H13021-H13024 are:	H13025-H13026 are:	H13020 is coded as:	H13021-H13026 are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Any value	Stands as original value	Stand as original value	
2	0: None	Any value	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	1-6: Visits, or .: missing	"Blank or NA"	Any value	0: None	.N: Valid skip if missing; .C: question should be skipped if marked	B F
4	1-6: Visits, or .: missing	At least one is "marked" or "all are blank"	Any value	Stands as original value	.: Missing if –6; stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 7:
Responses to H13021-H13024 are all missing.

Definition of "blank or NA" in Coding Table for Note 7:
Responses to H13021-H13024 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 7:
Any pattern of marks for H13021-H13024 outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 8:
H13025, H13026

N8	H13025 is:	H13026 is:	H13025 is coded as:	H13026 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	Stands as original value	
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	.: Missing	Stands as original value	.N: Valid skip	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 8_01:
S13009, S13010

N8_01	S13009 is:	S13010 is:	S13009 is coded as:	S13010 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	Any value	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: No	Any value	Stands as original value	Stands as original value	
4	.: Missing	Any value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 9:
H13028, H13029-H13031

N9	H13028 is:	H13029-H13031 are:	H13028 is coded as:	H13029 is coded as:	H13030-H13031 are coded as:	*
1	1: Yes	Any value	Stands as original value	.: Missing if –6; stands as original value otherwise	Stand as original value	F
2	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stands as original value otherwise	Stand as original value	B
3	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	.: Missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	B F
5	.: Missing	"All are blank"	Stands as original value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 9:
Responses to H13029-H13031 are all missing.

Definition of "blank or NA" in Coding Table for Note 9:
All of the following are true: H13029 and H13031 are a combination of not applicable (-6) or missing. H13030 is either missing or 0: None.

Definition of "marked" in Coding Table for Note 9:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 10:
H13030, H13031

N10	H13030 is:	H13031 is:	H13030 is coded as:	H13031 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	1-5: Specialists	0-10 or .: missing	Stands as original value	Stands as original value	
3	1-5: Specialists or .: missing	-6: Didn't see a specialist in the last 12 months	0: None	.C: Question should be skipped	B F
4	0: None	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	0-10 or .: missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10_B1:
S13B02, S13B03-S13B04

N10_B1	S13B02 is:	S13B03-S13B04 are:	S13B02 is coded as:	S13B03-S13B04 are coded as:	*
1	1: Yes	Any value	Stands as original value	.: Missing if –6; stand as original value otherwise	F
2	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
3	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	.: Missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
5	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10_B1:
Responses to S13B03-S13B04 are all missing.

Definition of "blank or NA" in Coding Table for Note 10_B1:
All of the following are true: S13B03-S13B04 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 10_B1:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 11:
H13032, H13033

N11	H13032 is:	H13033 is:	H13032 is coded as:	H13033 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need care, tests, or treatment	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	–6: Didn't need care, tests, or treatment or .: missing	Stands as original value	.N: Valid skip if missing; .C: Question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 12:
H13034, H13035

N12	H13034 is:	H13035 is:	H13034 is coded as:	H13035 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't look for information	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't look for information or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 13:
H13036, H13037

N13	H13036 is:	H13037 is:	H13036 is coded as:	H13037 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need service or equipment	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't need service or equipment or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 14:
H13038, H13039

N14	H13038 is:	H13039 is:	H13038 is coded as:	H13039 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need prescription meds	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't need prescription meds or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15:
H13040, H13041-H13042

N15	H13040 is:	H13041-H13042 are:	H13040 is coded as:	H13041-H13042 are coded as:	*
1	1: Yes	At least one is "marked" or "all are blank"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
2	1: Yes or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
4	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 15:
Responses to H13041-H13042 are all missing.

Definition of "blank or NA" in Coding Table for Note 15:
All of the following are true: H13041-H13042 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 15:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 16:
H13043, H13044

N16	H13043 is:	H13044 is:	H13043 is coded as:	H13044 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't receive forms to fill out	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't receive forms to fill out or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 17:
H13045, H13046-H13047

N17	H13045 is:	H13046-H13047 are:	H13045 is coded as:	H13046-H13047 are coded as:	*
1	1: Yes	At least one is "marked", "all are blank" or "blank or don't know"	Stands as original value	.: Missing if –6; stands as original value otherwise	F
2	1: Yes, -5: don't know or .: missing	"Blank or NA" or "NA or don't know"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2: No, -5: don't know or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stands as original value otherwise	B F
4	2: No	None are "marked"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	-5: Don't know	"Blank or don't know" or "all are blank"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing	"Blank or don't know" or "all are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 17:
Responses to H13046-H13047 are all missing.

Definition of "blank or NA" in Coding Table for Note 17:
Responses to H13046-H13047 are either all not applicable (-6) or a combination of missing and not applicable (-6).

Definition of "blank or don't know" in Coding Table for Note 17:
Responses to H13046-H13047 are either all don't know (-5) or a combination of missing and don't know (-5).

Definition of "NA or don't know" in Coding Table for Note 17:
Responses to H13046-H13047 are a combination of not applicable (-6) and don't know (-5).

Definition of "marked" in Coding Table for Note 17:
Any pattern of marks outside the definitions "all are blank," "blank or NA," "blank or don't know," or "NA or don't know".

Coding Table for Note 18:
H13053, H13054-H13056, H13057A-H13057D

N18	H13053 is:	H13054-H13056 are:	H13057A-H13057D are:	H13053 is coded as:	H13054- H13056, H13057A-H13057D are coded as:	*
1	3: Some days, 4: every day, or .: missing	Any value	Any value	Stands as original value	Stand as original value	
2	2: Not at all or -5: don't know	Any value	"All are unmarked"	Stands as original value	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F
3	2: Not at all	Any value	At least one is "marked"	.: Missing	Stand as original value	B
4	-5: Don't know	Any value	At least one is "marked"	Stands as original value	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are unmarked" in Coding Table for Note 18:
Responses to H13057A-H13057D are all missing or unmarked.

Definition of "marked" in Coding Table for Note 18:
Any pattern of marks outside the definition "all are unmarked"

Coding Table for Note 19:

Note 19 (Part A)
H13058, H13059B, H13060-H13064

N19A	H13058 is :	SEX is:	H13059B--H13064 are:	XSEXA is coded as:
1	.: Missing	F	Any marked	2: Female
2	.: Missing	F	All missing	2: Female
3	.: Missing	M	Any marked	1: Male
4	.: Missing	M	All missing	1: Male
5	.: Missing	Z or .: missing	Any marked	2: Female
6	.: Missing	Z	All missing	.: Missing
7	.: Missing	.: Missing	All missing	.: Missing
8	1: Male	Any value	All missing	1: Male
9	1: Male	F	Any marked	2: Female
10	1: Male	M, Z, or .: missing	Any marked	1: Male
11	2: Female	Any value	Any marked	2: Female
12	2: Female	M	All missing	1: Male
13	2: Female	F, Z, or .: missing	All missing	2: Female

SEX (PNSEXCD) is the gender from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

XSEXA is the recoded gender variable after taking into account the self-reported response (H13058), any responses to gender-specific questions, and the gender of the sample beneficiary from DEERS.

Note 19 (Part B):
H13059B, H13060-H13064

N19B	XSEXA is:	H13059B--H13064 are:	H13059B--H13064 are coded as:	*
1	1: Male	"All are blank"	.N: Valid skip	F
2	1: Male	At least one is "marked"	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: Female	"All are blank" or at least one is "marked"	Stand as original value	
4	.: Missing	"All are blank" or at least one is "marked"	Missing value	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 19b:
All variables H13059B--H13064 are missing.

Definition of "marked" in Coding Table for Note 19b:
Any pattern of marks outside the definition "all are blank".

Coding Table for Note 20
XSEXA, AGE, H13060, H13061

N20	XSEXA is:	AGE is:	H13060 is:	H13061 is:	H13060 is coded as:	H13061 is coded as:	*
1	1: Male	Any value	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	2: Female	Any value	2: 40 or over	Any value	Stands as original value	Stands as original value	
3	2: Female	Any value	1: Under 40	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	2: Female	Any value	.: Missing	Marked	2: >= 40	Stands as original value	B
5	2: Female	< 40	.: Missing	.: Missing	1: < 40	.N: Valid skip	F B
6	2: Female	>=40	.: Missing	.: Missing	2: >= 40	Stands as original value	B
7	2: Female	.: Missing	.: Missing	.: Missing	Stands as original value	Stands as original value	
8	.: Missing	Any value	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

AGE (DAGEQY) is from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

Coding Table for Note 21:
XSEXA, H13062-H13064

N21	XSEXA is:	H13062 is:	H13063 is:	H13064 is:	H13062 is coded as:	H13063 is coded as:	H13064 is coded as:	*
1	1: Male	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
2	2: Female	1: Pregnant now	1: First trimester	Any value	Stands as original value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: Female	1: Pregnant now	2: Second trimester	2: Third trimester	Stands as original value	Stands as original value	.: Missing	F
4	2: Female	1: Pregnant now	2: Second trimester	4: First trimester, 3: second trimester, 1: did not receive prenatal care, or .: missing	Stands as original value	Stands as original value	Stands as original value	
5	2: Female	1: Pregnant now	3: Third trimester or .: missing	Any value	Stands as original value	Stands as original value	Stands as original value	
6	2: Female	2: Pregnant in last 12 months	Any value	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	Stands as original value	F
7	2: Female	3: Not pregnant in past 12 months	Any value	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
8	2: Female	.: Missing	1: First trimester	Any value	1: Pregnant now	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	B F
9	2: Female	.: Missing	2: Second trimester	2: Third trimester	1: Pregnant now	Stands as original value	.: Missing	B F
10	2: Female	.: Missing	2: Second trimester	4: First trimester, 3: second trimester, 1: did not receive prenatal care, or .: missing	1: Pregnant now	Stands as original value	Stands as original value	B
11	2: Female	.: Missing	3: Third trimester	Any value	1: Pregnant now	Stands as original value	Stands as original value	B
12	2: Female	.: Missing	.: Missing	Any value	Stands as original value	Stands as original value	Stands as original value	F
13	.: Missing	.: Missing	Marked or .: missing	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F)

Coding Table for Note 22:
H13067, H13068

N22	H13067 is:	H13068 is:	H13067 is coded as:	H13068 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or .: missing	1: Yes or 2: no	1: Yes	Stands as original value	B
3	2: No	.: Missing	Stands as original value	.N: Valid skip	F
4	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 23:
H13069, H13070

N23	H13069 is:	H13070 is:	H13069 is coded as:	H13070 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or .: missing	1: Yes or 2: no	1: Yes	Stands as original value	B
3	2: No	.: Missing	Stands as original value	.N: Valid skip	F
4	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 24:
H13073, H13073A-H13073E

N24	H13073A is:	H13073B is:	H13073C is:	H13073D is:	H13073E is:	H13073 is coded as:	H13073A-E are coded as:	*
1	Any value	1: Marked	Any value	Any value	Any value	2: Yes, Mexican, Mexican American, Chicano	Stand as original value	F
2	Any value	2: Unmarked	Any value	Any value	1: Marked	5: Yes, other Spanish, Hispanic, or Latino	Stand as original value	F
3	Any value	2: Unmarked	1: Marked	Any value	2: Unmarked	3: Yes, Puerto Rican	Stand as original value	F
4	Any value	2: Unmarked	2: Unmarked	1: Marked	2: Unmarked	4: Yes, Cuban	Stand as original value	F
5	1: Marked	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	1: No, not Spanish, Hispanic, or Latino	Stand as original value	F
6	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	.: Missing	Stand as original value	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 25:
H13074, H13075-H13079

N25	H13074 is:	H13075-H13079 are:	H13074 is coded as:	H13075-H13079 are coded as:	*
1	1: Yes	Any value	Stands as original value	Stand as original value	
2	2: No or -5: don't know	"All are uncovered/unknown"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: No, -5: don't know, or .: missing	At least one is "covered"	1: Yes	Stand as original value	B
4	.: Missing	"All are uncovered/unknown"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are uncovered/unknown" in Coding Table for Note 25:
Responses to H13075-H13079 are all 2: no, -5: don't know, or missing.

Definition of "covered" in Coding Table for Note 25:
Any pattern of marks outside the definition "all are uncovered/unknown".

APPENDIX B

CODING SCHEME AND CODING TABLES – QUARTER III

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2013 HEALTH CARE SURVEY OF DOD BENEFICIARIES (HCSDB)
CODING SCHEME AND CODING TABLES

BASIC SAS AND ASCII/EBCDIC MISSING DATA AND NOT APPLICABLE CODES

SAS	ASCII/EBCDIC	
Numeric	Numeric	Description
.	-9	No response
.O	-7	Out of range error
.N	-6	Not applicable or valid skip
.D	-5	Scalable response of "don't know" or "not sure"
.I	-4	Incomplete grid error
.C	-1	Question should have been skipped

Missing values '.' and incomplete grids '.I' are encoded prior to implementation of the Coding Scheme Notes (see below).

Coding Table for Note 1:
H13003, H13004

N1	H13003 is:	H13004 is:	H13003 is coded as:	H13004 is coded as:	*
1	1-16: Health plan or -5: Not sure	Marked or missing response	Stands as original value	Stands as original value	
2	-6: No usage in past 12 months	Marked response	Stands as original value	.C: Question should be skipped	F
3	-6: No usage in past 12 months	Missing response	Stands as original value	.N: Valid skip	F
4	Missing response	Marked or missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 2:
H13006, H13007, H13008

N2	H13006 is:	H13007-H13008 are:	H13006 is coded as:	H13007-H13008 are coded as:	*
1	1: Yes	"All are blank"	Stands as original value	Stand as original value	
2	1: Yes or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	1: Yes	"One marked, and one NA"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
4	1: Yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: No	"One marked, and one NA"	Stands as original value	.C: Question should be skipped if marked	F
6	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
7	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
8	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 2:
Responses to H13007-H13008 are all missing.

Definition of "blank or NA" in Coding Table for Note 2:
All of the following are true: H13007-H13008 are a combination of not applicable (-6) or missing.

Definition of "one marked and one NA" in Coding Table for Note 2:
H13007-H13008 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 2:
Any pattern of marks outside the definitions "all are blank", "one marked and one NA", and "blank or NA".

Coding Table for Note 3:
H13009, H13010, H13011

N3	H13009 is:	H13010-H13011 are:	H13009 is coded as:	H13010-H13011 are coded as:	*
1	1: Yes	"All are blank"	Stands as original value	Stand as original value	
2	1: Yes or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	1: Yes	"One marked and one NA"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
4	1: Yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: No	"One marked and one NA"	Stands as original value	.C: Question should be skipped if marked	F
6	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
7	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
8	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 3:
Responses to H13010-H13011 are all missing.

Definition of "blank or NA" in Coding Table for Note 3:
All of the following are true: H13010-H13011 are a combination of not applicable (-6) or missing.

Definition of "one marked and one NA" in Coding Table for Note 3:
H13010-H13011 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 3:
Any pattern of marks outside the definitions "all are blank", "one marked and one NA", and "blank or NA".

Coding Table for Note 4:
H13013, H13014-H13018

N4	H13013 is:	H13014-H13018 are:	H13013 is coded as:	H13014-H13018 are coded as:	*
1	1: None	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
2	2-7: Visits, or .: missing	"Blank or NA"	1: None	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2-7: Visits	At least one is "marked" or "all are blank"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
4	.: Missing	"All are blank"	Stands as original value	Stand as original value	
5	.: Missing	At least one is "marked"	Stands as original value	.: Missing if –6; stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 4:
Responses to H13014-H13018 are all missing.

Definition of "blank or NA" in Coding Table for Note 4:
All of the following are true: H13014-H13018 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 4:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 5:
H13015, H13016-H13017

N5	H13015 is:	H13016 is:	H13017 is:	H13015 is coded as:	H13016 is coded as:	H13017 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
3	2: No or .: missing	1: Definitely yes 2: somewhat yes	Any value	1: Yes	Stands as original value	Stands as original value	B
4	2: No or .: missing	3: Somewhat no, 4: definitely no, or .: missing	1: Definitely yes 2: somewhat yes	1: Yes	Stands as original value	Stands as original value	B
5	2: No	3: Somewhat no, 4: definitely no, or .: missing	3: Somewhat no, 4: definitely no, or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing	3: Somewhat no, 4: definitely no, or .: missing	3: Somewhat no, 4: definitely no, or .: missing	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 5A1:
S13C09, S13C10

N5A1	S13C09 is:	S13C10 is:	S13C09 is coded as:	S13C10 is coded as:	*
1	1: Yes	1-3: Marked or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need to get special medical equipment	2: No	.C: Question should be skipped if marked	B F
3	2: No or .: missing	1-3: Marked	1: Yes	Stands as original value	B
4	2: No	-6: Didn't need to get special medical equipment or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 5A2:
S13C11, S13C12

N5A2	S13C11 is:	S13C12 is:	S13C11 is coded as:	S13C12 is coded as:	*
1	1: Yes	1-3: Marked or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need to get special therapy	2: No	.C: Question should be skipped if marked	B F
3	2: No or .: missing	1-3: Marked	1: Yes	Stands as original value	B
4	2: No	-6: Didn't need to get special therapy or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 5A3:
S13C13, S13C14

N5A3	S13C13 is:	S13C14 is:	S13C13 is coded as:	S13C14 is coded as:	*
1	1: Yes	1-3: Marked or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need to get home health care	2: No	.C: Question should be skipped if marked	B F
3	2: No or .: missing	1-3: Marked	1: Yes	Stands as original value	B
4	2: No	-6: Didn't need to get home health care or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 6:
H13019, H13020-H13027, S13009

N6	H13019 is:	H13020-H13024 are:	H13025-H13026, S13009 are:	H13027 is:	H13019 is coded as:	H13020-H13026, S13009 are coded as:	H13027 is coded as:	*
1	1: Yes	Any value	Any value	Any value	Stands as original value	Stand as original value	.: Missing if –6; stands as original value otherwise	F
2	2: No or .: missing	Any value	Any value	0-10	1: Yes	Stand as original value	Stands as original value	B
3	2: No or .: missing	At least one is "marked"	Any value	.: Missing	1: Yes	Stand as original value	Stands as original value	B
4	2: No	At least one is "marked"	Any value	-6: No personal doctor	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.C: Question should be skipped	F
5	2: No	"Blank or NA"	Any value	-6: No personal doctor or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing	Any value	Any value	-6: No personal doctor	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	.C: Question should be skipped	B F
7	.: Missing	"Blank or NA"	Any value	.: Missing	Stands as original value	Stand as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "blank or NA" in Coding Table for Note 6:
All of the following are true: H13020 is either 0: None or missing and H13021-H13024 are either not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 6:
Any pattern of marks for H13020-H13024 outside the definition "blank or NA".

Coding Table for Note 7:
H13020, H13021-H13026

N7	H13020 is:	H13021-H13024 are:	H13025-H13026 are:	H13020 is coded as:	H13021-H13026 are coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Any value	Stands as original value	Stand as original value	
2	0: None	Any value	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	1-6: Visits, or .: missing	"Blank or NA"	Any value	0: None	.N: Valid skip if missing; .C: question should be skipped if marked	B F
4	1-6: Visits, or .: missing	At least one is "marked" or "all are blank"	Any value	Stands as original value	.: Missing if –6; stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 7:
Responses to H13021-H13024 are all missing.

Definition of "blank or NA" in Coding Table for Note 7:
Responses to H13021-H13024 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 7:
Any pattern of marks for H13021-H13024 outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 8:
H13025, H13026

N8	H13025 is:	H13026 is:	H13025 is coded as:	H13026 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	Stands as original value	
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	.: Missing	Stands as original value	.N: Valid skip	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 8_01:
S13009, S13010

N8_01	S13009 is:	S13010 is:	S13009 is coded as:	S13010 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	Any value	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: No	Any value	Stands as original value	Stands as original value	
4	.: Missing	Any value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 9:
H13028, H13029-H13031

N9	H13028 is:	H13029-H13031 are:	H13028 is coded as:	H13029 is coded as:	H13030-H13031 are coded as:	*
1	1: Yes	Any value	Stands as original value	.: Missing if –6; stands as original value otherwise	Stand as original value	F
2	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stands as original value otherwise	Stand as original value	B
3	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	.: Missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	B F
5	.: Missing	"All are blank"	Stands as original value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 9:
Responses to H13029-H13031 are all missing.

Definition of "blank or NA" in Coding Table for Note 9:
All of the following are true: H13029 and H13031 are a combination of not applicable (-6) or missing. H13030 is either missing or 0: None.

Definition of "marked" in Coding Table for Note 9:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 10:
H13030, H13031

N10	H13030 is:	H13031 is:	H13030 is coded as:	H13031 is coded as:	*
1	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	1-5: Specialists	0-10 or .: missing	Stands as original value	Stands as original value	
3	1-5: Specialists or .: missing	-6: Didn't see a specialist in the last 12 months	0: None	.C: Question should be skipped	B F
4	0: None	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	0-10 or .: missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10_B1:
S13B02, S13B03-S13B04

N10_B1	S13B02 is:	S13B03-S13B04 are:	S13B02 is coded as:	S13B03-S13B04 are coded as:	*
1	1: Yes	Any value	Stands as original value	.: Missing if –6; stand as original value otherwise	F
2	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
3	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	.: Missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
5	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10_B1:
Responses to S13B03-S13B04 are all missing.

Definition of "blank or NA" in Coding Table for Note 10_B1:
All of the following are true: S13B03-S13B04 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 10_B1:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 11:
H13032, H13033

N11	H13032 is:	H13033 is:	H13032 is coded as:	H13033 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need care, tests, or treatment	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	–6: Didn't need care, tests, or treatment or .: missing	Stands as original value	.N: Valid skip if missing; .C: Question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 12:
H13034, H13035

N12	H13034 is:	H13035 is:	H13034 is coded as:	H13035 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't look for information	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't look for information or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 13:
H13036, H13037

N13	H13036 is:	H13037 is:	H13036 is coded as:	H13037 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need service or equipment	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't need service or equipment or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 14:
H13038, H13039

N14	H13038 is:	H13039 is:	H13038 is coded as:	H13039 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't need prescription meds	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't need prescription meds or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15:
H13040, H13041-H13042

N15	H13040 is:	H13041-H13042 are:	H13040 is coded as:	H13041-H13042 are coded as:	*
1	1: Yes	At least one is "marked" or "all are blank"	Stands as original value	.: Missing if –6; stand as original value otherwise	F
2	1: Yes or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2: No or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stand as original value otherwise	B F
4	2: No	"All are blank" or "blank or NA"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 15:
Responses to H13041-H13042 are all missing.

Definition of "blank or NA" in Coding Table for Note 15:
All of the following are true: H13041-H13042 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 15:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 16:
H13043, H13044

N16	H13043 is:	H13044 is:	H13043 is coded as:	H13044 is coded as:	*
1	1: Yes	1-4: How often or .: missing	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Didn't receive forms to fill out	2: No	.C: Question should be skipped	B F
3	2: No or .: missing	1-4: How often	1: Yes	Stands as original value	B
4	2: No	-6: Didn't receive forms to fill out or .: missing	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 17:
H13045, H13046-H13047

N17	H13045 is:	H13046-H13047 are:	H13045 is coded as:	H13046-H13047 are coded as:	*
1	1: Yes	At least one is "marked", "all are blank" or "blank or don't know"	Stands as original value	.: Missing if –6; stands as original value otherwise	F
2	1: Yes, -5: don't know or .: missing	"Blank or NA" or "NA or don't know"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2: No, -5: don't know or .: missing	At least one is "marked"	1: Yes	.: Missing if –6; stands as original value otherwise	B F
4	2: No	None are "marked"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	-5: Don't know	"Blank or don't know" or "all are blank"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing	"Blank or don't know" or "all are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 17:
Responses to H13046-H13047 are all missing.

Definition of "blank or NA" in Coding Table for Note 17:
Responses to H13046-H13047 are either all not applicable (-6) or a combination of missing and not applicable (-6).

Definition of "blank or don't know" in Coding Table for Note 17:
Responses to H13046-H13047 are either all don't know (-5) or a combination of missing and don't know (-5).

Definition of "NA or don't know" in Coding Table for Note 17:
Responses to H13046-H13047 are a combination of not applicable (-6) and don't know (-5).

Definition of "marked" in Coding Table for Note 17:
Any pattern of marks outside the definitions "all are blank," "blank or NA," "blank or don't know," or "NA or don't know".

Coding Table for Note 17_Q0:
S13Q08, S13Q01-S13Q05

N17_Q0	S13Q08 is:	S13Q01-S13Q05 are:	S13Q08 is coded as:	S13Q01-S13Q05 are coded as:	*
1	1: Yes	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
2	2: No	Any value	Stands as original value	Stands as original value	
3	.: Missing	At least one is "marked"	2: No	Stands as original value	B
4	.: Missing	"All are blank"	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 17_Q0:
Responses to S13Q01-S13Q05 are all missing.

Definition of "marked" in Coding Table for Note 17_Q0:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 17_Q1:
S13Q01, S13Q02

N17_Q1	S13Q01 is:	S13Q02 is:	S13Q01 is coded as:	S13Q02 is coded as:	*
0	.N: Valid skip, or .C:question should have been skipped	.N: Valid skip, or .C:question should have been skipped	Stands as original value	Stands as original value	
1	1: Yes	1-4: Time since last blood stool test, .: missing, or -5: don't know	Stands as original value	Stands as original value	
2	1: Yes or .: missing	-6: Never had a blood stool test	2: No	.C: Question should be skipped	B F
3	2: No, -5: don't know, or .: missing	1-4: Time since last blood stool test	1: Yes	Stands as original value	B
4	2: No, -5: don't know	.: Missing, –6: never had a blood stool test, or -5: don't know	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	.: Missing,	.: Missing, -5: don't know, .N: valid skip, or .C:question should have been skipped	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 17_Q2:
S13Q03, S13Q04-S13Q05

N17_Q2	S13Q03 is:	S13Q04-S13Q05 are:	S13Q03 is coded as:	S13Q04-S13Q05 are coded as:	*
0	.N: Valid skip, or .C: question should have been skipped	.N: Valid skip, or .C: question should have been skipped	Stands as original value	Stands as original value	
1	1: Yes	At least one is "marked", "unmarked or don't know", or "all are blank"	Stands as original value	Stand as original value	
2	1: Yes, -5: don't know, or .: missing	"Blank or NA"	2: No	.N: Valid skip if missing; .C: question should be skipped if marked	B F
3	2: No, -5: don't know, or .: missing	At least one is "marked"	1: Yes	Stand as original value	B
4	2: No	"Blank or NA", "unmarked or don't know", or "all are blank"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
5	-5: Don't know	"Unmarked or don't know" or "all are blank"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
6	.: Missing,	"Unmarked or don't know", "all are blank",	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 17_Q2:
Responses to S13Q04-S13Q05 are all missing.

Definition of "blank or NA" in Coding Table for Note 17_Q2:
Responses to S13Q04-S13Q05 are either all not applicable (-6) or a combination of missing and not applicable (-6).

Definition of "unmarked or don't know" in Coding Table for Note 17_Q2:
Responses to S13Q04-S13Q05 are either all don't know (-5) or a combination of don't know (-5) and either missing or not applicable (-6).

Definition of "marked" in Coding Table for Note 17_Q2:
Any pattern of marks outside the definitions "all are blank", "blank or NA", or "unmarked or don't know".

Coding Table for Note 18:
H13053, H13054-H13056, H13057A-H13057D

N18	H13053 is:	H13054-H13056 are:	H13057A-H13057D are:	H13053 is coded as:	H13054- H13056, H13057A-H13057D are coded as:	*
1	3: Some days, 4: every day, or .: missing	Any value	Any value	Stands as original value	Stand as original value	
2	2: Not at all or -5: don't know	Any value	"All are unmarked"	Stands as original value	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F
3	2: Not at all	Any value	At least one is "marked"	.: Missing	Stand as original value	B
4	-5: Don't know	Any value	At least one is "marked"	Stands as original value	.N: Valid skip if missing or unmarked; .C: question should be skipped if marked	F

*   Indication of backward coding (B) or forward coding (F).

Definition of "all are unmarked" in Coding Table for Note 18:
Responses to H13057A-H13057D are all missing or unmarked.

Definition of "marked" in Coding Table for Note 18:
Any pattern of marks outside the definition "all are unmarked"

Coding Table for Note 19:

Note 19 (Part A)
H13058, H13059B, H13060-H13064, SEX, XSEXA

N19A	H13058 is :	SEX is:	H13059B--H13064 are:	XSEXA is coded as:
1	.: Missing	F	Any marked	2: Female
2	.: Missing	F	All missing	2: Female
3	.: Missing	M	Any marked	1: Male
4	.: Missing	M	All missing	1: Male
5	.: Missing	Z or .: missing	Any marked	2: Female
6	.: Missing	Z	All missing	.: Missing
7	.: Missing	.: Missing	All missing	.: Missing
8	1: Male	Any value	All missing	1: Male
9	1: Male	F	Any marked	2: Female
10	1: Male	M, Z, or .: missing	Any marked	1: Male
11	2: Female	Any value	Any marked	2: Female
12	2: Female	M	All missing	1: Male
13	2: Female	F, Z, or .: missing	All missing	2: Female

SEX (PNSEXCD) is the gender from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

XSEXA is the recoded gender variable after taking into account the self-reported response (H13058), any responses to gender-specific questions, and the gender of the sample beneficiary from DEERS.

Note 19 (Part B):
XSEXA, H13059B, H13060-H13064

N19B	XSEXA is:	H13059B--H13064 are:	H13059B--H13064 are coded as:	*
1	1: Male	"All are blank"	.N: Valid skip	F
2	1: Male	At least one is "marked"	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: Female	"All are blank" or at least one is "marked"	Stand as original value	
4	.: Missing	"All are blank" or at least one is "marked"	Missing value	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 19b:
All variables H13059B--H13064 are missing.

Definition of "marked" in Coding Table for Note 19b:
Any pattern of marks outside the definition "all are blank".

Coding Table for Note 20
XSEXA, AGE, H13060, H13061

N20	XSEXA is:	AGE is:	H13060 is:	H13061 is:	H13060 is coded as:	H13061 is coded as:	*
1	1: Male	Any value	.N: Valid skip, or .C: question should be skipped	.N: Valid skip, or .C: question should be skipped	Stands as original value	Stands as original value	
2	2: Female	Any value	2: 40 or over	Any value	Stands as original value	Stands as original value	
3	2: Female	Any value	1: Under 40	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
4	2: Female	Any value	.: Missing	Marked	2: >= 40	Stands as original value	B
5	2: Female	< 40	.: Missing	.: Missing	1: < 40	.N: Valid skip	F B
6	2: Female	>=40	.: Missing	.: Missing	2: >= 40	Stands as original value	B
7	2: Female	.: Missing	.: Missing	.: Missing	Stands as original value	Stands as original value	
8	.: Missing	Any value	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

AGE (DAGEQY) is from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

Coding Table for Note 21:
XSEXA, H13062-H13064

N21	XSEXA is:	H13062 is:	H13063 is:	H13064 is:	H13062 is coded as:	H13063 is coded as:	H13064 is coded as:	*
1	1: Male	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
2	2: Female	1: Pregnant now	1: First trimester	Any value	Stands as original value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: Female	1: Pregnant now	2: Second trimester	2: Third trimester	Stands as original value	Stands as original value	.: Missing	F
4	2: Female	1: Pregnant now	2: Second trimester	4: First trimester, 3: second trimester, 1: did not receive prenatal care, or .: missing	Stands as original value	Stands as original value	Stands as original value	
5	2: Female	1: Pregnant now	3: Third trimester or .: missing	Any value	Stands as original value	Stands as original value	Stands as original value	
6	2: Female	2: Pregnant in last 12 months	Any value	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	Stands as original value	F
7	2: Female	3: Not pregnant in past 12 months	Any value	Any value	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	.N: Valid skip if missing; .C: question should be skipped if marked	F
8	2: Female	.: Missing	1: First trimester	Any value	1: Pregnant now	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	B F
9	2: Female	.: Missing	2: Second trimester	2: Third trimester	1: Pregnant now	Stands as original value	.: Missing	B F
10	2: Female	.: Missing	2: Second trimester	4: First trimester, 3: second trimester, 1: did not receive prenatal care, or .: missing	1: Pregnant now	Stands as original value	Stands as original value	B
11	2: Female	.: Missing	3: Third trimester	Any value	1: Pregnant now	Stands as original value	Stands as original value	B
12	2: Female	.: Missing	.: Missing	Any value	Stands as original value	Stands as original value	Stands as original value	F
13	.: Missing	.: Missing	Marked or .: missing	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F)

Coding Table for Note 22:
H13067, H13068

N22	H13067 is:	H13068 is:	H13067 is coded as:	H13068 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or .: missing	1: Yes or 2: no	1: Yes	Stands as original value	B
3	2: No	.: Missing	Stands as original value	.N: Valid skip	F
4	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 23:
H13069, H13070

N23	H13069 is:	H13070 is:	H13069 is coded as:	H13070 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or .: missing	1: Yes or 2: no	1: Yes	Stands as original value	B
3	2: No	.: Missing	Stands as original value	.N: Valid skip	F
4	.: Missing	.: Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 24:
H13073, H13073A-H13073E

N24	H13073A is:	H13073B is:	H13073C is:	H13073D is:	H13073E is:	H13073 is coded as:	H13073A-E are coded as:	*
1	Any value	1: Marked	Any value	Any value	Any value	2: Yes, Mexican, Mexican American, Chicano	Stand as original value	F
2	Any value	2: Unmarked	Any value	Any value	1: Marked	5: Yes, other Spanish, Hispanic, or Latino	Stand as original value	F
3	Any value	2: Unmarked	1: Marked	Any value	2: Unmarked	3: Yes, Puerto Rican	Stand as original value	F
4	Any value	2: Unmarked	2: Unmarked	1: Marked	2: Unmarked	4: Yes, Cuban	Stand as original value	F
5	1: Marked	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	1: No, not Spanish, Hispanic, or Latino	Stand as original value	F
6	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	.: Missing	Stand as original value	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 25:
H13074, H13075-H13079

N25	H13074 is:	H13075-H13079 are:	H13074 is coded as:	H13075-H13079 are coded as:	*
1	1: Yes	Any value	Stands as original value	Stand as original value	
2	2: No or -5: don't know	"All are uncovered/unknown"	Stands as original value	.N: Valid skip if missing; .C: question should be skipped if marked	F
3	2: No, -5: don't know, or .: missing	At least one is "covered"	1: Yes	Stand as original value	B
4	.: Missing	"All are uncovered/unknown"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are uncovered/unknown" in Coding Table for Note 25:
Responses to H13075-H13079 are all 2: no, -5: don't know, or missing.

Definition of "covered" in Coding Table for Note 25:
Any pattern of marks outside the definition "all are uncovered/unknown".

APPENDIX C

MAPPING THE MILITARY TREATMENT FACILITY (MTF) TO THE CATCHMENT AREA

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
0001	0001	FOX AHC-REDSTONE ARSENAL	630
0003	0003	LYSTER AHC-FT. RUCKER	686
0004	0004	42ND MEDICAL GROUP-MAXWELL	620
0005	0005	BASSETT ACH-FT. WAINWRIGHT	330
0005	0202	FT. GREELY AHC	1
0005	0204	TMC FT. RICHARDSON	239
0005	6033	KAMISH CLINIC-FT. WAINWRIGHT	236
0006	0006	673rd MED GRP-ELMENDORF	669
0008	0008	R W BLISS AHC-FT. HUACHUCA	673
0009	0009	56th MED GRP-LUKE	612
0010	0010	355th MED GRP-DAVIS MONTHAN	709
0013	0013	19th MEDICAL GROUP-LITTLE ROCK	747
0014	0014	60th MED GRP-TRAVIS	671
0018	0018	30th MED GRP-VANDENBERG	714
0019	0019	412th MED GRP-EDWARDS	678
0024	0024	NH CAMP PENDLETON	608
0024	0208	BMC MCB CAMP PENDLETON	38
0024	0210	BMC EDSON RANGE ANNEX	30
0024	0269	BMC YUMA	48
0024	1657	BMC CAMP DELMAR MCB	5
0024	1659	BMC SAN ONOFRE MCB	15
0024	6216	TRICARE OUTPATIENT-OCEANSIDE	46
0026	0026	NBHC PORT HUENEME	687
0028	0028	NH LEMOORE	637
0028	0319	NBHC FALLON	98
0029	0029	NMC SAN DIEGO	484
0029	0230	NBHC MCRD SAN DIEGO	9
0029	0232	BMC MCAS MIRAMAR	81
0029	0239	NBHC EL CENTRO	7
0029	0409	SD E COUNTY PRIMARY CARE CLIN	61
0029	0701	NBHC NAVSTA SAN DIEGO	40
0029	6207	TRICARE OUTPATIENT-CLAIREMONT	138
0030	0030	NH TWENTYNINE PALMS	694
0030	0212	NBHC NAVWPNCEN CHINA LAKE	81
0032	0032	EVANS ACH-FT. CARSON	406
0032	6102	PREMIER ARMY HEALTH CLINIC	41
0032	7293	TMC 10-FT. CARSON	98
0032	7300	TMC 9-FT. CARSON	114
0032	7301	WARRIOR CLINIC-FT. CARSON	69
0033	0033	10th MED GROUP-USAF ACADEMY CO	659
0038	0038	NH PENSACOLA	334
0038	0107	NBHC NSA MID-SOUTH	66
0038	0260	NBHC NAS PENSACOLA	54
0038	0261	NBHC MILTON WHITING FIELD	40
0038	0262	NBHC NATTC PENSACOLA	22
0038	0265	NBHC NAVCOASTSYSC PANAMA CITY	14
0038	0316	NBHC GULFPORT	64
0038	0317	NBHC MERIDIAN	26
0038	0436	NBHC NAS BELLE CHASE	98

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
0038	0513	NBHC NTTC PENSACOLA	15
0039	0039	NH JACKSONVILLE	462
0039	0266	NBHC NAS JACKSONVILLE	81
0039	0275	NBHC ALBANY	22
0039	0337	NBHC KINGS BAY	114
0039	0517	NBHC KEY WEST	28
0042	0042	96th MED GRP-EGLIN	652
0043	0043	325th MED GRP-TYNDALL	631
0045	0045	6th MED GRP-MACDILL	442
0045	1946	BRANDON COMM CLINIC-MILITARY	189
0046	0046	45th MED GRP-PATRICK	617
0047	0047	EISENHOWER AMC-FT. GORDON	433
0047	1550	TMC-4-FT. GORDON	168
0047	7197	CONNELLY HLTH CLINIC-FT.GORDON	20
0047	7239	SOUTHCOM CLINIC	49
0047	8924	RODRIGUEZ ARMY HEALTH CLINIC	19
0048	0048	MARTIN ACH-FT. BENNING	395
0048	1315	CTMC-FT. BENNING	110
0048	1316	WINDER FPC-FT. BENNING	69
0048	1330	CTMC 2-HARMONY CHURCH-BENNING	41
0048	1332	7TH SPECIAL FORCES (TMC 9)	39
0048	1555	TMC-5-FT. BENNING	22
0048	6124	N COLUMBUS MED HOME-BENNING	53
0049	0049	WINN ACH-FT. STEWART	223
0049	0272	TUTTLE AHC-HUNTER ARMY AIRFLD	165
0049	6122	RICHMOND HILL MED HOME-STEWART	53
0049	7344	TROOP MED CLINIC-FT. STEWART	60
0049	7443	LLOYD C. HAWKS TMC	238
0051	0051	78th MED GRP-ROBINS	681
0052	0052	TRIPLER AMC-FT SHAFTER	366
0052	0437	SCHOFIELD BARRACKS AHC	135
0052	0534	TMC-1-SCHOF 25th-SCHOFIELD BKS	220
0052	6120	WARRIOR OHANA MED HOME-SHAFTER	47
0053	0053	366th MED GRP-MOUNTAIN HOME	715
0055	0055	375th MED GRP-SCOTT	652
0056	0056	JAMES A LOVELL FHCC	762
0056	1660	NBHC NCTC INPR GREAT LAKES	27
0056	1959	NBHC NTC GREAT LAKES	43
0057	0057	IRWIN ACH-FT. RILEY	164
0057	1539	AVIATION CLINIC-FT. RILEY	62
0057	7289	CUSTER HILL HC-FT. RILEY	165
0057	7337	AMH FARRELLY AHC-FT. RILEY	385
0058	0058	MUNSON AHC-FT. LEAVENWORTH	670
0060	0060	BLANCHFIELD ACH-FT. CAMPBELL	256
0060	1506	AVIATION MEDICINE CLINIC	99
0060	6108	SCREAMING EAGLE MED HOME-CAMPB	57
0060	7307	LA POINTE HEALTH CLINIC	241
0060	7341	BYRD HEALTH CLIN-FT. CAMPBELL	140
0061	0061	IRELAND ACH-FT. KNOX	522

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
0061	0290	ROCK ISLAND ARSENAL AHC	41
0061	7198	NELSON MEDICAL CLINIC-FT.KNOX	141
0062	0062	2nd MED GRP-BARKSDALE	710
0064	0064	BAYNE-JONES ACH-FT. POLK	745
0066	0066	779th MED GRP-ANDREWS	673
0067	0067	WALTER REED NATL MIL MED CNTR	582
0067	0256	DILORENZO TRICARE HEALTH CLIN	171
0068	0068	NHC PATUXENT RIVER	425
0068	0301	NBHC INDIAN HEAD	64
0068	0386	NBHC DAHLGREN	114
0068	0522	NBHC ANDREWS AFB	96
0069	0069	KIMBROUGH AMB CAR CEN-FT MEADE	286
0069	0308	KIRK AHC-ABERDEEN PRVNG GD	64
0069	0309	BARQUIST ARMY HEALTH CLINIC	66
0069	0352	DUNHAM AHC-CARLISLE BARRACKS	98
0069	0390	ANDREW RADER AHC MYER-HENDERSN	138
0069	0441	FILLMORE AHC AT NEW CUMBERLAND	23
0069	0545	OHC EDGEWOOD ARS	8
0073	0073	81st MED GRP-KEESLER	710
0074	0074	14th MED GRP-COLUMBUS	847
0075	0075	L. WOOD ACH-FT. LEONARD WOOD	648
0075	6115	OZARK MEDICAL HOME-LEONRD WOOD	100
0076	0076	509th MED GRP-WHITEMAN	700
0077	0077	341st MED GRP-MALMSTROM	703
0078	0078	55th MED GRP-OFFUTT	646
0079	0079	99th MED GRP-O'CALLAGHAN HOSP	653
0083	0083	377th MED GRP-KIRTLAND	700
0086	0086	KELLER ACH-WEST POINT	528
0086	1815	MOLOGNE TMC	278
0086	7154	MILLS TROOP CLINIC-FT. DIX	33
0089	0089	WOMACK AMC-FT. BRAGG	145
0089	6034	POPE HEALTH CLINIC	62
0089	6105	FAYETTEVILLE MEDICAL HOME-BRAG	55
0089	6106	HOPE MILLS MEDICAL HOME-BRAGG	28
0089	7143	ROBINSON CLINIC-FT. BRAGG	266
0089	7286	JOEL CLINIC-FT. BRAGG	59
0089	7294	CLARK CLINIC-FT. BRAGG	190
0091	0091	NH CAMP LEJEUNE	781
0091	0333	BMC MCAS NEW RIVER	69
0091	1662	BMC CAMP GEIGER MCB	17
0091	1663	BMC CAMP JOHNSON MCB	7
0091	1664	BMC COURTHOUSE BAY MCB	6
0091	1992	BMC BLDG 15 MCB CAMP LEJEUNE	17
0092	0092	NHC CHERRY POINT	672
0094	0094	5th MED GRP-MINOT	759
0095	0095	88th MED GRP-WRIGHT-PATTERSON	628
0096	0096	72nd MED GRP-TINKER	713
0098	0098	REYNOLDS ACH-FT. SILL	613
0098	6121	FRONTIER MEDICAL HOME-SILL	109

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
0100	0035	NBHC GROTON	267
0100	0100	NAVAL HLTH CLINIC NEW ENGLAND	255
0100	0321	NBHC PORTSMOUTH	77
0100	0328	NBHC SARATOGA SPRINGS	122
0101	0101	20th MED GRP-SHAW	744
0103	0103	NAVAL HEALTH CLINIC CHARLESTON	752
0104	0104	NH BEAUFORT	680
0104	0358	NBHC MCRD PARRIS ISLAND	82
0104	0360	NBHC MCAS BEAUFORT	35
0105	0105	MONCRIEF ACH-FT. JACKSON	627
0105	6114	MONCRIEF MEDICAL HOME-JACKSON	96
0108	0108	WILLIAM BEAUMONT AMC-FT. BLISS	90
0108	0327	AHC MCAFEE-WHITE SANDS MSL RAN	19
0108	1481	MENDOZA SOLDIER FAMILY CC	430
0108	1617	TMC MED EXAM-FT. BLISS	219
0109	0109	SAN ANTONIO MMC-FT. SAM HOUSTN	619
0109	6119	SCHERTZ MED HOME-JOINT (AF) SA	95
0110	0110	DARNALL AMC-FT. HOOD	82
0110	1592	MONROE CONSOLIDATED-FT. HOOD	168
0110	1599	TMC-12-FT. HOOD	27
0110	1601	TMC-14-FT. HOOD	5
0110	6014	CHARLES MOORE HLTH CLN-FT HOOD	132
0110	6076	WEST FORT HOOD CLINIC	90
0110	6111	HARKER HEIGHTS MED HOME-HOOD	36
0110	6112	KILLEEN MEDICAL HOME-HOOD	48
0110	6113	COPPERAS COVE MED HOME-HOOD	46
0110	7236	BENNETT FAM CARE CLINIC-HOOD	148
0112	0112	7th MED GRP-DYESS	740
0113	0113	82nd MED GRP-SHEPPARD	646
0117	0117	59th MED WING-LACKLAND	636
0118	0118	NHC CORPUS CHRISTI	481
0118	0369	NBHC KINGSVILLE	64
0118	0370	NBHC FORT WORTH	199
0119	0119	75th MED GRP-HILL	658
0120	0120	633rd MED GRP LANGLEY-EUSTIS	664
0121	0121	MCDONALD AHC-FT. EUSTIS	463
0121	0464	AHC FT. STORY	29
0121	0554	TMC-2-FT. EUSTIS	163
0122	0122	KENNER AHC-FT. LEE	659
0123	0123	FT BELVOIR COMMUNITY HOSP-FBCH	348
0123	6200	FAIRFAX HEALTH CENTER	109
0123	6201	DUMFRIES HEALTH CENTER	169
0124	0124	NMC PORTSMOUTH	489
0124	0380	NBHC NSY NORFOLK	4
0124	0381	NBHC YORKTOWN	27
0124	0382	NBHC DAM NECK	37
0124	0519	NBHC CHESAPEAKE	18
0124	6214	TRICARE OUTPATIENT CL VA BEACH	130
0124	6221	TRICARE OUTPATIENT CHESAPEAKE	85

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
0125	0125	MADIGAN AMC-FT. LEWIS	227
0125	0247	MONTEREY AHC	54
0125	1485	US ARMY HEALTH CLN-MCCHORD AFB	40
0125	1489	555 EN/17 FIB SOLDIER CARE MH	55
0125	1646	WINDER FAMILY MEDICAL CL-JBLM	219
0125	1649	OKUBO FAM PRACT CLIN-FT LEWIS	100
0125	6116	MADIGAN-PUYALLUP MEDICAL HOME	28
0126	0126	NH BREMERTON	494
0126	0398	NBHC PUGET SOUND	8
0126	1656	NBHC SUBASE BANGOR	103
0126	7138	NHCL EVERETT	90
0127	0127	NH OAK HARBOR	714
0128	0128	92nd MED GRP-FAIRCHILD	670
0129	0129	90th MED GRP-F.E. WARREN	731
0131	0131	WEED ACH-FT. IRWIN	555
0131	0206	YUMA PROVING GROUND AHC	31
0131	1644	TMC-1-FT. IRWIN	248
0231	0231	NBHC NAS NORTH ISLAND	721
0248	0248	61st MED GROUP-LOS ANGELES	846
0252	0252	21st MED GRP-PETERSON	602
0252	1497	SCHRIEVER MEDICAL CLINIC	67
0280	0280	NHC HAWAII	507
0280	0284	NBHC NAVCAMS EASTPAC	69
0280	0285	BMC MCAS KANEOHE BAY	206
0280	1987	NBHC MCB CAMP H.M. SMITH	41
0306	0306	NHC ANNAPOLIS	315
0306	0322	BMC COLTS NECK EARLE	70
0306	0401	BMC LAKEHURST	67
0306	0525	NBHC BANCROFT HALL	344
0310	0310	66th MED GRP-HANSCOM	706
0330	0330	GUTHRIE AHC-FT. DRUM	321
0330	7113	CONNOR CTMC	518
0364	0364	17th MED GRP-GOODFELLOW	702
0366	0366	359th MED GRP-RANDOLPH	604
0378	0378	NBHC LITTLE CREEK	741
0385	0385	NHC QUANTICO	499
0385	0404	BMC SUGAR GROVE	5
0385	0703	NBHC WASHINGTON NAVY YARD	131
0385	1670	BMC OCS BROWN FIELD	60
0385	1671	NBHC THE BASIC SCHOOL	93
0387	0387	NBHC OCEANA	713
0405	0405	NBHC MAYPORT	703
0407	0407	NBHC NTC SAN DIEGO	661
0508	0508	NBHC NAVSTA SEWELLS	929
0606	0606	AHC HEIDELBERG	99
0606	7152	AHC COLEMAN-SANDHOFEN	5
0606	8987	AHC STUTTGART-PATCH BARRACKS	136
0607	0606	AHC HEIDELBERG	62
0607	0607	LANDSTUHL REGIONAL MEDCEN	146

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
0607	0611	VICENZA MEDICAL SERVICES CNTR	119
0607	0614	AHC SHAPE	37
0607	1126	AHC BAUMHOLDER	80
0607	1128	AHC KAISERSLAUTERN	82
0607	1147	AHC WIESBADEN	117
0607	1154	AHC LIVORNO	10
0607	8977	AHC BRUSSELS	9
0607	8987	AHC STUTTGART-PATCH BARRACKS	87
0609	1013	AHC BAMBERG	113
0609	1014	AHC ILLESHEIM	54
0609	1015	AHC KATTERBACH	75
0609	1016	AHC GRAFENWOEHR	171
0609	1017	AHC VILSECK	217
0609	1019	AHC HOHENFELS	68
0609	1124	AHC SCHWEINFURT	133
0612	0612	BRIAN ALLGOOD ACH-SEOUL	186
0612	1156	USAHC CAMP STANLEY	14
0612	1157	USAHC CAMP CASEY	216
0612	8903	USAHC CAMP HUMPHREYS	186
0612	8907	USAHC-CAMP WALKER	65
0612	8912	USAHC-CAMP RED CLOUD	29
0612	8913	USAHC-CAMP CARROLL	37
0612	8916	USAHC-YONGSAN	111
0620	0620	NH GUAM-AGANA	582
0620	0871	BMC NAVSTA GUAM	111
0621	0621	NH OKINAWA	658
0621	0861	BMC MCAS FUTENMA	12
0621	0862	BMC EVANS-CAMP FOSTER	35
0621	1269	BMC CAMP KINSER	50
0621	7032	BMC CAMP BUSH/COURTNEY	82
0621	7033	BMC CAMP HANSEN	1
0622	0622	NH YOKOSUKA	471
0622	0625	BMC IWAKUNI	106
0622	0852	NBHC COMFLEACT SASEBO	75
0622	0853	NBHC NAF ATSUGI	157
0622	8934	NBHC NSF DIEGO GARCIA	11
0622	8938	BMC YOKOHOMA	1
0622	8939	BMC CHINHEA	6
0633	0633	48th MED GRP-LAKENHEATH	787
0804	0804	18th MED GRP-KADENA AB	836
0805	0805	52nd MED GROUP-SPANGDAHLEM	831
0806	0806	86th MEDICAL GROUP-RAMSTEIN	834
6215	6215	TRICARE OUTPATIENT-CHULA VISTA	485
7139	7139	1st SPEC OPS MED GRP-HURLBURT	752
9001	0015	9th MED GRP-BEALE	1
9001	0034	USCG CLINIC NEW LONDON	49
9001	0036	436th MED GRP-DOVER	291
9001	0050	23rd MED GRP-MOODY	2
9001	0056	JAMES A LOVELL FHCC	251

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
9001	0059	22nd MED GRP-MCCONNELL	3
9001	0061	IRELAND ACH-FT. KNOX	282
9001	0066	779th MED GRP-ANDREWS	4
9001	0067	WALTER REED NATL MIL MED CNTR	838
9001	0069	KIMBROUGH AMB CAR CEN-FT MEADE	2
9001	0084	49th MED GRP-HOLLOMAN	1
9001	0086	KELLER ACH-WEST POINT	217
9001	0089	WOMACK AMC-FT. BRAGG	721
9001	0090	4th MED GRP-SEYMOUR JOHNSON	292
9001	0091	NH CAMP LEJEUNE	694
9001	0092	NHC CHERRY POINT	1
9001	0095	88th MED GRP-WRIGHT-PATTERSON	175
9001	0097	97th MED GRP-ALTUS	4
9001	0106	28th MED GRP-ELLSWORTH	1
9001	0114	47th MED GRP-LAUGHLIN	1
9001	0120	633rd MED GRP LANGLEY-EUSTIS	386
9001	0121	MCDONALD AHC-FT. EUSTIS	2
9001	0122	KENNER AHC-FT. LEE	1
9001	0123	FT BELVOIR COMMUNITY HOSP-FBCH	845
9001	0124	NMC PORTSMOUTH	1490
9001	0287	15th MED GRP-HICKAM	4
9001	0321	NBHC PORTSMOUTH	1
9001	0326	87th MED GRP-MCGUIRE	424
9001	0335	43RD MEDICAL GROUP-POPE	1
9001	0338	71st MED GRP-VANCE	2
9001	0356	628th MED GRP-CHARLESTON	3
9001	0390	ANDREW RADER AHC MYER-HENDERSN	4
9001	0413	579TH MED GROUP-BOLLING	170
9001	0418	USCG CLINIC ALAMEDA	4
9001	0419	USCG CLINIC PETALUMA	9
9001	0420	USCG CLINIC DISTRICT OF COLUMB	61
9001	0422	USCG CLINIC CLEARWATER	1
9001	0424	USCG CLINIC BALTIMORE	17
9001	0425	USCG CLINIC CAPE COD	36
9001	0426	USCG CLINIC BOSTON	36
9001	0427	USCG CLINIC TRAVERSE CITY	4
9001	0428	USCG CLINIC CAPE MAY	91
9001	0430	USCG CLINIC ELIZABETH CITY	22
9001	0432	USCG CLINIC PORTSMOUTH	87
9001	0433	USCG CLINIC YORKTOWN	31
9001	0434	USCG CLINIC PORT ANGELES	1
9001	0435	USCG CLINIC SEATTLE	1
9001	0615	NH GUANTANAMO BAY	5
9001	0617	NH NAPLES	8
9001	0618	NH ROTA	3
9001	0624	NH SIGONELLA	4
9001	0635	39th MED GROUP-INCIRLIK	3
9001	0639	35th MED GRP-MISAWA	5
9001	0640	374th MED GRP-YOKOTA AB	3

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
9001	0780	KENTUCKY-EXCL FT CAMPBELL AREA	345
9001	0781	NORTHEAST WEST VIRGINIA	60
9001	0782	WESTERN WEST VIRGINIA	260
9001	0783	EASTERN MISSOURI-ST LOUIS AREA	215
9001	0789	IOWA-QUAD CITIES AREA	20
9001	0799	470 MED FLT-GEILENKIRCHEN	2
9001	0802	36th MED GRP-ANDERSEN	1
9001	0814	423RD ABS OL-A-RAF UPWOOD	2
9001	0907	CONNECTICUT	467
9001	0908	DELAWARE	165
9001	0914	ILLINOIS	637
9001	0915	INDIANA	797
9001	0920	MAINE	256
9001	0921	MARYLAND	319
9001	0922	MASSACHUSETTS	563
9001	0923	MICHIGAN	931
9001	0930	NEW HAMPSHIRE	201
9001	0931	NEW JERSEY	510
9001	0933	NEW YORK	1323
9001	0934	NORTH CAROLINA	1078
9001	0936	OHIO	976
9001	0939	PENNSYLVANIA	1258
9001	0940	RHODE ISLAND	188
9001	0946	VERMONT	128
9001	0950	WISCONSIN	545
9001	0953	PUERTO RICO	1
9001	0971	CENTRAL AMERICA	1
9001	0983	OTHER PACIFIC	1
9001	0995	NORTHERN VIRGINIA	125
9001	0996	SOUTHERN VIRGINIA	604
9001	0999	UNKNOWN LOCATION	213
9001	1153	BMC CAPODICHINO	1
9001	1170	NBHC NSA BAHRAIN	33
9001	5195	USCG CLINIC DETROIT	16
9001	5196	USCG CLINIC NEW YORK	19
9001	5197	USCG CLINIC SAN JUAN	1
9001	5199	USCG CLINIC KEY WEST	3
9001	6034	POPE HEALTH CLINIC	2
9001	6200	FAIRFAX HEALTH CENTER	3
9001	7042	USCG CLINIC BORINQUEN	2
9001	7048	USCG CLINIC BASE MIAMI	1
9001	7200	460th MED GRP-BUCKLEY AFB	5
9001	7234	MENWITH HILL MEDICAL CENTER	1
9001	7286	JOEL CLINIC-FT. BRAGG	3
9001	7294	CLARK CLINIC-FT. BRAGG	1
9002	0003	LYSTER AHC-FT. RUCKER	1
9002	0015	9th MED GRP-BEALE	3
9002	0034	USCG CLINIC NEW LONDON	2
9002	0036	436th MED GRP-DOVER	8

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
9002	0038	NH PENSACOLA	239
9002	0039	NH JACKSONVILLE	694
9002	0042	96th MED GRP-EGLIN	337
9002	0045	6th MED GRP-MACDILL	3
9002	0046	45th MED GRP-PATRICK	1
9002	0047	EISENHOWER AMC-FT. GORDON	189
9002	0048	MARTIN ACH-FT. BENNING	270
9002	0049	WINN ACH-FT. STEWART	379
9002	0050	23rd MED GRP-MOODY	445
9002	0059	22nd MED GRP-MCCONNELL	1
9002	0060	BLANCHFIELD ACH-FT. CAMPBELL	460
9002	0064	BAYNE-JONES ACH-FT. POLK	86
9002	0073	81st MED GRP-KEESLER	195
9002	0084	49th MED GRP-HOLLOMAN	4
9002	0085	27th SPEC OPS MED GRP-CANNON	4
9002	0090	4th MED GRP-SEYMOUR JOHNSON	2
9002	0093	319th MED GRP-GRAND FORKS	1
9002	0097	97th MED GRP-ALTUS	143
9002	0098	REYNOLDS ACH-FT. SILL	141
9002	0104	NH BEAUFORT	111
9002	0105	MONCRIEF ACH-FT. JACKSON	322
9002	0106	28th MED GRP-ELLSWORTH	2
9002	0109	SAN ANTONIO MMC-FT. SAM HOUSTN	616
9002	0110	DARNALL AMC-FT. HOOD	659
9002	0113	82nd MED GRP-SHEPPARD	2
9002	0114	47th MED GRP-LAUGHLIN	129
9002	0117	59th MED WING-LACKLAND	10
9002	0120	633rd MED GRP LANGLEY-EUSTIS	1
9002	0130	USCG CLINIC KODIAK	1
9002	0203	354th MED GRP-EIELSON	3
9002	0287	15th MED GRP-HICKAM	2
9002	0326	87th MED GRP-MCGUIRE	20
9002	0338	71st MED GRP-VANCE	129
9002	0356	628th MED GRP-CHARLESTON	397
9002	0366	359th MED GRP-RANDOLPH	1
9002	0395	62nd MED SQUAD-MCCHORD	1
9002	0413	579TH MED GROUP-BOLLING	17
9002	0416	USCG CLINIC MOBILE	45
9002	0418	USCG CLINIC ALAMEDA	3
9002	0419	USCG CLINIC PETALUMA	4
9002	0420	USCG CLINIC DISTRICT OF COLUMB	3
9002	0421	USCG CLINIC AIR STATION MIAMI	22
9002	0422	USCG CLINIC CLEARWATER	52
9002	0423	USCG CLINIC NEW ORLEANS	32
9002	0428	USCG CLINIC CAPE MAY	9
9002	0430	USCG CLINIC ELIZABETH CITY	4
9002	0432	USCG CLINIC PORTSMOUTH	2
9002	0433	USCG CLINIC YORKTOWN	3
9002	0435	USCG CLINIC SEATTLE	1

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
9002	0610	BG CRAWFORD SAMS AHC-CAMP ZAMA	2
9002	0615	NH GUANTANAMO BAY	9
9002	0617	NH NAPLES	5
9002	0618	NH ROTA	3
9002	0624	NH SIGONELLA	5
9002	0635	39th MED GROUP-INCIRLIK	1
9002	0637	8th MED GRP-KUNSAN AB	2
9002	0638	51st MED GRP-OSAN AB	6
9002	0639	35th MED GRP-MISAWA	8
9002	0640	374th MED GRP-YOKOTA AB	4
9002	0653	422 ABS MED FLT-CROUGHTON	1
9002	0779	KENTUCKY-FT CAMPBELL AREA	28
9002	0787	GEORGIA-FORMER NOBLE CATCHMENT	10
9002	0799	470 MED FLT-GEILENKIRCHEN	3
9002	0802	36th MED GRP-ANDERSEN	2
9002	0808	31st MED GRP-AVIANO	8
9002	0814	423RD ABS OL-A-RAF UPWOOD	4
9002	0901	ALABAMA	1183
9002	0904	ARKANSAS	549
9002	0911	GEORGIA	1737
9002	0925	MISSISSIPPI	723
9002	0937	OKLAHOMA	797
9002	0941	SOUTH CAROLINA	822
9002	0943	TENNESSEE	1118
9002	0971	CENTRAL AMERICA	1
9002	0987	EASTERN FLORIDA	2021
9002	0988	WESTERN FLORIDA	201
9002	0989	EASTERN LOUISIANA	378
9002	0990	WESTERN LOUISIANA	374
9002	0993	EASTERN TEXAS	2902
9002	0999	UNKNOWN LOCATION	167
9002	1170	NBHC NSA BAHRAIN	33
9002	5195	USCG CLINIC DETROIT	1
9002	5197	USCG CLINIC SAN JUAN	1
9002	5199	USCG CLINIC KEY WEST	31
9002	7043	USCG CLINIC HONOLULU	1
9002	7044	USCG CLINIC JUNEAU	1
9002	7045	USCG CLINIC NORTH BEND	1
9002	7046	USCG CLINIC SAN PEDRO	1
9002	7048	USCG CLINIC BASE MIAMI	51
9002	7082	USCG CLINIC GALVESTON	36
9002	7200	460th MED GRP-BUCKLEY AFB	7
9002	7234	MENWITH HILL MEDICAL CENTER	1
9003	0005	BASSETT ACH-FT. WAINWRIGHT	90
9003	0006	673rd MED GRP-ELMENDORF	164
9003	0009	56th MED GRP-LUKE	4
9003	0014	60th MED GRP-TRAVIS	386
9003	0015	9th MED GRP-BEALE	227
9003	0024	NH CAMP PENDLETON	984

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
9003	0028	NH LEMOORE	134
9003	0029	NMC SAN DIEGO	1346
9003	0030	NH TWENTYNINE PALMS	82
9003	0032	EVANS ACH-FT. CARSON	654
9003	0033	10th MED GROUP-USAF ACADEMY CO	3
9003	0034	USCG CLINIC NEW LONDON	3
9003	0050	23rd MED GRP-MOODY	2
9003	0052	TRIPLER AMC-FT SHAFTER	593
9003	0053	366th MED GRP-MOUNTAIN HOME	29
9003	0057	IRWIN ACH-FT. RILEY	183
9003	0059	22nd MED GRP-MCCONNELL	250
9003	0075	L. WOOD ACH-FT. LEONARD WOOD	135
9003	0078	55th MED GRP-OFFUTT	1
9003	0079	99th MED GRP-O'CALLAGHAN HOSP	256
9003	0084	49th MED GRP-HOLLOMAN	217
9003	0085	27th SPEC OPS MED GRP-CANNON	263
9003	0093	319th MED GRP-GRAND FORKS	121
9003	0097	97th MED GRP-ALTUS	7
9003	0106	28th MED GRP-ELLSWORTH	241
9003	0108	WILLIAM BEAUMONT AMC-FT. BLISS	383
9003	0114	47th MED GRP-LAUGHLIN	3
9003	0125	MADIGAN AMC-FT. LEWIS	745
9003	0126	NH BREMERTON	187
9003	0127	NH OAK HARBOR	79
9003	0130	USCG CLINIC KODIAK	38
9003	0131	WEED ACH-FT. IRWIN	46
9003	0203	354th MED GRP-EIELSON	129
9003	0231	NBHC NAS NORTH ISLAND	2
9003	0232	BMC MCAS MIRAMAR	1
9003	0287	15th MED GRP-HICKAM	323
9003	0326	87th MED GRP-MCGUIRE	6
9003	0338	71st MED GRP-VANCE	4
9003	0356	628th MED GRP-CHARLESTON	2
9003	0395	62nd MED SQUAD-MCCHORD	158
9003	0407	NBHC NTC SAN DIEGO	7
9003	0417	USCG CLINIC KETCHIKAN	8
9003	0418	USCG CLINIC ALAMEDA	67
9003	0419	USCG CLINIC PETALUMA	50
9003	0420	USCG CLINIC DISTRICT OF COLUMB	1
9003	0422	USCG CLINIC CLEARWATER	1
9003	0423	USCG CLINIC NEW ORLEANS	1
9003	0428	USCG CLINIC CAPE MAY	12
9003	0430	USCG CLINIC ELIZABETH CITY	2
9003	0431	USCG CLINIC ASTORIA	20
9003	0432	USCG CLINIC PORTSMOUTH	3
9003	0433	USCG CLINIC YORKTOWN	1
9003	0434	USCG CLINIC PORT ANGELES	7
9003	0435	USCG CLINIC SEATTLE	46
9003	0437	SCHOFIELD BARRACKS AHC	2

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
9003	0610	BG CRAWFORD SAMS AHC-CAMP ZAMA	1
9003	0615	NH GUANTANAMO BAY	17
9003	0617	NH NAPLES	3
9003	0618	NH ROTA	2
9003	0624	NH SIGONELLA	7
9003	0635	39th MED GROUP-INCIRLIK	1
9003	0637	8th MED GRP-KUNSAN AB	5
9003	0638	51st MED GRP-OSAN AB	5
9003	0639	35th MED GRP-MISAWA	5
9003	0640	374th MED GRP-YOKOTA AB	2
9003	0784	WESTERN MISSOURI	741
9003	0785	ARIZONA-EXCLUDING YUMA AREA	996
9003	0786	YUMA ARIZONA AREA	190
9003	0788	IOWA-EXCLUDING QUAD CITIES	391
9003	0802	36th MED GRP-ANDERSEN	8
9003	0808	31st MED GRP-AVIANO	2
9003	0814	423RD ABS OL-A-RAF UPWOOD	1
9003	0902	ALASKA	106
9003	0906	COLORADO	531
9003	0912	HAWAII	67
9003	0917	KANSAS	583
9003	0924	MINNESOTA	719
9003	0927	MONTANA	247
9003	0928	NEBRASKA	380
9003	0929	NEVADA	199
9003	0932	NEW MEXICO	417
9003	0935	NORTH DAKOTA	169
9003	0938	OREGON	556
9003	0942	SOUTH DAKOTA	206
9003	0945	UTAH	545
9003	0948	WASHINGTON	851
9003	0951	WYOMING	127
9003	0973	NORTHERN IDAHO	48
9003	0974	SOUTHERN IDAHO	247
9003	0985	NORTHERN CALIFORNIA	1009
9003	0986	SOUTHERN CALIFORNIA	1375
9003	0994	WESTERN TEXAS	3
9003	0999	UNKNOWN LOCATION	185
9003	1170	NBHC NSA BAHRAIN	38
9003	1485	US ARMY HEALTH CLN-MCCHORD AFB	4
9003	6207	TRICARE OUTPATIENT-CLAIREMONT	2
9003	6215	TRICARE OUTPATIENT-CHULA VISTA	1
9003	6216	TRICARE OUTPATIENT-OCEANSIDE	1
9003	7043	USCG CLINIC HONOLULU	13
9003	7044	USCG CLINIC JUNEAU	11
9003	7045	USCG CLINIC NORTH BEND	4
9003	7046	USCG CLINIC SAN PEDRO	15
9003	7047	USCG CLINIC SITKA	8
9003	7048	USCG CLINIC BASE MIAMI	1

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
9003	7083	USCG CLINIC HUMBOLDT BAY	6
9003	7200	460th MED GRP-BUCKLEY AFB	225
9004	0036	436th MED GRP-DOVER	2
9004	0050	23rd MED GRP-MOODY	2
9004	0059	22nd MED GRP-MCCONNELL	2
9004	0084	49th MED GRP-HOLLOMAN	1
9004	0085	27th SPEC OPS MED GRP-CANNON	2
9004	0090	4th MED GRP-SEYMOUR JOHNSON	3
9004	0093	319th MED GRP-GRAND FORKS	1
9004	0106	28th MED GRP-ELLSWORTH	1
9004	0114	47th MED GRP-LAUGHLIN	1
9004	0287	15th MED GRP-HICKAM	1
9004	0326	87th MED GRP-MCGUIRE	7
9004	0356	628th MED GRP-CHARLESTON	1
9004	0413	579TH MED GROUP-BOLLING	5
9004	0419	USCG CLINIC PETALUMA	1
9004	0430	USCG CLINIC ELIZABETH CITY	1
9004	0607	LANDSTUHL REGIONAL MEDCEN	309
9004	0610	BG CRAWFORD SAMS AHC-CAMP ZAMA	91
9004	0611	VICENZA MEDICAL SERVICES CNTR	68
9004	0612	BRIAN ALLGOOD ACH-SEOUL	172
9004	0615	NH GUANTANAMO BAY	101
9004	0617	NH NAPLES	234
9004	0618	NH ROTA	168
9004	0620	NH GUAM-AGANA	164
9004	0621	NH OKINAWA	198
9004	0622	NH YOKOSUKA	209
9004	0624	NH SIGONELLA	138
9004	0629	65th MED GRP-LAJES	63
9004	0633	48th MED GRP-LAKENHEATH	101
9004	0635	39th MED GROUP-INCIRLIK	121
9004	0637	8th MED GRP-KUNSAN AB	135
9004	0638	51st MED GRP-OSAN AB	544
9004	0639	35th MED GRP-MISAWA	353
9004	0640	374th MED GRP-YOKOTA AB	382
9004	0653	422 ABS MED FLT-CROUGHTON	48
9004	0799	470 MED FLT-GEILENKIRCHEN	89
9004	0802	36th MED GRP-ANDERSEN	252
9004	0808	31st MED GRP-AVIANO	385
9004	0814	423RD ABS OL-A-RAF UPWOOD	94
9004	0858	BMC NAVSUPPACT SOUDA BAY	20
9004	0953	PUERTO RICO	2322
9004	0957	GERMANY	954
9004	0958	GREECE	19
9004	0960	ITALY	70
9004	0961	JAPAN	215
9004	0963	PHILIPPINES	122
9004	0964	PORTUGAL	26
9004	0965	KOREA	87

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2013
9004	0966	SPAIN	64
9004	0967	TURKEY	53
9004	0968	UNITED KINGDOM	126
9004	0969	CANADA	16
9004	0970	OTHER CARIBBEAN	22
9004	0971	CENTRAL AMERICA	96
9004	0972	SOUTH AMERICA	76
9004	0975	U.S. VIRGIN ISLANDS	117
9004	0976	AFRICA	46
9004	0977	MIDEAST	242
9004	0978	SOUTHEAST ASIA	147
9004	0979	BELGIUM	90
9004	0982	OTHER EUROPE	161
9004	0983	OTHER PACIFIC	182
9004	0999	UNKNOWN LOCATION	3475
9004	1153	BMC CAPODICHINO	97
9004	1170	NBHC NSA BAHRAIN	203
9004	5197	USCG CLINIC SAN JUAN	30
9004	6894	TGRO OUTREACH-EUROPE	1
9004	7042	USCG CLINIC BORINQUEN	19
9004	7048	USCG CLINIC BASE MIAMI	1
9004	7200	460th MED GRP-BUCKLEY AFB	5
9004	7234	MENWITH HILL MEDICAL CENTER	35
9004	8987	AHC STUTTGART-PATCH BARRACKS	1
			153000

APPENDIX D

RESPONSE RATE TABLES – QUARTERS I-III AND COMBINED ANNUAL

TABLE D.1

RESPONSE RATES BY ENROLLMENT AND BENEFICIARY

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Active Duty	13.9	11.7	12.6	10.5	13.3	11.3	13.3	11.1
Active Duty fam,Prime,civ PCM	13.4	13.2	13.2	13.1	10.9	10.9	12.5	12.4
Active Duty fam,Prime,mil PCM	14.1	14.4	12.6	11.9	11.0	10.6	12.6	12.3
Active Duty fam,non-enrollee	10.7	10.5	9.1	9.2	8.8	9.6	9.6	9.8
Retired,<65,civ PCM	39.0	40.1	36.2	36.9	30.1	31.0	35.1	36.0
Retired,<65,mil PCM	37.7	38.5	30.8	32.2	28.5	29.1	32.3	33.3
Retired,<65,non-enrollee	31.9	35.7	27.3	31.0	24.6	28.5	27.9	31.7
Retired,65+,enrolled	66.0	66.4	61.5	61.4	66.0	66.2	64.4	64.6
Retired,65+,non-enrollee	67.2	67.2	62.7	62.6	59.5	59.3	63.1	63.0
TRICARE Reserve Select	17.0	17.0	14.5	14.5	14.9	14.9	15.5	15.4

RR=Unweighted
RR_W=Weighted

TABLE D.2

RESPONSE RATES BY XOCONUS

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Europe	17.1	17.3	14.2	13.3	12.0	12.7	14.5	14.5
In Conus/Missing Region	19.7	36.8	17.4	33.6	16.7	31.7	17.9	34.0
Latin America	20.1	31.8	19.0	23.4	18.3	25.6	19.1	27.1
Western Pacific	14.8	13.6	12.9	12.1	12.3	11.7	13.3	12.5

RR=Unweighted
RR_W=Weighted

TABLE D.3

RESPONSE RATES BY SEX

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_W$	RR	RR$_W$	RR	RR$_W$	RR	RR$_W$
Female	19.5	36.5	17.3	33.8	16.0	32.1	17.6	34.1
Male	19.3	35.5	16.8	31.8	16.5	29.8	17.5	32.4

RR=Unweighted
RR$_W$=Weighted

TABLE D.4

RESPONSE RATES BY USA/OVERSEAS INDICATOR

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_W$	RR	RR$_W$	RR	RR$_W$	RR	RR$_W$
In USA	19.8	36.9	17.6	33.7	16.9	31.8	18.1	34.1
Invalid/Missing	17.2	33.0	13.4	29.9	12.0	26.2	14.2	30.5
Not in USA	16.7	17.3	14.4	13.7	13.1	13.8	14.7	14.9

RR=Unweighted
RR$_W$=Weighted

TABLE D.5

RESPONSE RATES BY BENEFICIARY CATEGORY

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_W$	RR	RR$_W$	RR	RR$_W$	RR	RR$_W$
Active Duty and Guard/Reserve	13.9	11.9	12.6	10.5	13.3	11.5	13.3	11.3
Dependent of Active Duty & Guard/Reserve	12.8	13.5	11.5	12.1	10.2	10.7	11.5	12.1
Retiree/Depend of Retir/Surviv/Other 65+	67.1	67.1	62.6	62.5	60.0	59.9	63.2	63.1
Retiree/Depend of Retir/Surviv/Other <65	35.3	37.6	30.1	32.9	27.0	29.4	30.8	33.3

RR=Unweighted
RR$_W$=Weighted

TABLE D.6

RESPONSE RATES BY CATCHMENT AREA

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
10th Med Group-USAF Academy CO	20.4	28.6	18.4	25.6	15.8	17.9	18.2	23.9
18th Med Grp-Kadena AB	20.1	20.6	11.2	11.5	16.7	17.2	16.0	16.4
20th Med Grp-Shaw	19.7	22.0	13.8	14.4	16.5	17.5	16.6	18.0
21st Med Grp-Peterson	20.0	24.5	19.4	22.7	13.7	15.4	17.6	20.8
2nd Med Grp-Barksdale	16.4	19.8	20.0	21.1	19.1	20.2	18.5	20.4
325th Med Grp-Tyndall	20.6	24.2	18.5	20.1	17.7	18.6	18.9	21.0
355th Med Grp-Davis Monthan	22.0	25.6	18.8	20.0	14.1	16.6	18.3	20.7
359th Med Grp-Randolph	29.4	34.4	17.0	18.7	21.2	32.6	22.5	28.8
366th Med Grp-Mountain Home	20.6	26.0	19.8	18.3	21.0	36.1	20.4	26.4
374th Med Grp-Yokota AB	15.5	14.4	16.5	16.3	14.9	15.6	15.7	15.4
375th Med Grp-Scott	27.8	32.3	17.0	17.2	22.1	25.8	22.3	25.2
377th Med Grp-Kirtland	22.3	21.9	19.1	20.7	16.3	19.3	19.3	20.7
3rd Med Grp-Elmendorf	24.0	34.4	16.9	24.2	16.1	36.1	18.9	31.6
422 ABS Med Flt-Croughton	22.2	23.7	18.2	16.1	30.0	27.4	24.5	23.4
42nd Medical Group-Maxwell	26.2	31.3	21.7	23.3	19.2	21.4	22.4	25.3
45th Med Grp-Patrick	27.1	43.8	24.5	33.3	21.4	27.2	24.3	35.3
470 Med Flt-Geilenkirchen	26.3	27.8	26.9	25.3	16.7	22.6	23.4	25.5
48th Med Grp-Lakenheath	17.7	18.4	15.3	13.4	16.7	17.6	16.6	16.3
52nd Med Group-Spangdahlem	20.5	21.9	17.9	19.2	14.7	15.9	17.7	19.0
55th Med Grp-Offutt	25.0	32.2	20.1	24.5	19.5	26.3	21.5	27.6
56th Med Grp-Luke	24.3	30.4	20.5	33.0	15.0	30.1	19.9	31.1
59th Med Wing-Lackland	18.9	34.7	15.6	16.7	16.6	23.7	17.0	25.5
60th Med Grp-Travis	21.9	34.2	17.3	29.6	23.7	38.8	21.0	34.3
633rd Med Grp Langley-Eustis	22.4	33.8	19.0	29.2	13.5	22.1	18.3	28.3
6th Med Grp-MacDill	26.5	33.9	22.3	35.3	16.6	26.6	21.8	31.5
72nd Med Grp-Tinker	18.5	20.2	16.7	18.7	14.5	15.5	16.5	18.1
75th Med Grp-Hill	19.4	22.5	18.6	21.8	16.9	19.5	18.3	21.3
779th Med Grp-Andrews	20.9	23.6	17.2	20.5	17.4	19.1	18.5	21.0
78th Med Grp-Robins	25.4	29.6	16.9	20.3	16.8	18.2	19.7	22.6
7th Med Grp-Dyess	16.1	19.1	17.8	19.9	14.6	17.0	16.1	18.7
81st Med Grp-Keesler	21.6	43.4	18.0	27.9	16.0	30.3	18.6	34.0
82nd Med Grp-Sheppard	24.9	29.9	29.0	40.1	19.1	21.7	24.3	32.1
88th Med Grp-Wright-Patterson	24.4	34.2	21.2	32.0	22.7	37.2	22.8	34.5

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
90th Med Grp-F.E. Warren	23.2	28.7	19.8	21.0	16.4	16.9	19.7	22.0
92nd Med Grp-Fairchild	14.9	19.9	18.9	22.7	21.4	25.9	18.5	22.8
95th Med Grp-Edwards	20.7	22.4	16.3	17.5	17.2	18.1	18.1	19.3
96th Med Grp-Eglin	18.9	40.7	20.1	32.5	18.0	34.3	19.0	36.2
99th Med Grp-O'Callaghan Hosp	29.3	44.3	18.2	31.6	19.2	31.7	22.1	36.0
Bassett ACH-Ft. Wainwright	11.0	11.1	10.2	12.7	11.8	11.9	10.9	11.9
Bavaria Meddac	11.9	10.8	9.7	9.1	8.5	8.4	10.0	9.4
Bayne-Jones ACH-Ft. Polk	14.8	17.8	10.8	22.7	11.5	12.1	12.3	18.1
Blanchfield ACH-Ft. Campbell	12.5	19.1	12.0	17.3	13.7	16.2	12.7	17.4
Brian Allgood ACH-Seoul	14.2	13.4	9.2	7.7	8.2	8.0	10.5	9.7
Brooke AMC-Ft. Sam Houston	16.6	37.2	19.3	41.6	17.0	33.0	17.6	37.0
Darnall ACH-Ft. Hood	14.0	24.5	8.8	17.2	11.2	19.5	11.4	20.5
Eisenhower AMC-Ft. Gordon	15.2	29.1	14.0	24.6	13.4	21.7	14.2	25.0
Evans ACH-Ft. Carson	12.8	22.7	11.1	19.7	13.9	26.8	12.5	23.2
FHCC-Formerly NHC Great Lakes	14.0	18.5	13.4	31.2	10.2	22.3	12.6	24.7
Fox AHC-Redstone Arsenal	24.5	30.2	19.0	23.0	22.0	25.9	21.9	26.3
Ft Belvoir Community Hosp-FBCH	24.2	36.3	26.1	38.2	18.7	30.6	22.9	35.0
Guthrie AHC-Ft. Drum	12.0	9.8	6.1	4.7	6.5	5.9	8.2	6.9
Heidelberg Meddac	17.2	28.8	.	.	.	.	17.2	28.8
Ireland ACH-Ft. Knox	17.3	36.4	13.3	24.8	14.1	26.9	14.9	29.7
Irwin ACH-Ft. Riley	11.4	20.7	8.5	18.8	10.8	18.7	10.2	19.4
Keller ACH-West Point	14.3	18.5	9.2	9.1	12.3	33.6	11.9	21.4
Kenner AHC-Ft. Lee	17.7	30.1	16.3	22.7	13.7	13.6	15.9	22.4
Kimbrough Amb Car Cen-Ft Meade	18.0	27.5	16.0	21.4	16.0	25.8	16.7	25.0
L. Wood ACH-Ft. Leonard Wood	12.9	18.8	12.0	15.9	14.1	23.6	13.0	19.6
Landstuhl Regional Medcen	15.3	17.3	14.5	15.6	9.6	12.0	13.1	14.8
Lyster AHC-Ft. Rucker	17.9	31.8	19.9	21.9	17.0	18.8	18.3	24.5
Madigan AMC-Ft. Lewis	19.8	30.6	14.4	24.6	13.7	26.6	15.8	26.8
Martin ACH-Ft. Benning	14.5	24.9	16.3	26.3	6.5	12.6	12.4	21.6
McDonald AHC-Ft. Eustis	13.8	15.6	16.1	19.2	18.7	26.2	16.2	20.3
Menwith Hill Medical Center	22.2	21.1	7.7	8.0	33.3	32.6	18.9	18.5
Missing data	.	.	.	.	15.6	25.9	.	.
Moncrief ACH-Ft. Jackson	19.4	40.8	14.6	37.0	15.4	39.5	16.5	39.0
Munson AHC-Ft. Leavenworth	19.5	22.8	19.0	20.5	18.9	20.4	19.1	21.2
NBHC Little Creek	21.3	25.9	15.4	17.6	18.2	21.3	18.3	21.6
NBHC Mayport	15.9	20.0	17.9	22.0	19.7	21.5	17.8	21.2

TABLE D.6 (continued)

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
NBHC NAS North Island	19.2	17.1	18.1	33.2	17.8	19.1	18.4	23.3
NBHC NTC San Diego	22.1	47.0	17.1	33.2	15.5	12.1	18.3	32.1
NBHC Navsta Sewells	22.0	20.7	17.9	17.9	18.9	17.9	19.6	18.8
NBHC Oceana	12.1	13.0	13.8	15.7	19.2	21.3	15.1	16.7
NBHC Port Hueneme	19.8	23.4	21.5	22.1	19.7	20.8	20.3	22.1
NBHC Portsmouth	20.4	25.4	24.4	26.5	17.8	22.2	20.8	24.7
NH Beaufort	12.1	13.3	7.7	14.7	8.8	27.9	9.5	19.5
NH Bremerton	19.9	32.5	21.8	33.3	16.4	24.9	19.4	30.4
NH Camp Lejeune	13.2	19.9	11.5	18.6	13.3	15.2	12.7	17.9
NH Camp Pendleton	14.9	26.8	12.5	18.3	10.9	25.0	12.8	23.5
NH Guam-Agana	14.6	15.1	13.0	14.5	11.6	12.4	13.0	14.0
NH Guantanamo Bay	12.7	12.3	8.6	8.2	7.0	8.3	9.2	9.4
NH Jacksonville	18.8	31.1	17.3	36.1	16.5	30.9	17.5	32.7
NH LeMoore	15.8	25.9	13.4	32.1	13.0	25.5	14.1	28.2
NH Naples	14.2	13.8	12.4	10.4	8.6	8.3	11.7	10.8
NH Oak Harbor	19.2	28.7	14.0	15.7	15.6	20.8	16.2	22.0
NH Okinawa	10.7	9.3	11.3	12.4	10.1	10.5	10.7	10.7
NH Pensacola	18.6	30.7	15.9	37.9	15.5	27.9	16.7	32.6
NH Twentynine Palms	8.0	21.9	12.6	20.1	10.5	16.8	10.3	19.7
NH Yokosuka	12.4	12.2	9.4	10.2	9.4	10.3	10.4	10.9
NHC Cherry Point	16.3	22.5	16.2	18.3	13.8	15.4	15.4	18.5
NHC Corpus Christi	19.8	23.1	13.0	18.1	12.1	16.0	15.0	19.1
NHC Hawaii	18.2	17.8	17.3	16.3	13.3	13.4	16.2	15.8
NHC Patuxent River	23.4	26.2	19.3	20.5	23.6	25.7	22.1	24.2
NHC Quantico	18.1	18.8	18.1	18.4	18.2	18.8	18.1	18.7
NMC Portsmouth	18.5	28.2	15.6	23.4	16.2	25.0	16.7	25.5
NMC San Diego	13.3	20.6	15.8	22.8	11.4	20.8	13.5	21.4
Naval Health Care New England	16.4	18.3	16.9	17.4	16.9	19.1	16.7	18.3
Naval Health Clinic Charleston	15.3	18.3	11.2	12.1	13.0	15.0	13.1	15.2
Out of Catchment North Region	23.0	46.3	21.3	43.2	20.3	41.5	21.5	43.6
Out of Catchment OCONUS Region	17.9	25.4	15.5	24.4	14.0	25.2	15.8	25.0
Out of Catchment South Region	22.6	48.5	19.6	43.0	19.1	40.0	20.4	43.9
Out of Catchment West Region	26.0	49.2	23.1	46.8	21.1	40.7	23.4	45.6
R W Bliss AHC-Ft. Huachuca	16.6	22.9	12.6	15.4	16.7	18.9	15.3	19.1
RAF Upwood	20.7	22.1	16.7	20.8	13.9	14.6	16.8	19.2
Reynolds ACH-Ft. Sill	14.9	24.3	14.9	23.0	15.5	15.7	15.1	21.3

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
TRICARE Outpatient-Chula Vista	25.3	24.6	22.4	25.7	18.4	21.7	22.0	23.9
Tripler AMC-Ft. Shafter	17.9	26.7	12.7	22.1	13.1	25.9	14.6	24.9
USCG Clinic Detroit	14.3	14.3	20.0	20.0	20.0	21.4	17.6	17.9
USCG Clinic Key West	25.0	25.0	.	.	22.2	21.7	17.6	16.9
Vicenza Medical Services Cntr	28.6	33.2	7.1	8.6	6.7	7.0	14.1	15.4
Walter Reed AMC-Washington DC	26.3	27.2	47.6	46.8	32.0	32.0	35.4	35.3
Walter Reed Natl Mil Med Cntr	21.4	34.9	22.1	30.0	20.3	33.9	21.3	32.9
Weed ACH-Ft. Irwin	11.7	24.4	12.8	27.5	11.5	10.2	12.0	21.5
William Beaumont AMC-Ft. Bliss	15.5	24.9	11.7	23.8	11.6	19.2	12.9	22.8
Winn ACH-Ft. Stewart	9.5	15.9	11.7	18.0	10.5	19.5	10.5	17.6

RR=Unweighted
RR$_W$=Weighted

TABLE D.7

RESPONSE RATES BY SERVICE AFFILIATION

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
Administrative	37.5	76.9	28.6	5.6	25.0	74.7	30.4	40.9
Air Force	21.2	32.9	18.3	27.3	17.1	28.0	18.8	29.4
Army	15.1	24.6	13.0	22.8	13.1	21.6	13.7	23.0
Coast Guard	24.0	26.7	21.5	22.9	25.1	25.8	23.5	25.1
Missing/unknown	32.9	46.9	25.8	23.8	16.8	30.7	18.7	35.9
Navy	16.0	24.4	14.3	23.7	14.1	22.9	14.8	23.6
Noncatchment	23.4	51.5	20.8	47.7	20.0	45.0	21.5	48.1
Support Contractor	22.0	38.2	20.1	34.4	17.8	30.9	20.0	34.5
USTF	36.0	51.0	37.1	52.0	29.0	42.0	34.0	48.4

RR=Unweighted
RR$_W$=Weighted

TABLE D.8

RESPONSE RATES BY BRANCH OF SERVICE

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
Air Force	23.0	43.0	20.7	40.2	19.0	35.5	20.9	39.6
Army	16.9	32.7	14.5	29.3	14.2	28.0	15.2	30.0
Coast Guard	24.5	39.7	20.6	29.6	22.6	30.9	22.6	33.6
Marine Corps	12.5	23.2	11.5	21.9	12.3	23.9	12.1	23.0
Navy	20.2	37.1	17.9	33.5	16.3	32.9	18.1	34.5
Other/Unknown	27.4	32.1	29.5	33.0	28.6	40.8	28.5	35.2

RR=Unweighted
RR$_W$=Weighted

TABLE D.9

RESPONSE RATES BY TRICARE NEXT GENERATION OF CONTRACTS REGION GROUPING

	Q1 2013		Q2 2013		Q3 2013		COMBINED	
	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
North	20.7	36.6	21.6	37.7	21.0	36.5	20.8	36.6
Overseas	14.3	18.0	15.7	18.8	16.1	21.4	14.9	18.6
South	20.8	37.5	22.1	42.0	22.0	41.0	21.4	39.7
West	21.0	35.1	22.3	38.9	21.3	36.8	21.1	36.8

RR=Unweighted
RR$_W$=Weighted

RESPONSE RATES BY COMBINED GEOGRAPHIC AREA

TNEX Reg	Catchment	Q1 2013		Q2 2013		Q3 2013		COMBINED	
		RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
North	375th Med Grp-Scott	27.8	32.3	17.0	17.2	22.1	25.8	22.3	25.2
North	633rd Med Grp Langley-Eustis	22.4	33.8	19.0	29.2	13.5	22.1	18.3	28.3
North	779th Med Grp-Andrews	20.9	23.6	17.2	20.5	17.4	19.1	18.5	21.0
North	88th Med Grp-Wright-Patterson	24.4	34.2	21.2	32.0	22.7	37.2	22.8	34.5
North	Blanchfield ACH-Ft. Campbell	12.5	19.1	12.0	17.3	13.7	16.2	12.7	17.4
North	FHCC-Formerly NHC Great Lakes	14.0	18.5	13.4	31.2	10.2	22.3	12.6	24.7
North	Ft Belvoir Community Hosp-FBCH	24.2	36.3	26.1	38.2	18.7	30.6	22.9	35.0
North	Guthrie AHC-Ft. Drum	12.0	9.8	6.1	4.7	6.5	5.9	8.2	6.9
North	Ireland ACH-Ft. Knox	17.3	36.4	13.3	24.8	14.1	26.9	14.9	29.7
North	Keller ACH-West Point	14.3	18.5	9.2	9.1	12.3	33.6	11.9	21.4
North	Kenner AHC-Ft. Lee	17.7	30.1	16.3	22.7	13.7	13.6	15.9	22.4
North	Kimbrough Amb Car Cen-Ft Meade	18.0	27.5	16.0	21.4	16.0	25.8	16.7	25.0
North	McDonald AHC-Ft. Eustis	13.8	15.6	16.1	19.2	18.7	26.2	16.2	20.3
North	Missing data	.	.	.	.	20.8	37.5	.	.
North	NBHC Little Creek	21.3	25.9	15.4	17.6	18.2	21.3	18.3	21.6
North	NBHC Navsta Sewells	22.0	20.7	17.9	17.9	18.9	17.9	19.6	18.8
North	NBHC Oceana	12.1	13.0	13.8	15.7	19.2	21.3	15.1	16.7
North	NBHC Portsmouth	20.4	25.4	24.4	26.5	17.8	22.2	20.8	24.7
North	NH Camp Lejeune	13.2	19.9	11.5	18.6	13.3	15.2	12.7	17.9
North	NHC Cherry Point	16.3	22.5	16.2	18.3	13.8	15.4	15.4	18.5
North	NHC Patuxent River	23.4	26.2	19.3	20.5	23.6	25.7	22.1	24.2
North	NHC Quantico	18.1	18.8	18.1	18.4	18.2	18.8	18.1	18.7
North	NMC Portsmouth	18.5	28.2	15.6	23.4	16.2	25.0	16.7	25.5
North	Naval Health Care New England	16.4	18.3	16.9	17.4	16.9	19.1	16.7	18.3
North	Out of Catchment North Region	23.0	46.3	21.3	43.2	20.3	41.5	21.5	43.6
North	Out of Catchment OCONUS Region	22.2	38.5	13.6	29.1	16.0	41.0	16.7	35.3
North	USCG Clinic Detroit	14.3	14.3	20.0	20.0	20.0	21.4	17.6	17.9
North	USCG Clinic Key West	.	.	.	.	.	.	.	.
North	Walter Reed AMC-Washington DC	26.3	27.2	47.6	46.8	32.0	32.0	35.4	35.3
North	Walter Reed Natl Mil Med Cntr	21.4	34.9	22.1	30.0	20.3	33.9	21.3	32.9
North	Womack AMC-Ft. Bragg	13.4	17.2	13.1	20.2	12.0	13.9	12.8	17.3
Overseas	18th Med Grp-Kadena AB	20.1	20.6	11.2	11.5	16.7	17.2	16.0	16.4
Overseas	374th Med Grp-Yokota AB	15.5	14.4	16.5	16.3	14.9	15.6	15.7	15.4
Overseas	422 ABS Med Flt-Croughton	22.2	23.7	18.2	16.1	30.0	27.4	24.5	23.4
Overseas	470 Med Flt-Geilenkirchen	27.8	30.9	26.9	25.3	18.5	25.6	24.7	27.8

TABLE D.10 (continued)

TNEX Reg	Catchment	Q1 2013		Q2 2013		Q3 2013		COMBINED	
		RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
Overseas	48th Med Grp-Lakenheath	17.7	18.4	15.3	13.4	16.7	17.6	16.6	16.3
Overseas	52nd Med Group-Spangdahlem	20.5	21.9	17.9	19.2	14.7	15.9	17.7	19.0
Overseas	Bavaria Meddac	11.9	10.8	9.7	9.1	8.5	8.4	10.0	9.4
Overseas	Brian Allgood ACH-Seoul	14.2	13.4	9.2	7.7	8.2	8.0	10.5	9.7
Overseas	Heidelberg Meddac	17.2	28.8	.	.	.	.	17.2	28.8
Overseas	Landstuhl Regional Medcen	15.3	17.3	14.5	15.6	9.6	12.0	13.1	14.8
Overseas	Menwith Hill Medical Center	18.8	18.4	7.7	8.0	33.3	32.6	17.1	17.0
Overseas	NH Guam-Agana	14.6	15.1	13.0	14.5	11.6	12.4	13.0	14.0
Overseas	NH Guantanamo Bay	12.7	12.3	8.6	8.2	7.0	8.3	9.2	9.4
Overseas	NH Naples	14.2	13.8	12.4	10.4	8.6	8.3	11.7	10.8
Overseas	NH Okinawa	10.7	9.3	11.3	12.4	10.1	10.5	10.7	10.7
Overseas	NH Yokosuka	12.4	12.2	9.4	10.2	9.4	10.3	10.4	10.9
Overseas	Out of Catchment OCONUS Region	17.9	20.5	15.5	14.7	13.8	19.9	15.8	18.5
Overseas	RAF Upwood	20.7	22.1	16.7	20.8	13.9	14.6	16.8	19.2
Overseas	Vicenza Medical Services Cntr	28.6	33.2	7.1	8.6	6.7	7.0	14.1	15.4
South	20th Med Grp-Shaw	19.7	22.0	13.8	14.4	16.5	17.5	16.6	18.0
South	2nd Med Grp-Barksdale	16.4	19.8	20.0	21.1	19.1	20.2	18.5	20.4
South	325th Med Grp-Tyndall	20.6	24.2	18.5	20.1	17.7	18.6	18.9	21.0
South	359th Med Grp-Randolph	29.4	34.4	17.0	18.7	21.2	32.6	22.5	28.8
South	42nd Medical Group-Maxwell	26.2	31.3	21.7	23.3	19.2	21.4	22.4	25.3
South	45th Med Grp-Patrick	27.1	43.8	24.5	33.3	21.4	27.2	24.3	35.3
South	59th Med Wing-Lackland	18.9	34.7	15.6	16.7	16.6	23.7	17.0	25.5
South	6th Med Grp-MacDill	26.5	33.9	22.3	35.3	16.6	26.6	21.8	31.5
South	72nd Med Grp-Tinker	18.5	20.2	16.7	18.7	14.5	15.5	16.5	18.1
South	78th Med Grp-Robins	25.4	29.6	16.9	20.3	16.8	18.2	19.7	22.6
South	7th Med Grp-Dyess	16.1	19.1	17.8	19.9	14.6	17.0	16.1	18.7
South	81st Med Grp-Keesler	21.6	43.4	18.0	27.9	16.0	30.3	18.6	34.0
South	82nd Med Grp-Sheppard	24.9	29.9	29.0	40.1	19.1	21.7	24.3	32.1
South	96th Med Grp-Eglin	18.9	40.7	20.1	32.5	18.0	34.3	19.0	36.2
South	Bayne-Jones ACH-Ft. Polk	14.8	17.8	10.8	22.7	11.5	12.1	12.3	18.1
South	Brooke AMC-Ft. Sam Houston	16.6	37.2	19.3	41.6	17.0	33.0	17.6	37.0
South	Darnall ACH-Ft. Hood	14.0	24.5	8.8	17.2	11.2	19.5	11.4	20.5
South	Eisenhower AMC-Ft. Gordon	15.2	29.1	14.0	24.6	13.4	21.7	14.2	25.0
South	Fox AHC-Redstone Arsenal	24.5	30.2	19.0	23.0	22.0	25.9	21.9	26.3
South	Lyster AHC-Ft. Rucker	17.9	31.8	19.9	21.9	17.0	18.8	18.3	24.5
South	Martin ACH-Ft. Benning	14.5	24.9	16.3	26.3	6.5	12.6	12.4	21.6
South	Missing data	.	.	.	.	12.9	15.0	.	.

TNEX Reg	Catchment	Q1 2013 RR	Q1 2013 RR$_w$	Q2 2013 RR	Q2 2013 RR$_w$	Q3 2013 RR	Q3 2013 RR$_w$	COMBINED RR	COMBINED RR$_w$
South	Moncrief ACH-Ft. Jackson	19.4	40.8	14.6	37.0	15.4	39.5	16.5	39.0
South	NBHC Mayport	15.9	20.0	17.9	22.0	19.7	21.5	17.8	21.2
South	NH Beaufort	12.1	13.3	7.7	14.7	8.8	27.9	9.5	19.5
South	NH Jacksonville	18.8	31.1	17.3	36.1	16.5	30.9	17.5	32.7
South	NH Pensacola	18.6	30.7	15.9	37.9	15.5	27.9	16.7	32.6
South	NHC Corpus Christi	19.8	23.1	13.0	18.1	12.1	16.0	15.0	19.1
South	Naval Health Clinic Charleston	15.3	18.3	11.2	12.1	13.0	15.0	13.1	15.2
South	Out of Catchment OCONUS Region	18.9	30.6	14.5	40.1	19.6	28.3	17.7	32.6
South	Out of Catchment South Region	22.6	48.5	19.6	43.0	19.1	40.0	20.4	43.9
South	Reynolds ACH-Ft. Sill	14.9	24.3	14.9	23.0	15.5	15.7	15.1	21.3
South	USCG Clinic Key West	25.0	25.0	.	.	23.5	23.5	19.4	19.3
South	Winn ACH-Ft. Stewart	9.5	15.9	11.7	18.0	10.5	19.5	10.5	17.6
West	10th Med Group-USAF Academy CO	20.4	28.6	18.4	25.6	15.8	17.9	18.2	23.9
West	21st Med Grp-Peterson	20.0	24.5	19.4	22.7	13.7	15.4	17.6	20.8
West	355th Med Grp-Davis Monthan	22.0	25.6	18.8	20.0	14.1	16.6	18.3	20.7
West	366th Med Grp-Mountain Home	20.6	26.0	19.8	18.3	21.0	36.1	20.4	26.4
West	377th Med Grp-Kirtland	22.3	21.9	19.1	20.7	16.3	19.3	19.3	20.7
West	3rd Med Grp-Elmendorf	24.0	34.4	16.9	24.2	16.1	36.1	18.9	31.6
West	55th Med Grp-Offutt	25.0	32.2	20.1	24.5	19.5	26.3	21.5	27.6
West	56th Med Grp-Luke	24.3	30.4	20.5	33.0	15.0	30.1	19.9	31.1
West	60th Med Grp-Travis	21.9	34.2	17.3	29.6	23.7	38.8	21.0	34.3
West	75th Med Grp-Hill	19.4	22.5	18.6	21.8	16.9	19.5	18.3	21.3
West	90th Med Grp-F.E. Warren	23.2	28.7	19.8	21.0	16.4	16.9	19.7	22.0
West	92nd Med Grp-Fairchild	14.9	19.9	18.9	22.7	21.4	25.9	18.5	22.8
West	95th Med Grp-Edwards	20.7	22.4	16.3	17.5	17.2	18.1	18.1	19.3
West	99th Med Grp-O'Callaghan Hosp	29.3	44.3	18.2	31.6	19.2	31.7	22.1	36.0
West	Bassett ACH-Ft. Wainwright	11.0	11.1	10.2	12.7	11.8	11.9	10.9	11.9
West	Evans ACH-Ft. Carson	12.8	22.7	11.1	19.7	13.9	26.8	12.5	23.2
West	Irwin ACH-Ft. Riley	11.4	20.7	8.5	18.8	10.8	18.7	10.2	19.4
West	L. Wood ACH-Ft. Leonard Wood	12.9	18.8	12.0	15.9	14.1	23.6	13.0	19.6
West	Madigan AMC-Ft. Lewis	19.8	30.6	14.4	24.6	13.7	26.6	15.8	26.8
West	Missing data	.	.	.	.	11.1	10.9	.	.
West	Munson AHC-Ft. Leavenworth	19.5	22.8	19.0	20.5	18.9	20.4	19.1	21.2
West	NBHC NAS North Island	19.2	17.1	18.1	33.2	17.8	19.1	18.4	23.3
West	NBHC NTC San Diego	22.1	47.0	17.1	33.2	15.5	12.1	18.3	32.1
West	NBHC Port Hueneme	19.8	23.4	21.5	22.1	19.7	20.8	20.3	22.1
West	NH Bremerton	19.9	32.5	21.8	33.3	16.4	24.9	19.4	30.4

TABLE D.10 (continued)

TNEX Reg	Catchment	Q1 2013		Q2 2013		Q3 2013		COMBINED	
		RR	RR$_w$	RR	RR$_w$	RR	RR$_w$	RR	RR$_w$
West	NH Camp Pendleton	14.9	26.8	12.5	18.3	10.9	25.0	12.8	23.5
West	NH LeMoore	15.8	25.9	13.4	32.1	13.0	25.5	14.1	28.2
West	NH Oak Harbor	19.2	28.7	14.0	15.7	15.6	20.8	16.2	22.0
West	NH Twentynine Palms	8.0	21.9	12.6	20.1	10.5	16.8	10.3	19.7
West	NHC Hawaii	18.2	17.8	17.3	16.3	13.3	13.4	16.2	15.8
West	NMC San Diego	13.3	20.6	15.8	22.8	11.4	20.8	13.5	21.4
West	Out of Catchment OCONUS Region	14.1	30.8	16.7	36.4	16.7	29.1	15.8	32.2
West	Out of Catchment West Region	26.0	49.2	23.1	46.8	21.1	40.7	23.4	45.6
West	R W Bliss AHC-Ft. Huachuca	16.6	22.9	12.6	15.4	16.7	18.9	15.3	19.1
West	TRICARE Outpatient-Chula Vista	25.3	24.6	22.4	25.7	18.4	21.7	22.0	23.9
West	Tripler AMC-Ft. Shafter	17.9	26.7	12.7	22.1	13.1	25.9	14.6	24.9
West	Weed ACH-Ft. Irwin	11.7	24.4	12.8	27.5	11.5	10.2	12.0	21.5
West	William Beaumont AMC-Ft. Bliss	15.5	24.9	11.7	23.8	11.6	19.2	12.9	22.8

RR=Unweighted
RR$_W$=Weighted

TABLE D.11

RESPONSE RATES BY BENEFICIARY CATEGORY AND SEX

Beneficiary Category	Sex	Q1 2013		Q2 2013		Q3 2013		COMBINED	
		RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Active Duty and Guard/Reserve	Female	16.3	14.5	15.7	12.7	15.8	14.7	15.9	14.0
Active Duty and Guard/Reserve	Male	13.5	11.5	12.0	10.1	12.8	10.9	12.8	10.8
Dependent of Active Duty & Guard/Reserve	Female	13.5	14.1	12.1	12.6	10.9	11.3	12.2	12.7
Dependent of Active Duty & Guard/Reserve	Male	7.7	9.0	7.2	8.6	5.1	5.4	6.7	7.7
Retiree/Depend of Retir/Surviv/Other 65+	Female	61.4	61.3	59.0	58.9	57.5	57.5	59.2	59.2
Retiree/Depend of Retir/Surviv/Other 65+	Male	73.1	73.3	66.5	66.5	63.1	62.7	67.7	67.6
Retiree/Depend of Retir/Surviv/Other <65	Female	33.6	37.0	28.8	32.3	25.9	28.9	29.5	32.7
Retiree/Depend of Retir/Surviv/Other <65	Male	37.0	38.3	31.4	33.6	28.2	30.0	32.2	34.0

RR=Unweighted
RR_W=Weighted

TABLE D.12

RESPONSE RATES BY BENEFICIARY CATEGORY AND SERVICE

Beneficiary Category	Service	Q1 2013		Q2 2013		Q3 2013		COMBINED	
		RR	RR$_W$	RR	RR$_W$	RR	RR$_W$	RR	RR$_W$
Active Duty and Guard/Reserve	Air Force	20.3	20.8	18.1	17.2	17.8	17.5	18.7	18.5
	Army	8.9	8.1	7.9	7.0	9.6	8.9	8.8	8.0
	Coast Guard	23.4	23.3	21.2	20.0	26.1	25.0	23.5	22.7
	Marine Corps	6.1	6.0	6.2	5.7	8.0	7.9	6.7	6.5
	Navy	13.5	11.9	12.6	12.3	11.9	10.4	12.7	11.5
	Other/Unknown	34.9	30.7	26.8	25.2	32.6	30.3	31.5	28.9
Dependent of Active Duty & Guard/Reserve	Air Force	14.2	14.4	13.2	14.4	11.3	12.1	12.9	13.7
	Army	11.7	13.2	9.6	10.4	9.3	10.2	10.2	11.3
	Coast Guard	16.9	20.4	15.2	16.9	12.0	13.0	14.8	16.9
	Marine Corps	10.2	9.7	10.2	10.7	9.4	10.4	9.9	10.2
	Navy	13.5	13.8	12.3	13.0	10.5	9.7	12.1	12.2
	Other/Unknown	20.5	21.7	29.5	31.9	23.8	23.3	24.6	25.8
Retiree/Depend of Retir/Surviv/Other 65+	Air Force	69.6	69.6	66.9	66.7	59.3	59.3	65.3	65.2
	Army	64.9	65.1	60.5	60.3	58.3	58.3	61.2	61.3
	Coast Guard	73.9	73.6	61.5	59.3	47.4	46.5	61.8	60.7
	Marine Corps	65.9	65.5	59.6	59.8	62.1	62.2	62.3	62.3
	Navy	67.0	66.9	60.0	60.1	63.9	63.3	63.7	63.4
	Other/Unknown	40.0	40.8	50.0	50.0	80.0	79.9	58.3	58.2
Retiree/Depend of Retir/Surviv/Other <65	Air Force	35.9	39.4	31.2	34.6	27.6	30.2	31.6	34.8
	Army	35.1	37.8	29.9	32.9	26.5	28.6	30.5	33.1
	Coast Guard	42.5	40.0	28.9	32.1	33.7	34.8	34.8	35.6
	Marine Corps	33.8	34.4	26.7	28.1	26.5	26.1	28.9	29.4
	Navy	34.6	36.1	29.7	32.1	26.6	30.0	30.3	32.8
	Other/Unknown	28.6	31.8	32.7	33.3	26.4	30.8	29.3	32.1

RR=Unweighted
RR$_W$=Weighted

APPENDIX E

TECHNICAL DESCRIPTION OF THE 2013 TRICARE BENEFICIARY REPORTS

The beneficiary reports present 12 scores for each region and catchment area in the MHS and for the MHS overall. Scores will enable users to compare providers to national benchmarks in these areas: getting needed care; getting care quickly; how well doctors communicate; customer service; courteous and helpful office staff; claims processing; rating of the health plan, health care, personal doctor, and specialist; preventive care standards; and health behavior. These scores are made up of three different types, described in Table E.1: CAHPS composites, ratings, and TMA standard composites. A trend page compares composites and ratings with values from previous quarters, calculates a quarterly trend, and tests the trend for statistical significance in the quarterly version of the beneficiary reports. In the annual version, results from 3 years are presented.

TABLE E.1

CONTENT OF THE 2013 TRICARE BENEFICIARY REPORTS

CAHPS COMPOSITES
The CAHPS composites group together survey responses to a set of related HCSDB questions taken from CAHPS. Scores expressed as CAHPS composites profile TRICARE beneficiaries' satisfaction with their ability to get needed care, the speed with which they receive care, interactions with their doctor, their experience with customer service representatives, and their experience with claims processing. Scores are presented in relation to national benchmarks.
SATISFACTION RATINGS
Scores expressed as ratings reflect beneficiaries' self-rated satisfaction with their health plan, health care, and personal providers. The scores, adjusted for patient age and health status, are presented relative to national benchmarks.
TMA STANDARD COMPOSITES
Two TMA standard composite scores are reported. One score is based on how the preventive care that beneficiaries received compares with Healthy People 2020 standards. Preventive care indicators to be combined are prenatal care, hypertension screening, mammography, and Pap smears. Another composite combines a non-smoking rate, the rate at which smokers are counseled to quit, and rate of non-obese BMI ratio.

Table E.2 lists the questions and response choices for the CAHPS 4.0 composites in the beneficiary reports. Question numbers refer to the CAHPS 4.0 Adult Questionnaire (Commercial). Response choices for each question within a composite are collapsed into three-item scales so that all composites have the same range. Along with the composites, mean responses to each question are presented and compared to national civilian benchmarks.

Four scores are based on respondents' ratings of health care and health care providers: health plan, health care, personal doctor, and specialist. These ratings are measures of overall beneficiary satisfaction. Questions about these aspects of care request beneficiaries to rate their health plan, health care, and physicians on a scale of 0 to 10, with 0 being the worst and 10 being the best. The rating score will be the mean. For the purpose of presentation, the means are multiplied by 100 so that the scores are presented on a scale of 0 to 100.

CAHPS 4.0 QUESTIONS AND RESPONSE CHOICES
EXPRESSED AS COMPOSITE SCORES AND RATINGS

ADULT QUESTIONNAIRE CAHPS 4.0	GETTING NEEDED CARE	RESPONSE CHOICE
Q17	In the last 12 months, how often was it easy to get appointments with specialists?	Never Sometimes Usually Always
Q21	In the last 12 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?	Never Sometimes Usually Always
	GETTING CARE QUICKLY	
Q6	In the last 12 months, not counting times you needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought you needed?	Never Sometimes Usually Always
Q4	In the last 12 months, when you needed care right away, how often did you get care as soon as you thought you needed?	Never Sometimes Usually Always
	HOW WELL DOCTORS COMMUNICATE	
Q12	In the last 12 months, how often did your personal doctor listen carefully to you?	Never Sometimes Usually Always
Q11	In the last 12 months, how often did your personal doctor explain things in a way that was easy to understand?	Never Sometimes Usually Always
Q13	In the last 12 months, how often did your personal doctor show respect for what you had to say?	Never Sometimes Usually Always
Q14	In the last 12 months, how often did your personal doctor spend enough time with you?	Never Sometimes Usually Always

ADULT QUESTIONNAIRE CAHPS 4.0	CUSTOMER SERVICE	RESPONSE CHOICE
Q23	In the last 12 months, how often did your health plan's customer service give you the information or help you needed?	Never Sometimes Usually Always
Q24	In the last 12 months, how often did your health plan's customer service staff treat you with courtesy and respect?	Never Sometimes Usually Always

ADULT SUPPLEMENTAL QUESTIONNAIRE CAHPS 4.0	CLAIMS PROCESSING	
H14	In the last 12 months, how often did your health plan handle your claims quickly?	Never Sometimes Usually Always
H15	In the last 12 months, how often did your health plan handle your claims correctly?	Never Sometimes Usually Always

	RATING OF ALL HEALTH CARE	
Q8	Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?	0 Worst health care possible 1 2 3 4 5 6 7 8 9 10 Best health care possible

ADULT QUESTIONNAIRE CAHPS 4.0	RATING OF HEALTH PLAN	RESPONSE CHOICE
Q27	Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?	0 Worst health plan possible 1 2 3 4 5 6 7 8 9 10 Best health plan possible
	RATING OF PERSONAL DOCTOR	
Q15	Using any number from 0 to 10, where 0 is the worst personal doctor or nurse possible and 10 is the best personal doctor or nurse possible, what number would you use to rate your personal doctor or nurse?	0 Worst personal doctor or nurse possible 1 2 3 4 5 6 7 8 9 10 Best personal doctor or nurse possible
	RATING OF SPECIALIST	
Q19	We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?	0 Worst specialist possible 1 2 3 4 5 6 7 8 9 10 Best specialist possible

The preventive care composite in the beneficiary reports measures MHS performance in terms of meeting TMA's goals for the provision of preventive services. The composite is calculated by combining the responses to individual questions pertaining to these goals. Questions and responses from the present version of the 2013 HCSDB that are incorporated into the preventive care composite are presented in Table E.3. When individual scores in the preventive care composite are combined, the resulting composite is weighted by the number of questions to which a normal population has responded. Therefore, the weight a particular question receives in the composite score is based on the number of responses it "receives". The resulting proportion is presented as a percentage.

TABLE E.3

QUESTIONS AND RESPONSE CHOICES ON PREVENTIVE CARE
EXPRESSED AS A STANDARD TMA COMPOSITE

2013 ADULT HCSDB	COMPOSITE PREVENTIVE CARE	RESPONSE CHOICES
H13049	When did you last have a blood pressure reading?	Less than 12 months ago 1 to 2 years ago More than 2 years ago
H13050	Do you know if your blood pressure is too high?	Yes, it is too high No, it is not too high Don't know
H13059B	When did you last have a Pap smear test?	Within the last 12 months 1 to 2 years ago More than 2 but less than 3 years ago More than 3 but less than 5 years ago 5 or more years ago Never had a Pap smear
H13061	When was the last time your breasts were checked by mammography?	Within the last 12 months 1 to 2 years ago More than 2 but less than 5 years ago 5 or more years ago Never had a mammogram
H13064	In which trimester did you first receive prenatal care?	First trimester Second trimester Third trimester Did not receive prenatal care
H13071F, H13071I	How tall are you without your shoes on? Please give your answer in feet and inches.	_____ feet _____ inches
H13072	How much do your weigh without your shoes on? Please give your answer in pounds.	_____ pounds

The healthy behavior composite measures the success of TMA's efforts to reduce smoking and obesity rates. The composite consists of a non-smoking rate, which is the proportion of adults not smoking or who quit more than a year ago, the counseled to quit rate, which is the proportion of smokers with office visits who were counseled to quit during at least one visit, and the rate of adults with non-obese BMI ratio. The composite weights these three measures equally.

TABLE E.4.1

CAHPS 4.0 QUESTIONS AND RESPONSE CHOICES
EXPRESSED AS COMPOSITE SCORES AND RATINGS

ADULT SUPPLEMENTAL QUESTIONNAIRE CAHPS 4.0	SMOKING	RESPONSE CHOICE
H17	Do you now smoke cigarettes or use tobacco every day, some days or not at all?	Every day Some days Not at all Don't know
H18	In the last 12 months, how often were you advised to quit smoking or using tobacco by a doctor or other health provider in your plan?	Never Sometimes Usually Always

TABLE E.4.2

CAHPS 3.0 QUESTIONS AND RESPONSE CHOICES
EXPRESSED AS COMPOSITE SCORES AND RATINGS

ADULT SUPPLEMENTAL QUESTIONNAIRE CAHPS 3.0	SMOKING	RESPONSE CHOICE
H12	Have you ever smoked at least 100 cigarettes in your entire life?	Yes No Don't know

APPENDIX E

TECHNICAL DESCRIPTION OF THE 2013 TRICARE BENEFICIARY REPORTS

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The beneficiary reports present 11 scores for each region and catchment area in the MHS and for the MHS overall. Scores will enable users to compare providers to national benchmarks in these areas: getting needed care; getting care quickly; how well doctors communicate; customer service; claims processing; rating of the health plan, health care, personal doctor, and specialist; preventive care standards; and health behavior. These scores are made up of three different types, described in Table E.1: CAHPS composites, ratings, and TMA standard composites. A trend page compares composites and ratings with values from previous quarters, calculates a quarterly trend, and tests the trend for statistical significance in the quarterly version of the beneficiary reports. In the annual version, results from 3 years are presented.

TABLE E.1

CONTENT OF THE 2013 TRICARE BENEFICIARY REPORTS

CAHPS COMPOSITES
The CAHPS composites group together survey responses to a set of related HCSDB questions taken from CAHPS. Scores expressed as CAHPS composites profile TRICARE beneficiaries' satisfaction with their ability to get needed care, the speed with which they receive care, interactions with their doctor, their experience with customer service representatives, and their experience with claims processing. Scores are presented in relation to national benchmarks.
SATISFACTION RATINGS
Scores expressed as ratings reflect beneficiaries' self-rated satisfaction with their health plan, health care, and personal providers. The scores, adjusted for patient age and health status, are presented relative to national benchmarks.
TMA STANDARD COMPOSITES
Two TMA standard composite scores are reported. One score is based on how the preventive care that beneficiaries received compares with Healthy People 2013 standards. Preventive care indicators to be combined are prenatal care, hypertension screening, mammography, and Pap smears. Another composite combines a non-smoking rate, the rate at which smokers are counseled to quit, and rate of non-obese BMI ratio.

Table E.2 lists the questions and response choices for the CAHPS 4.0 composites in the beneficiary reports. Question numbers refer to the CAHPS 4.0 Adult Questionnaire (Commercial). Response choices for each question within a composite are collapsed into three-item scales so that all composites have the same range. Along with the composites, mean responses to each question are presented and compared to national civilian benchmarks.

Four scores are based on respondents' ratings of health care and health care providers: health plan, health care, personal doctor, and specialist. These ratings are measures of overall beneficiary satisfaction. Questions about these aspects of care request beneficiaries to rate their health plan, health care, and physicians on a scale of 0 to 10, with 0 being the worst and 10 being the best. The rating score will be the mean. For the purpose of presentation, the means are multiplied by 100 so that the scores are presented on a scale of 0 to 100.

CAHPS 4.0 QUESTIONS AND RESPONSE CHOICES
EXPRESSED AS COMPOSITE SCORES AND RATINGS

ADULT QUESTIONNAIRE CAHPS 4.0	GETTING NEEDED CARE	RESPONSE CHOICE
Q17	In the last 12 months, how often was it easy to get appointments with specialists?	Never Sometimes Usually Always
Q21	In the last 12 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?	Never Sometimes Usually Always
	GETTING CARE QUICKLY	
Q6	In the last 12 months, not counting times you needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought you needed?	Never Sometimes Usually Always
Q4	In the last 12 months, when you needed care right away, how often did you get care as soon as you thought you needed?	Never Sometimes Usually Always
	HOW WELL DOCTORS COMMUNICATE	
Q12	In the last 12 months, how often did your personal doctor listen carefully to you?	Never Sometimes Usually Always
Q11	In the last 12 months, how often did your personal doctor explain things in a way that was easy to understand?	Never Sometimes Usually Always
Q13	In the last 12 months, how often did your personal doctor show respect for what you had to say?	Never Sometimes Usually Always
Q14	In the last 12 months, how often did your personal doctor spend enough time with you?	Never Sometimes Usually Always

ADULT QUESTIONNAIRE CAHPS 4.0	CUSTOMER SERVICE	RESPONSE CHOICE
Q23	In the last 12 months, how often did your health plan's customer service give you the information or help you needed?	Never Sometimes Usually Always
Q24	In the last 12 months, how often did your health plan's customer service staff treat you with courtesy and respect?	Never Sometimes Usually Always

ADULT SUPPLEMENTAL QUESTIONNAIRE CAHPS 4.0	CLAIMS PROCESSING	
H14	In the last 12 months, how often did your health plan handle your claims quickly?	Never Sometimes Usually Always
H15	In the last 12 months, how often did your health plan handle your claims correctly?	Never Sometimes Usually Always

	RATING OF ALL HEALTH CARE	
Q8	Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?	0 Worst health care possible 1 2 3 4 5 6 7 8 9 10 Best health care possible

ADULT QUESTIONNAIRE CAHPS 4.0	RATING OF HEALTH PLAN	RESPONSE CHOICE
Q27	Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?	0 Worst health plan possible 1 2 3 4 5 6 7 8 9 10 Best health plan possible
	RATING OF PERSONAL DOCTOR	
Q15	Using any number from 0 to 10, where 0 is the worst personal doctor or nurse possible and 10 is the best personal doctor or nurse possible, what number would you use to rate your personal doctor or nurse?	0 Worst personal doctor or nurse possible 1 2 3 4 5 6 7 8 9 10 Best personal doctor or nurse possible
	RATING OF SPECIALIST	
Q19	We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?	0 Worst specialist possible 1 2 3 4 5 6 7 8 9 10 Best specialist possible

The preventive care composite in the beneficiary reports measures MHS performance in terms of meeting TMA's goals for the provision of preventive services. The composite is calculated by combining the responses to individual questions pertaining to these goals. Questions and responses from the present version of the 2013 HCSDB that are incorporated into the preventive care composite are presented in Table E.3. When individual scores in the preventive care composite are combined, the resulting composite is weighted by the number of questions to which a normal population has responded. Therefore, the weight a particular question receives in the composite score is based on the number of responses it "receives". The resulting proportion is presented as a percentage.

QUESTIONS AND RESPONSE CHOICES ON PREVENTIVE CARE
EXPRESSED AS A STANDARD TMA COMPOSITE

2013 ADULT HCSDB	COMPOSITE PREVENTIVE CARE	RESPONSE CHOICES
H13049	When did you last have a blood pressure reading?	Less than 12 months ago 1 to 2 years ago More than 2 years ago
H13050	Do you know if your blood pressure is too high?	Yes, it is too high No, it is not too high Don't know
H13059B	When did you last have a Pap smear test?	Within the last 12 months 1 to 3 years ago More than 3 but less than 5 years ago 5 or more years ago Never had a Pap smear
H13059B	When did you last have a Pap smear test?	Within the last 12 months 1 to 2 years ago More than 2 but less than 3 years ago More than 3 but less than 5 years ago 5 or more years ago Never had a Pap smear
H13061	When was the last time your breasts were checked by mammography?	Within the last 12 months 1 to 2 years ago More than 2 but less than 5 years ago 5 or more years ago Never had a mammogram
H13064	In which trimester did you first receive prenatal care?	First trimester Second trimester Third trimester Did not receive prenatal care
H13071F, H13071I	How tall are you without your shoes on? Please give your answer in feet and inches.	_____ feet _____ inches
H13072	How much do your weigh without your shoes on? Please give your answer in pounds.	_____ pounds

The healthy behavior composite measures the success of TMA's efforts to reduce smoking and obesity rates. The composite consists of a non-smoking rate, which is the proportion of adults not smoking or who quit more than a year ago, the counseled to quit rate, which is the proportion of smokers with office visits who were counseled to quit during at least one visit, and the rate of adults with non-obese BMI ratio. The composite weights these three measures equally.

TABLE E.4.1

CAHPS 4.0 QUESTIONS AND RESPONSE CHOICES
EXPRESSED AS COMPOSITE SCORES AND RATINGS

ADULT SUPPLEMENTAL QUESTIONNAIRE CAHPS 4.0	SMOKING	RESPONSE CHOICE
H17	Do you now smoke cigarettes or use tobacco every day, some days or not at all?	Every day Some days Not at all Don't know
H18	In the last 12 months, how often were you advised to quit smoking or using tobacco by a doctor or other health provider in your plan?	Never Sometimes Usually Always

TABLE E.4.2

CAHPS 3.0 QUESTIONS AND RESPONSE CHOICES
EXPRESSED AS COMPOSITE SCORES AND RATINGS

ADULT SUPPLEMENTAL QUESTIONNAIRE CAHPS 3.0	SMOKING	RESPONSE CHOICE
H12	Have you ever smoked at least 100 cigarettes in your entire life?	Yes No Don't know

APPENDIX F

SAS CODE FOR FILE DEVELOPMENT – QUARTERS I-III

F.1   Q3FY2013\PROGRAMS\WEIGHTING\MERGESYN.SAS - Combine Item Response Data from survey contractor with the MPR sampling and DEERS variables.

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*****************************************************************************
*
* PROGRAM:  Changed from MERGENRC.SAS to MERGESYN.SAS
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE:  COMBINE ITEM RESPONSE DATA FROM SYNOVATE WITH THE MPR SAMPLING AND
*           DEERS VARIABLES.
* WRITTEN:  01/31/2001 BY KEITH RATHBUN
*
* MODIFIED: 1) 03/13/2002 BY KEITH RATHBUN for 2002 survey: Added MPCSMPL,
*              SERVAREA and DCATCH.  Drop SUBDEMO.
*           2) 03/11/2003 BY KEITH RATHBUN for 2003 survey: Removed the
*              processing involving the FLAG_FIN file.  NRC now sends
*              all records regardless of FLAG_FIN.
*           3) 09/28/2004 BY JACQUELINE AGUFA: Moved the code that contructs
*              XREGION, XTNEXREG and CONUS to CONVARQ.SAS.
*           4) 10/20/2004 BY KEITH RATHBUN: Recode unknown values of
*              MRTLSTAT into one group.
*           5) 06/22/2005 BY JACQUELINE AGUFA: Add ACV to mergenrc.sd2
*           6) 06/12/2012 BY JACQUELINE AGUFA: Add code to modify the observations of the file
* from Synovate
*              This process will reincorporate the overlapped cases(currently missing in the
* synovate file)
*              back to the mergsyn file. The missing overlapped cases can be found in
* bwt.sas7bdat or sampla02.sas7bdat
*
* INPUTS:   1) DODyyQnF.sas7bdat - Quarterly DOD Health Survey Data from Synovate
*              where n = Quarter Number
*                    yy = Survey Administration Year
*           2) BWT.sas7bdat - MPR Sampling and DEERS variables
*           3) EXTRACT.sas7bdat - DEERS variables
*
* OUTPUTS:  1) MERGESYN.sas7bdat - Quarterly DOD Health Survey Data
*              (Combined SYNOVATE, MPR, and DEERS variables)
*
*****************************************************************************;
LIBNAME  INr        "K:\Q3FY2013"; /*Restricted folder*/
LIBNAME  IN         "..\..\DATA\afinal";
LIBNAME  OUT        "..\..\DATA\afinal";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*****************************************************************************
* Define fielding start date so AGE can be recalculated based on DOB.
* Also assign quarter and number of eligibility periods.
*****************************************************************************;
%LET FIELDATE = 04012013; * mmddyyyy;
%LET FIELDLBL = April 1st 2013;
%LET QUARTER  = Q3FY2013;
%LET NUMPD    = 50; *Add 1 to number of Quarters processed each quarter;

*****************************************************************************
* SORT the Synovate-Provided file and the original sample (BWT).
*****************************************************************************;
PROC SORT DATA=IN.dod13q3f OUT=SYNFILE;
    BY MPRID;
RUN;

DATA SYNFILE;
   LENGTH MPRID $8;
   SET SYNFILE;
RUN;


PROC SORT DATA=IN.BWT OUT=BWT; BY MPRID; RUN;

*****************************************************************************
* Attach DEERS variables to the combined file that were omitted from the
* BWT file. Using extract.sas7bdat to obtain this data since the overlap cases
* are not in SAMPLA02.sas7bdat
```

```
    *****************************************************************************;
    PROC SORT DATA=INr.EXTRACT OUT=EXTRACT
            (KEEP=MPRID DAGEQY DBENCAT DCATCH DMEDELG DSPONSVC /*LEGDDSCD (JMA 09/18/2007)*/
                    MBRRELCD
                    MEDTYPE MRTLSTAT PATCAT PCM RACEETHN
                    PNLCATCD PNBRTHDT PAYPLNCD /*E1-E&NUMPD*/ ACV);
        BY MPRID;

    RUN;

    *****************************************************************************
    * Attach the original sampling variables to the combined file.
    *****************************************************************************;
    DATA MERGESYN;
        MERGE BWT(in=b) SYNFILE(in=in2) EXTRACT(in=in1);
        BY MPRID;
        /*FLAG_FIN = COMPRESS(FLAG_FIN); *Trim off the blanks; Apr 3 2007 */

        *****************************************************************************
        * DROP variables that are not needed.
        *****************************************************************************;
        DROP SVCCD GEOSMPL GEOCELL /*EBG_COM*/ EBSMPL
            D_INSTAL /*GROUP_geosmpl*/ ;


        LABEL  /*CACSMPL  = 'CACSMPL - Catchment Area' */ /*Dec 15, 2006*/
                BWT      = 'BWT - Basic Sampling Weight'
                ENBGSMPL = 'ENBGSMPL - Beneficiary/Enrollment Status'
                NHFF     = 'NHFF - Stratum Sample Size'
                SEXSMPL  = 'SEXSMPL - Sex'
                STRATUM  = 'Stratum'
                SVCSMPL  = 'SVCSMPL - Branch of Service'
                FLAG_FIN = 'Final Disposition'
            ;
        IF IN2 AND NOT IN1 THEN
            PUT "ERROR: MPRID Not Found in both the SYNOVATE and MPR files, MPRID = " MPRID;

        IF IN2 AND IN1 THEN OUTPUT MERGESYN;

        *****************************************************************************
        * JMA 06/12/2012
        * incorporate cases that were dropped from the file sent to synovate because
        * of the overlap with TSS.
        *****************************************************************************;
        IF b AND NOT in2 THEN DO;
            ***JMA 07/03/2012 assign a flag_fin value of 99-Overlap case.  Survey was never mailed
                to the respondent;
            FLAG_FIN=99;
            output MERGESYN;
        END;
    RUN;

    DATA OUT.MERGESYN;
        SET MERGESYN(/*RENAME=(COMMENT_FLAG=CMNTFLAG)*/);
        BY MPRID;
        *****************************************************************************
        * Construct MPCSMPL.
        *****************************************************************************;
        IF PAYPLNCD = 'MO' THEN
            MPCSMPL = 2;
        ELSE IF PAYPLNCD = 'MW' THEN
            MPCSMPL = 3;
        ELSE
            MPCSMPL = 1;
        *****************************************************************************
        * Calculate FIELDAGE based on PNBRTHDT using fielding period
        * starting date.
        *****************************************************************************;
        FIELDATE = INPUT("&FIELDATE",mmddyy8.);
        DOB = SUBSTR(PNBRTHDT,5,2) || SUBSTR(PNBRTHDT,7,2) || SUBSTR(PNBRTHDT,1,4);
        BRTHDATE = INPUT(DOB,mmddyy8.);

        FIELDAGE = PUT(INT((FIELDATE - BRTHDATE)/365.25),Z3.);
```

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```
   LABEL MPCSMPL  = "MPCSMPL - Military Personnel Category";
   LABEL FIELDAGE = "Age as of &FIELDLBL";
   LABEL DCATCH   = "Catchment Area";

   LENGTH QUARTER $8;
   QUARTER = "&QUARTER";
   LABEL  QUARTER  = 'Survey Quarter';

   LENGTH ONTIME $3;
   ONTIME = "YES";
   LABEL ONTIME = "Responded Within 8 weeks of Mail-Out";

   **************************************************************************
   * Recode unknown values of MRTLSTAT into one 'Unknown' group (Z).
   *************************************************************************;
   IF MRTLSTAT NOT IN ("A","D","I","L","M","N","S","W","Z"," ") THEN MRTLSTAT = "Z";

   DROP FIELDATE DOB BRTHDATE PNBRTHDT PAYPLNCD;

RUN;


TITLE1 "Quarterly DOD Health Survey - Combine SYNOVATE, MPR and DEERS variables (6663-0500)";
TITLE2 "Program Name: MERGESYN.SAS By Jacqueline Agufa";
TITLE3 "Program Inputs: DODyyQnF.sas7bdat, BWT.sas7bdat, EXTRACT.sas7bdat -- Program Output:
MERGESYN.sas7bdat";

PROC CONTENTS; RUN;

PROC FORMAT;
   Value $ACV
     'A'='Active Duty Prime'
     'B'='TRICARE Global Remote Overseas Prime Active Duty'
     'D'='TRICARE Senior Prime enrollee'
     'E'='Non-Active Duty Prime'
     'F'='TRICARE Global Remote Overseas Prime ADFM'
     'G'='TRICARE Plus (CHAMPUS/TFL Eligible)'
     'H'='TRICARE Overseas Prime AD'
     'J'='TRICARE Overseas Prime ADFM'
     'L'='TRICARE Plus (w/o civilian healthcare)'
     'M'='AD not reported as enrolled'
     'R'='TRICARE Reserve Select'
     'Q'='Active Duty enrolled to Op Forces'
     'U'='USFHP/USTF'
     'V'='TRICARE Retired Reserve'
 ' ','Z'='Not enrolled in TRICARE Prime or USFHP'
          ;

   VALUE $ENBGS
          '01' = "Active duty"
          '02' = "Active duty fam,Prime,civ PCM"
          '03' = "Active duty fam,Prime,mil PCM"
          '04' = "Active duty fam,non-enrollee"
          '05' = "Retired,<65,civ PCM"
          '06' = "Retired,<65,mil PCM"
          '07' = "Retired,<65,non-enrollee"
          '08' = "Retired,65+,civ PCM"
          '09' = "Retired,65+,mil PCM"
          '10' = "Retired,65+,non-enrollee"
          '11' = "TRICARE Reserve Select"
   ;

RUN;

PROC FREQ DATA=OUT.MERGESYN(DROP=MPRID PRN MIQCNTL);
  TABLES WEB ONTIME FLAG_FIN DAGEQY*FIELDAGE ACV PCM ENBGSMPL
         ACV*PCM ACV*ENBGSMPL
         _ALL_ /MISSING LIST;
  FORMAT ACV $ACV. ENBGSMPL $ENBGS.;
RUN;
```

F.2.A   Q1FY2013\PROGRAMS\CODINGSCHEME\CSCHM13Q.SAS - Implement Coding Scheme and Coding Tables for Quarter 1 FY2013.

```
*****************************************************************************;
*  Program:  Cschm13q.sas
*  Written:  06/04/2001
*   Author:  C. Rankin
*
*    Input:  MERGESYN.sas7bdat - Merged MPR Sampling, DEERS, and Synovate Response Data
*   Output:  CSCHM11Q.sas7bdat - Coding scheme file
*
* Modified:  9/20/2001 - Recodes removed (stored in recodes_old.sas)
*           10/31/2001 - Revised notes 16 and 17 (became notes 26 and 27)
*            3/22/2002 - Updated Variable names for Q1 2002 and added
*                        Include file RENAME.SAS to change the variable
*                        names from 01 to 02. Skipping 01 designation to make
*                        survey reflect year of fielding
*            5/09/2002 - Change to logic in TFL supplement
*            3/17/2003 - Updated Variables names for Q1 2003
*            4/11/2003 - Added note 19a to accomodate Q1 2003 error where
*                        an option on most of the questionnaires was omitted for
*                        H03062
*            3/28/2008 - Updated Variable names for Q2 FY 2008
*           12/14/2009 - Updated Variable names for Q1 FY 2010
*           12/01/2010 - Updated Variable names for Q1 FY 2011
*           12/09/2011 - Updated Variable names for Q1 FY 2012
*           12/15/2012 - Updated Variable names for Q1 FY 2013
*           12/15/2012 - Removed logic for handling check boxes for height and
*                        weight variables. Also no longer have to convert the
*                        weight variable from character to numeric
*           12/21/2012 - Added code on line 146 to correct out of range height (in)
*  Purpose:  Apply Coding Scheme Specifications to DoD Health Care Survey
*            Response Data, check for consistency in responses and skip
*            patterns
*  Include
*    files:  Cschm13q.fmt
*
*****************************************************************************;

OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;

LIBNAME LIBRARY    "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN         "..\..\DATA\AFINAL";
LIBNAME OUT        "..\..\DATA\AFINAL";

%LET INDATA=MERGESYN;
%LET OUTDATA=CSCHM13q;
%LET PERIOD=October, 2011 to September, 2012;

/* Variable names in survey -- become recoded varibles */

%Let varlist1 =


 H13001  H13002A H13002C H13002N H13002O H13002P H13002Q H13002S H13002T H13002U
 H13002F H13002G H13002H H13002I H13002J H13002K H13002M H13002R H13002L
 H13003  H13004
 S13AA01 S13AA02A S13AA02B S13AA02C S13AA02D S13AA02E S13AA02F S13AA02G S13AA02H S13AA02I
 S13AA02J S13AA02K S13AA02L S13AA02V S13AA02M S13AA02N S13AA02O S13AA02P S13AA02Q S13AA02R
 S13AA02S S13AA02T S13AA02U S13AA02W S13AA03 S13AA04A S13AA04B S13AA04C S13AA04D S13AA04E S13AA05
 H13005  H13006  H13007  H13008  H13009  H13010  H13011  H13012
 H13013  H13014  H13015  H13016  H13017  H13018  H13019  H13020  H13021  H13022
 H13023  H13024  H13025  H13026  H13027
 S13009  S13010
 H13028  H13029  H13030  H13031
 S13B01  S13B02  S13B03  S13B04
 H13032  H13033  H13034  H13035  H13036  H13037  H13038  H13039  H13040  H13041
 H13042  H13043  H13044  H13045  H13046  H13047  H13048
 H13049  H13050
 S13015
 H13051  H13052  H13053  H13054  H13055  H13056  H13057A H13057B
```

```
 H13057C H13057D H13058
 H13059B H13060  H13061  H13062  H13063  H13064
 H13065  H13066  H13067  H13068  H13069  H13070
 S13B23  S13B24  S13B25  S13B26
 H13071F H13071I H13072
 SREDA   H13073A H13073B H13073C H13073D H13073E
 SRRACEA SRRACEB SRRACEC SRRACED SRRACEE SRAGE
 H13074  H13075  H13076  H13077  H13078  H13079
 S13011  S13014
 S13N11  S13N12A S13N12B S13N12C S13N12D S13N12E S13N12F S13N12G S13N12H S13N12I
 S13N12J S13N12K S13N12L S13N12M
 ;

/*  _O variables are the original values from the survey response */

%Let varlist2 =

 H13001_O H13002AO H13002CO H13002NO H13002OO H13002PO H13002QO H13002SO H13002TO H13002UO
 H13002FO H13002GO H13002HO H13002IO H13002JO H13002KO H13002MO H13002RO H13002LO
 H13003_O H13004_O
 S13AA01_O S13AA02AO S13AA02BO S13AA02CO S13AA02DO S13AA02EO S13AA02FO S13AA02GO S13AA02HO
 S13AA02IO S13AA02JO S13AA02KO S13AA02LO S13AA02VO S13AA02MO S13AA02NO S13AA02OO S13AA02PO
 S13AA02QO S13AA02RO S13AA02SO S13AA02TO S13AA02UO S13AA02WO S13AA03_O S13AA04AO S13AA04BO
 S13AA04CO S13AA04DO S13AA04EO S13AA05_O
 H13005_O H13006_O H13007_O H13008_O H13009_O H13010_O H13011_O H13012_O
 H13013_O H13014_O H13015_O H13016_O H13017_O H13018_O H13019_O H13020_O H13021_O H13022_O
 H13023_O H13024_O H13025_O H13026_O H13027_O
 S13009_O S13010_O
 H13028_O H13029_O H13030_O H13031_O
 S13B01_O S13B02_O S13B03_O S13B04_O
 H13032_O H13033_O H13034_O H13035_O H13036_O H13037_O H13038_O H13039_O H13040_O H13041_O
 H13042_O H13043_O H13044_O H13045_O H13046_O H13047_O H13048_O
 H13049_O H13050_O
 S13015_O
 H13051_O H13052_O H13053_O H13054_O H13055_O H13056_O H13057AO H13057BO
 H13057CO H13057DO H13058_O
 H13059BO H13060_O H13061_O H13062_O H13063_O H13064_O
 H13065_O H13066_O H13067_O H13068_O H13069_O H13070_O
 S13B23_O S13B24_O S13B25_O S13B26_O
 H13071FO H13071IO H13072_O
 SREDA_O  H13073AO H13073BO H13073CO H13073DO H13073EO
 SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O
 H13074_O H13075_O H13076_O H13077_O H13078_O H13079_O
 S13011_O S13014_O
 S13N11_O S13N12AO S13N12BO S13N12CO S13N12DO S13N12EO S13N12FO S13N12GO S13N12HO S13N12IO
 S13N12JO S13N12KO S13N12LO S13N12MO
 ;

TITLE  "DoD 2013 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";




DATA MERGESYN;

  SET IN.MERGESYN;

***********************************************************************;
* Code added by Jacqueline Agufa 09/15/2004 to fix name of race variable;
***********************************************************************;

  RENAME SRACEA = SRRACEA;
  RENAME SRACEB = SRRACEB;
  RENAME SRACEC = SRRACEC;
  RENAME SRACED = SRRACED;
  RENAME SRACEE = SRRACEE;


  *** Correct odd height and weights Per Eric Schone;

  IF H13071F NOT IN (-9,.) THEN DO;
    IF H13071F < 2 OR
       H13071F > 8
```

```
    THEN H13071F= -7;
  END;
  ***Correct odd height in inches per Daisy's request;
  IF H13071I NOT IN (-9,.) THEN DO;
    IF H13071I > 11 then H13071I=-7;
  END;

  IF 0 <= H13072 < 40 OR
    H13072 > 500
  THEN H13072= -7;

RUN;


DATA OUT.CSCHM13q;

  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;
  %INCLUDE "CSCHM13q.FMT";


/* label and format statements for original variables */


  SET MERGESYN;



****************************************************************;
**** Recodes for invalid responses:***************************;
****************************************************************;


/* This is a version of the coding scheme and coding tables for the
   FY 2013 HCSDB Form A.
   The following tables outline the coding of screening questions (skip),
   and subsequent items to be answered (or not answered in a series
   following a skip question.) */

/* First set up new variables that capture the original values */
/* recode the initial numeric values to the SAS numeric values */
/* specified in the coding scheme                            */

  SEX=PNSEXCD;
  AGE=INPUT(DAGEQY,8.);

  ARRAY RECODE(*) &VARLIST1;
  ARRAY   ORIG(*) &VARLIST2;

  DO I = 1 to DIM(ORIG);
     ORIG(I) = RECODE(I);
     IF ORIG(I) < 0 THEN DO;
             IF ORIG(I)= -9 THEN RECODE(I)=.;
        ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
        ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
        ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
        ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
        ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
     END;
  END;
  DROP I;



/* recode selected responses to be 1=marked, 2=unmarked */

  ARRAY   MARKED(*)
          H13002A H13002C H13002N H13002O H13002P H13002Q H13002S H13002T H13002U
          H13002F H13002G H13002H H13002I H13002J H13002K H13002M H13002R H13002L

          S13AA02A S13AA02B S13AA02C S13AA02D S13AA02E S13AA02F S13AA02G S13AA02H
          S13AA02I S13AA02J S13AA02K S13AA02L S13AA02V S13AA02M S13AA02N S13AA02O
          S13AA02P S13AA02Q S13AA02R S13AA02S S13AA02T S13AA02U S13AA02W
```

```
            H13057A H13057B H13057C H13057D

            H13073A H13073B H13073C H13073D H13073E
            SRRACEA SRRACEB SRRACEC SRRACED SRRACEE

            S13N12A S13N12B S13N12C S13N12D S13N12E S13N12F S13N12G S13N12H S13N12I
            S13N12J S13N12K S13N12L S13N12M
                 ;


    ARRAY INFORMAT(*)
            H13002AO H13002CO H13002NO H13002OO H13002PO H13002QO H13002SO H13002TO H13002UO
            H13002FO H13002GO H13002HO H13002IO H13002JO H13002KO H13002MO H13002RO H13002LO

            S13AA02AO S13AA02BO S13AA02CO S13AA02DO S13AA02EO S13AA02FO S13AA02GO S13AA02HO
            S13AA02IO S13AA02JO S13AA02KO S13AA02LO S13AA02VO S13AA02MO S13AA02NO S13AA02OO
            S13AA02PO S13AA02QO S13AA02RO S13AA02SO S13AA02TO S13AA02UO S13AA02WO

            H13057AO H13057BO H13057CO H13057DO

            H13073AO H13073BO H13073CO H13073DO H13073EO
            SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO

            S13N12AO S13N12BO S13N12CO S13N12DO S13N12EO S13N12FO S13N12GO S13N12HO S13N12IO
            S13N12JO S13N12KO S13N12LO S13N12MO
                 ;


    DO J=1 TO DIM(INFORMAT);
       IF INFORMAT(J) NOT IN (.,-9) THEN MARKED(J)=1;
       ELSE MARKED(J)=2;
    END;
    DROP J;

    FORMAT
            H13002A H13002C H13002N H13002O H13002P H13002Q H13002S H13002T H13002U
            H13002F H13002G H13002H H13002I H13002J H13002K H13002M H13002R H13002L

            S13AA02A S13AA02B S13AA02C S13AA02D S13AA02E S13AA02F S13AA02G S13AA02H
            S13AA02I S13AA02J S13AA02K S13AA02L S13AA02V S13AA02M S13AA02N S13AA02O
            S13AA02P S13AA02Q S13AA02R S13AA02S S13AA02T S13AA02U S13AA02W

            H13057A H13057B H13057C H13057D

            H13073A H13073B H13073C H13073D H13073E
            SRRACEA SRRACEB SRRACEC SRRACED SRRACEE

            S13N12A S13N12B S13N12C S13N12D S13N12E S13N12F S13N12G S13N12H S13N12I
            S13N12J S13N12K S13N12L S13N12M
           MARKED.;


**********************************************************************;

/*  skip coding scheme for all surveys not returned  **/

 IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;




/** Note 1_Q1 -- H13003, H13004 health plan usage;
            updated to include skip coding required for supplemental questions**/
  ARRAY NOTE1_Q11 S13AA01  S13AA03 S13AA04A--S13AA04E S13AA05;
  ARRAY NOTE1_Q12 S13AA02A--S13AA02W;

  IF (H13003 > 0 OR H13003 =.D) and H13004 in(., 1, 2, 3) THEN N1_Q1=1;
  ELSE IF (H13003 > 0 OR H13003 =.D) and H13004 in( 4, 5, 6) THEN DO;
     N1_Q1=2;
     DO OVER NOTE1_Q11;
        IF NOTE1_Q11=. THEN NOTE1_Q11=.N;
```

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```
            ELSE NOTE1_Q11=.C;
        END;
        DO OVER NOTE1_Q12;
            IF NOTE1_Q12 IN (.,2) THEN NOTE1_Q12=.N;
      ELSE NOTE1_Q12=.C;
        END;
    END;
    ELSE IF H13003=.N  THEN DO;
        N1_Q1=3;
        IF H13004=. THEN H13004=.N;
        ELSE H13004=.C;
    END;
    ELSE IF H13003=. and H13004 in(., 1, 2, 3)  THEN N1_Q1=4;
    ELSE IF H13003=. and H13004 in(4, 5, 6)  THEN DO;
        N1_Q1=5;
        DO OVER NOTE1_Q11;
            IF NOTE1_Q11=. THEN NOTE1_Q11=.N;
            ELSE NOTE1_Q11=.C;
        END;
        DO OVER NOTE1_Q12;
            IF NOTE1_Q12 IN(.,2) THEN NOTE1_Q12=.N;
      ELSE NOTE1_Q12=.C;
        END;
    END;
  END;


/** Note 1_AA1 -- S13AA01,S13AA02A-S13AA02W, S13AA03,
                 S13AA04A-S13AAO4E,S13AA05: Prior health plan**/

  ARRAY NOTE1AA1_1 S13AA02A--S13AA02W;
  ARRAY NOTE1AA1_2 S13AA03 S13AA04A--S13AA04E S13AA05;

  N1AA1MARKED=0;

  DO OVER NOTE1AA1_1;
      IF NOTE1AA1_1 = 1 THEN N1AA1MARKED+1;
  END;

  DO OVER NOTE1AA1_2;
      IF NOTE1AA1_2 > 0 THEN N1AA1MARKED+1;
  END;

  IF N1_Q1 IN (2,5) THEN N1_AA1=1;  /* Forwarded coded by previous note */
  ELSE IF S13AA01 > 0 OR S13AA01 =.D THEN N1_AA1=2;
  ELSE IF S13AA01=.N  AND N1AA1MARKED >0 THEN DO;
      N1_AA1=3;
      S13AA01 =.;
  END;
  ELSE IF S13AA01=.N AND N1AA1MARKED =0 THEN DO;
      N1_AA1=4;
      DO OVER NOTE1AA1_1;
          IF NOTE1AA1_1 IN (.,2) THEN NOTE1AA1_1=.N;
          ELSE NOTE1AA1_1=.C;
      END;
      DO OVER NOTE1AA1_2;
          IF NOTE1AA1_2=. THEN NOTE1AA1_2=.N;
          ELSE NOTE1AA1_2=.C;
      END;
  END;
  ELSE IF S13AA01=. THEN N1_AA1=5;

  DROP N1AA1MARKED;


/** Note 2 -- H13006,H13007,H13008:  illness or injury **/

  ARRAY NOTE2 H13007 H13008;
  N2MARK=0;
  N2NMISS=0;
  N2NN=0;

  DO OVER NOTE2;
      IF NOTE2 NE . THEN N2NMISS+1;
```

```
        IF NOTE2 NOT IN (.N,.) THEN N2MARK+1;
        IF NOTE2 EQ .N THEN N2NN+1;
     END;


   IF H13006=1 AND N2NMISS=0 THEN DO;
       N2=1;
   END;
   ELSE IF H13006 IN (1,.) AND N2NMISS>0 AND N2MARK=0 THEN DO;
      H13006=2;
      N2=2;
      DO OVER NOTE2;
         IF NOTE2=. THEN NOTE2=.N;
         ELSE NOTE2=.C;
      END;
   END;
   ELSE IF H13006=1 AND N2MARK=1 AND N2NN=1 THEN  DO;
      DO OVER NOTE2;
         IF NOTE2=.N THEN NOTE2=.;
      END;
      N2=3;
   END;
   ELSE IF H13006=1 AND N2MARK>0 THEN DO;
      N2=4;
   END;
   ELSE IF H13006=2 AND N2MARK=1 AND N2NN=1  THEN  DO;
      H13007=.C;
      H13008=.C;
      N2=5;
   END;
   ELSE IF H13006 IN (2,.) AND N2MARK>0 THEN DO;
      H13006=1;
      N2=6;
      DO OVER NOTE2;
         IF NOTE2=.N THEN NOTE2=.;
      END;
   END;
   ELSE IF H13006=2 AND (N2NMISS=0 OR (N2NMISS>0 AND N2MARK=0)) THEN DO;
      N2=7;
      DO OVER NOTE2;
         IF NOTE2=. THEN NOTE2=.N;
         ELSE NOTE2=.C;
      END;
   END;
   ELSE IF H13006=.  AND N2NMISS=0 THEN N2=8;


   DROP N2NMISS N2MARK N2NN;


/** Note 3 -- H13009,H13010,H13011:  regular or routine healthcare **/

   ARRAY Note3 H13010 H13011;
   N3MARK=0;
   N3NMISS=0;
   N3NN=0;

   DO OVER Note3;
      IF Note3 NE . THEN N3NMISS+1;
      IF Note3 NOT IN (.N,.) THEN N3MARK+1;
      IF Note3 EQ .N THEN N3NN+1;
   END;

   IF H13009=1 AND N3NMISS=0 THEN DO;
       N3=1;
   END;
   ELSE IF H13009 IN (1,.) AND N3NMISS>0 AND N3MARK=0 THEN DO;
      H13009=2;
      N3=2;
      DO OVER Note3;
         IF Note3=. THEN Note3=.N;
         ELSE Note3=.C;
      END;
```

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```
      END;
    ELSE IF H13009=1 AND N3MARK=1 AND N3NN=1 THEN  DO;
       DO OVER Note3;
          IF Note3=.N THEN Note3=.;
       END;
       N3=3;
    END;
    ELSE IF H13009=1 AND N3MARK>0 THEN DO;
       N3=4;
    END;
    ELSE IF H13009=2 AND N3MARK=1 AND N3NN=1  THEN  DO;
       H13010=.C;
       H13011=.C;
       N3=5;
    END;
    ELSE IF H13009 IN (2,.) AND N3MARK>0 THEN DO;
       H13009=1;
       N3=6;
       DO OVER Note3;
          IF Note3=.N THEN Note3=.;
       END;
    END;
    ELSE IF H13009=2 AND (N3NMISS=0 OR (N3NMISS>0 AND N3MARK=0)) THEN DO;
       N3=7;
       DO OVER Note3;
          IF Note3=. THEN Note3=.N;
          ELSE Note3=.C;
       END;
    END;
    ELSE IF H13009=.  AND N3NMISS=0 THEN N3=8;


    DROP N3NMISS N3MARK N3NN;


 /** Note 4 -- H13013, H13014-H13018: doctor's office or clinic **/

    ARRAY NOTE4  H13014-H13018;

    N4MARK=0;
    N4NMISS=0;

    DO OVER NOTE4;
       IF NOTE4 NE . THEN N4NMISS+1;
       IF NOTE4 NOT IN  (., .N) THEN N4MARK+1;
    END;


    IF H13013=1 THEN DO;
       N4=1;
       DO OVER NOTE4;
          IF NOTE4=. THEN NOTE4=.N;
          ELSE NOTE4=.C;
       END;
    END;
    ELSE IF H13013 IN (2,3,4,5,6,7,.) AND N4NMISS>0 AND N4MARK=0 THEN DO;
       H13013=1;
       N4=2;
       DO OVER NOTE4;
          IF NOTE4=. THEN NOTE4=.N;
          ELSE NOTE4=.C;
       END;
    END;
    ELSE IF H13013 IN (2,3,4,5,6,7) AND (N4NMISS=0 OR N4MARK>0) THEN DO;
       DO OVER NOTE4;
          IF NOTE4=.N THEN NOTE4=.;
       END;
       N4=3;
    END;
    ELSE IF H13013=.  AND N4NMISS=0 THEN N4=4;
    ELSE IF H13013 IN (.) AND N4MARK>0 THEN DO;
       N4=5;
       DO OVER NOTE4;
```

```
           IF NOTE4=.N THEN NOTE4=.;
       END;
    END;

  DROP N4NMISS N4MARK;


/** Note 5 -- H13015, H13016-H13017: doctor's office or clinic- treatment **/

 IF H13015 IN (.N,.C) THEN N5=1;
 ELSE IF H13015= 1  THEN N5=2;
 ELSE IF H13015 IN (2,.) AND H13016 IN (1,2) THEN  DO;
     N5=3;
     H13015=1;
 END;
 ELSE IF H13015 IN (2,.) AND (H13016 IN (3,4,.) AND H13017 IN (1,2)) THEN  DO;
     N5=4;
     H13015=1;
 END;
 ELSE IF H13015 IN (2) AND (H13016 IN (3,4,.) AND H13017 IN (3,4,.)) THEN  DO;
     N5=5;
     IF H13016 = . THEN H13016 = .N;
     ELSE H13016 = .C;
     IF H13017 = . THEN H13017 = .N;
     ELSE H13017 = .C;
 END;
 ELSE IF H13015 IN (.) AND (H13016 IN (3,4,.) AND H13017 IN (3,4,.)) THEN  DO;
     N5=6;
 END;


/** Note 6 -- H13019, H13020-H13027, S13009: personal doctor **/
/* MER 07/01/09 */

  ARRAY NOTE6  H13021-H13024;

  N6MARK=0;

  DO OVER NOTE6;
     IF NOTE6 NOT IN  (., .N) THEN N6MARK+1;
  END;

  IF H13020 NOT IN (0,.) THEN N6MARK+1;


  IF H13019 = 1  THEN DO;
     N6=1;
     IF H13027=.N THEN H13027=.;
  END;
  ELSE IF H13019 in (2,.) AND H13027 in (0,1,2,3,4,5,6,7,8,9,10) THEN DO;
     N6=2;
     H13019=1;
  END;
  ELSE IF H13019 in (2,.) AND N6MARK>0 AND H13027 = . THEN DO;
     N6=3;
     H13019=1;
  END;
  ELSE IF H13019 = 2 AND N6MARK>0 AND H13027 = .N THEN DO;
     N6=4;
     IF H13020=. THEN H13020=.N;
     ELSE H13020=.C;
     DO OVER NOTE6;
         IF NOTE6=. THEN NOTE6=.N;
         ELSE NOTE6=.C;
     END;
     IF H13025=. THEN H13025=.N;
     ELSE H13025=.C;
     IF H13026=. THEN H13026=.N;
     ELSE H13026=.C;
     IF S13009=. THEN S13009=.N;
     ELSE S13009=.C;
     H13027=.C;
  END;
```

```
      ELSE IF H13019 = 2 AND N6MARK=0 AND H13027 in (.N,.) THEN DO;
         N6=5;
         IF H13020=. THEN H13020=.N;
         ELSE H13020=.C;
         DO OVER NOTE6;
             IF NOTE6=. THEN NOTE6=.N;
             ELSE NOTE6=.C;
         END;
         IF H13025=. THEN H13025=.N;
         ELSE H13025=.C;
         IF H13026=. THEN H13026=.N;
         ELSE H13026=.C;
         IF S13009=. THEN S13009=.N;
         ELSE S13009=.C;
         IF H13027=. THEN H13027=.N;
         ELSE H13027=.C;
      END;
      ELSE IF H13019 = . AND H13027 = .N THEN DO; /* MER 07/31/09 combined rows 6 and 7 */
         N6=6;
         H13019=2;
         IF H13020=. THEN H13020=.N;
         ELSE H13020=.C;
         DO OVER NOTE6;
             IF NOTE6=. THEN NOTE6=.N;
             ELSE NOTE6=.C;
         END;
         IF H13025=. THEN H13025=.N;
         ELSE H13025=.C;
         IF H13026=. THEN H13026=.N;
         ELSE H13026=.C;
         IF S13009=. THEN S13009=.N;
         ELSE S13009=.C;
         H13027=.C;
      END;
      ELSE IF H13019 = . AND N6MARK=0 AND H13027 = . THEN N6=7;

      DROP N6MARK;


  /** Note 7 -- H13020, H13021-H13026: personal doctor visit **/

      ARRAY NOTE7  H13021-H13024;

      N7MARK=0;
      N7NMISS=0;

      DO OVER NOTE7;
          IF NOTE7 NE . THEN N7NMISS+1;
          IF NOTE7 NOT IN  (., .N) THEN N7MARK+1;
      END;


      IF H13020 IN (.N, .C) THEN N7=1;
      ELSE IF H13020=0 THEN DO;
         N7=2;
         DO OVER NOTE7;
             IF NOTE7=. THEN NOTE7=.N;
             ELSE NOTE7=.C;
         END;
         IF H13025=. THEN H13025=.N;
         ELSE H13025=.C;
         IF H13026=. THEN H13026=.N;
         ELSE H13026=.C;
      END;
      ELSE IF H13020 IN (1,2,3,4,5,6,.) AND N7NMISS>0 AND N7MARK=0 THEN DO;
         H13020=0;
         N7=3;
         DO OVER NOTE7;
             IF NOTE7=. THEN NOTE7=.N;
             ELSE NOTE7=.C;
         END;
         IF H13025=. THEN H13025=.N;
         ELSE H13025=.C;
```

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```
      IF H13026=. THEN H13026=.N;
      ELSE H13026=.C;
   END;
   ELSE IF H13020 IN (1,2,3,4,5,6,.) AND (N7NMISS=0 OR N7MARK>0) THEN DO;
      DO OVER NOTE7;
         IF NOTE7=.N THEN NOTE7=.;
      END;
      N7=4;
   END;

   DROP N7NMISS N7MARK;


/** Note 8 -- H13025, H13026:  care from another doctor or healthcare provider **/

   IF H13025 IN (.N, .C) THEN N8=1;
   ELSE IF H13025=1 THEN N8=2;
   ELSE IF H13025 IN (2,.) AND H13026 IN (1,2,3,4) THEN DO;
      H13025=1;
      N8=3;
   END;
   ELSE IF H13025=2 AND H13026 IN (.) THEN DO;
      H13026=.N;
      N8=4;
   END;
   ELSE IF H13025=.  AND H13026=.  THEN N8=5;


/** Note 8_01 -- S13009, S13010:  problem getting new personal doctor or nurse **/

   IF S13009 IN (.N,.C) THEN N8_01=1; /* MER 07/31/09 gave each S13009 value its own row for
analysis purposes */
   ELSE IF S13009=1 THEN DO;
      N8_01=2;
      IF S13010=. THEN S13010=.N;
      ELSE S13010=.C;
   END;
   ELSE IF S13009=2 THEN N8_01=3;
   ELSE IF S13009=. THEN N8_01=4;  /* MER 07/31/09 eliminated backward coding for missing S13009
*/


/** Note 9 -- H13028, H13029-H13031:  needed to see a specialist in last 12 months **/

   ARRAY NOTE9  H13029 H13031;

   N9MARK=0;
   N9NMISS=0;

   DO OVER NOTE9;
      IF NOTE9 NE . THEN N9NMISS+1;
      IF NOTE9 NOT IN  (., .N) THEN N9MARK+1;
   END;

   IF H13030 NE . THEN N9NMISS+1;
   IF H13030 NOT IN (.,0) THEN N9MARK+1;


   IF H13028 IN (1)  THEN DO;
      N9=1;
      IF H13029=.N THEN H13029=.;
   END;
   ELSE IF H13028 in (2,.) AND N9MARK>0 THEN DO;
      N9=2;
      H13028=1;
      IF H13029=.N THEN H13029=.;
   END;
   ELSE IF H13028 in (2) THEN DO;
      N9=3;
      DO OVER NOTE9;
         IF NOTE9=. THEN NOTE9=.N;
         ELSE NOTE9=.C;
      END;
```

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```
        IF H13030=. THEN H13030=.N;
        ELSE H13030=.C;
     END;
  ELSE IF H13028=.  AND N9NMISS>0 AND N9MARK=0 THEN DO;
     N9=4;
     H13028=2;
     DO OVER NOTE9;
        IF NOTE9=. THEN NOTE9=.N;
        ELSE NOTE9=.C;
     END;
     IF H13030=. THEN H13030=.N;
     ELSE H13030=.C;
  END;
  ELSE IF H13028=.  AND N9NMISS=0 THEN N9=5;

  DROP N9NMISS N9MARK;


/** Note 10 -- H13030, H13031: saw a specialist in last 12 months **/

  IF H13030 IN (.N,.C) AND H13031 IN (.N,.C) THEN N10=1;
  ELSE IF H13030 IN (1,2,3,4,5) AND H13031 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N10=2;
  ELSE IF H13030 IN (1,2,3,4,5,.) AND H13031 = .N THEN DO;
     N10=3;
     H13030=0;
     H13031=.C;
  END;
  ELSE IF H13030 = 0 THEN DO;
     N10=4;
     IF H13031 = . THEN H13031 = .N;
     ELSE H13031 = .C;
  END;
  ELSE IF H13030 = . AND H13031 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N10=5;


/** Note 10_B1 -- S13B02, S13B03-S13B04: overall mental health **/

  ARRAY NOTE10B1  S13B03-S13B04;

  N10B1MARK=0;
  N10B1NMISS=0;

  DO OVER NOTE10B1;
     IF NOTE10B1 NE . THEN N10B1NMISS+1;
     IF NOTE10B1 NOT IN  (., .N) THEN N10B1MARK+1;
  END;

  IF S13B02 = 1 THEN DO;
     N10_B1=1;
     DO OVER NOTE10B1;
        IF NOTE10B1=.N THEN NOTE10B1=.;
     END;
  END;
  ELSE IF S13B02 IN (2,.) AND (N10B1MARK>0) THEN DO;
     N10_B1=2;
     S13B02=1;
     DO OVER NOTE10B1;
        IF NOTE10B1=.N THEN NOTE10B1=.;
     END;
  END;
  ELSE IF S13B02=2  AND (N10B1NMISS=0 OR (N10B1NMISS > 0 AND N10B1MARK = 0)) THEN DO;
     N10_B1=3;
     DO OVER NOTE10B1;
        IF NOTE10B1 = . THEN NOTE10B1=.N;
        ELSE NOTE10B1 = .C;
     END;
  END;
  ELSE IF S13B02 IN (.) AND (N10B1NMISS > 0 AND N10B1MARK = 0) THEN DO;
     N10_B1=4;
     S13B02=2;
     DO OVER NOTE10B1;
        IF NOTE10B1 = . THEN NOTE10B1=.N;
        ELSE NOTE10B1 = .C;
```

```
      END;
    END;
    ELSE IF S13B02 IN (.) AND N10B1NMISS=0 THEN N10_B1=5;

    DROP N10B1NMISS N10B1MARK;


/** Note 11 -- H13032, H13033:  tried to get care, tests, or treatment from health plan**/

    IF H13032=1 AND H13033 IN (1,2,3,4,.) THEN N11=1;
    ELSE IF H13032 IN (1,.) AND H13033=.N THEN DO;
       H13032=2;
       H13033=.C;
       N11=2;
    END;
    ELSE IF H13032 IN (2,.) AND H13033 IN (1,2,3,4) THEN DO;
       H13032=1;
       N11=3;
    END;
    ELSE IF H13032=2 AND H13033 IN (.,.N) THEN DO;
       IF H13033=. THEN H13033=.N;
       ELSE H13033=.C;
       N11=4;
    END;
    ELSE IF H13032=.  AND H13033=.  THEN N11=5;


/** Note 12 -- H13034, H13035:  look for info in written materials or on internet**/
    IF H13034=1 AND H13035 IN (1,2,3,4,.) THEN N12=1;
    ELSE IF H13034 IN (1,.) AND H13035=.N THEN DO;
       N12=2;
       H13034=2;
       H13035=.C;
    END;
    ELSE IF H13034 IN (2,.) AND H13035 IN (1,2,3,4) THEN DO;
       N12=3;
       H13034=1;
    END;
    ELSE IF H13034=2 AND H13035 IN (.N,.) THEN DO;
       N12=4;
       IF H13035=. THEN H13035=.N;
       ELSE H13035=.C;
    END;
    ELSE IF H13034=. AND H13035=. THEN N12=5;


/** Note 13 -- H13036, H13037:  tried to get cost of service/equipment from health plan**/

    IF H13036=1 AND H13037 IN (1,2,3,4,.) THEN N13=1;
    ELSE IF H13036 IN (1,.) AND H13037=.N THEN DO;
       H13036=2;
       H13037=.C;
       N13=2;
    END;
    ELSE IF H13036 IN (2,.) AND H13037 IN (1,2,3,4) THEN DO;
       H13036=1;
       N13=3;
    END;
    ELSE IF H13036=2 AND H13037 IN (.,.N) THEN DO;
       IF H13037=. THEN H13037=.N;
       ELSE H13037=.C;
       N13=4;
    END;
    ELSE IF H13036=.  AND H13037=.  THEN N13=5;


/** Note 14 -- H13038, H13039:  tried to get cost of prescription meds from health plan**/

    IF H13038=1 AND H13039 IN (1,2,3,4,.) THEN N14=1;
    ELSE IF H13038 IN (1,.) AND H13039=.N THEN DO;
       H13038=2;
       H13039=.C;
       N14=2;
```

```
    END;
  ELSE IF H13038 IN (2,.) AND H13039 IN (1,2,3,4) THEN DO;
     H13038=1;
     N14=3;
  END;
  ELSE IF H13038=2 AND H13039 IN (.,.N) THEN DO;
     IF H13039=. THEN H13039=.N;
     ELSE H13039=.C;
     N14=4;
  END;
  ELSE IF H13038=.  AND H13039=.  THEN N14=5;


/** Note 15 -- H13040, H13041-H13042: tried to use health plan's customer service  **/

  ARRAY NOTE15  H13041-H13042;

  N15MARK=0;
  N15NMISS=0;

  DO OVER NOTE15;
     IF NOTE15 NE . THEN N15NMISS+1;
     IF NOTE15 NOT IN  (., .N) THEN N15MARK+1;
  END;

  IF H13040 = 1 AND (N15MARK>0 OR N15NMISS=0) THEN DO;
     DO OVER NOTE15;
        IF NOTE15=.N THEN NOTE15=.;
     END;
     N15=1;
  END;
  ELSE IF H13040 IN (1,.) AND (N15NMISS > 0 AND N15MARK = 0) THEN DO;
     N15=2;
     H13040=2;
     DO OVER NOTE15;
        IF NOTE15 = . THEN NOTE15=.N;
        ELSE NOTE15 = .C;
     END;
  END;
  ELSE IF H13040 IN (2,.) AND (N15MARK>0) THEN DO;
     N15=3;
     H13040=1;
     DO OVER NOTE15;
        IF NOTE15=.N THEN NOTE15=.;
     END;
  END;
  ELSE IF H13040=2  AND (N15NMISS=0 OR (N15NMISS > 0 AND N15MARK = 0)) THEN DO;
     N15=4;
     DO OVER NOTE15;
        IF NOTE15 = . THEN NOTE15=.N;
        ELSE NOTE15 = .C;
     END;
  END;
  ELSE IF H13040 IN (.) AND N15NMISS=0 THEN N15=5;

  DROP N15NMISS N15MARK;


/** Note 16 -- H13043, H13044:  received forms to fill out from health plan **/

  IF H13043=1 AND H13044 IN (1,2,3,4,.) THEN N16=1;
  ELSE IF H13043 IN (1,.) AND H13044=.N THEN DO;
     H13043=2;
     H13044=.C;
     N16=2;
  END;
  ELSE IF H13043 IN (2,.) AND H13044 IN (1,2,3,4) THEN DO;
     H13043=1;
     N16=3;
  END;
  ELSE IF H13043=2 AND H13044 IN (.,.N) THEN DO;
     IF H13044=. THEN H13044=.N;
     ELSE H13044=.C;
```

```
      N16=4;
   END;
   ELSE IF H13043=.  AND H13044=.  THEN N16=5;


/** Note 17 -- H13045, H13046-H13047: claims to health plan **/

   ARRAY NOTE17 H13046-H13047;
   N17MARK=0;
   N17NDK=0;

   DO OVER NOTE17;
      IF NOTE17 NOT IN (.N,.D,.) THEN N17MARK+1; /* At least one is marked */
      IF NOTE17 NOT IN (.,.D) THEN N17NDK+1; /* All are missing or blank or dnk */
   END;

   IF H13045=1 AND (N17MARK>0 OR N17NDK=0) THEN DO;
      N17=1;
      DO OVER NOTE17;
         IF NOTE17=.N THEN NOTE17=.;
      END;
   END;
   ELSE IF H13045 IN (1,.,.D) AND N17MARK=0 AND N17NDK>0 THEN DO;
      N17=2;
      H13045=2;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
         ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H13045 IN (2,.,.D) AND N17MARK>0
       THEN DO;
      H13045=1;
      N17=3;
      DO OVER NOTE17;
         IF NOTE17=.N THEN NOTE17=.;
      END;
   END;
   ELSE IF H13045 IN (2) AND N17MARK=0 THEN DO;
      N17=4;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
         ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H13045 IN (.D) AND N17NDK=0 THEN DO;
      N17=5;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
         ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H13045 IN (.) AND N17NDK=0 THEN N17=6;

   DROP N17MARK N17NDK;



/** Note 18 -- smoking:  H13053, H13054-H13056, H13057A-H13057D  **/

   ARRAY NOTE18a H13054 H13055 H13056;
   ARRAY NOTE18b H13057A--H13057D;

   N18MARK = 0;

   DO OVER NOTE18b;
      IF NOTE18b NOT IN (2,.) THEN N18MARK+1;
   END;

   IF H13053 IN (3,4,.) THEN N18=1;
   ELSE IF H13053 IN (2,.D) AND N18MARK = 0 THEN DO;
      N18=2;
      DO OVER NOTE18a;
```

```
             IF NOTE18a=. THEN NOTE18a=.N;
             ELSE NOTE18a=.C;
          END;
          DO OVER NOTE18b;
             IF NOTE18b IN (2,.) THEN NOTE18b=.N;
             ELSE NOTE18b=.C;
          END;
       END;
       ELSE IF H13053 = 2 AND N18MARK > 0 THEN DO;
          N18=3;
          H13053=.;
       END;
       ELSE IF H13053 = .D AND N18MARK > 0 THEN DO;
          N18=4;
          DO OVER NOTE18a;
             IF NOTE18a=. THEN NOTE18a=.N;
             ELSE NOTE18a=.C;
          END;
          DO OVER NOTE18b;
             IF NOTE18b IN (2,.) THEN NOTE18b=.N;
             ELSE NOTE18b=.C;
          END;
       END;

       DROP N18MARK;


/** Note 19a - gender H13058, SEX, H13059B--H13064,
                XSEXA */

/* 1/21/98 use SRSEX & responses to gender specific questions
     if there is discrepancy between SRSEX and SEX */
/* set imputed FMALE and MALE based on gender specific questions */


       ARRAY fmaleval H13059B H13060 H13061 H13062 H13063 H13064
                     ;

       cntfmale=0;
       DO OVER fmaleval;              /* mammogram/pap smear/PREGNANT*/
          IF fmaleval>0 THEN cntfmale=cntfmale+1;
       END;

       IF cntfmale>0 THEN FMALE=1;
       ELSE FMALE = 0;


       IF H13058=. THEN DO;
          IF (SEX='F' AND FMALE) THEN DO;
             N19a=1;
             XSEXA=2;
          END;
          ELSE IF (SEX='F' AND FMALE=0) THEN DO;
             N19a=2;
             XSEXA=2;
          END;
          ELSE IF (SEX='M' AND FMALE) THEN DO;
             N19a=3;
             XSEXA=1;
          END;
          ELSE IF (SEX='M' AND FMALE=0) THEN DO;
             N19a=4;
             XSEXA=1;
          END;
          ELSE IF ((SEX IN ('Z',' ') AND FMALE)) THEN DO;
             N19a=5;
             XSEXA=2;
          END;
          ELSE IF (SEX='Z' AND FMALE=0) THEN DO;
             N19a=6;
             XSEXA=.;
          END;
          ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
```

```
            N19a=7;
            XSEXA=.;
          END;
     END;
     ELSE IF (H13058=1) THEN DO;
        IF FMALE=0 THEN DO;
            N19a=8;
            XSEXA=1;
          END;
        ELSE IF FMALE THEN DO;
            IF SEX='F' THEN DO;
               N19a=9;
               XSEXA=2;
             END;
             ELSE DO;
               N19a=10;
               XSEXA=1;
             END;
          END;
     END;
     ELSE IF (H13058=2) THEN DO;
        IF FMALE THEN DO;
          N19a=11;
          XSEXA=2;
        END;
        ELSE IF FMALE=0 THEN DO;
           IF SEX='M' THEN DO;
             N19a=12;
             XSEXA=1;
           END;
           ELSE DO;
             N19a=13;
             XSEXA=2;
           END;
        END;
     END;
   END;


/* Note 19b - gender vs mammogram/paps/pregnancy */

     ARRAY NOTE19b H13059B H13060 H13061 H13062 H13063 H13064
                 ;
    IF XSEXA=1 THEN DO;    /* male */
       IF FMALE=0 THEN DO;
          N19b=1;
          DO OVER NOTE19b;
             NOTE19b=.N;
          END;
       END;    /* valid skip */
       ELSE IF FMALE=1 THEN DO;
          N19b=2;
          DO OVER NOTE19b;
             IF NOTE19b=. THEN NOTE19b = .N;
             ELSE NOTE19b=.C;
          END;
       END;    /* inconsistent response */
    END;
    ELSE IF XSEXA=2 THEN  N19b=3; /* female */
    ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
       N19b=4;
       DO OVER NOTE19b;
          NOTE19b=.;
       END;
    END;


   DROP FMALE CNTFMALE;



/* Note 20- breast exam for female 40 or over  */

  IF XSEXA=1 THEN DO;  /* male */
```

```
        IF  (H13060=.C OR H13060=.N) AND (H13061=.C OR H13061=.N)
        THEN N20 = 1;
    END;
  ELSE IF XSEXA=2 THEN DO;
      IF H13060=2 THEN N20=2;           /* female 40 or over */
      ELSE IF H13060=1 THEN DO;   /* female < 40 */
         IF H13061 NE . THEN H13061=.C;
         ELSE H13061=.N;
         N20=3;
      END;
      ELSE IF H13060=. THEN DO;
         IF H13061 NE . THEN DO;
            H13060=2;
            N20=4;
         END;
         ELSE IF H13061=.  THEN DO;
            IF AGE<40 THEN DO;
               H13060 = 1;
               H13061=.N;
               N20=5;
            END;
            ELSE IF AGE >= 40 THEN DO;
               H13060=2;
               N20=6;
            END;
            ELSE IF AGE=. THEN N20=7;
         END;
      END;
  END;
  ELSE IF XSEXA=. THEN N20=8;


/* Note 21 - gender vs Pregnancy */


  IF XSEXA=1 THEN N21=1;             /* male    */
  ELSE IF XSEXA=2 THEN DO;           /* female  */
      IF H13062=1 THEN DO;           /* pregnant */
         IF H13063=1 THEN DO;
            N21=2;
            IF H13064=. THEN H13064 = .N;
            ELSE H13064=.C;
         END;
         ELSE IF H13063=2 AND H13064 IN (2) THEN DO;
            N21=3;
            H13064=.;
         END;
         ELSE IF H13063=2 AND H13064 IN (4,3,1,.) THEN DO;
            N21=4;
         END;
         ELSE IF H13063 IN (3,.) THEN N21=5;
      END;
      ELSE IF H13062=2 THEN DO;
         IF H13063=. THEN H13063 = .N;
         ELSE H13063=.C;
         N21=6;
      END;
      ELSE IF H13062=3 THEN DO;
         N21=7;
         IF H13063=. THEN H13063 = .N;
         ELSE H13063=.C;
         IF H13064=. THEN H13064=.N;
         ELSE H13064=.C;
      END;
      ELSE IF H13062 IN (.) THEN DO;
         IF H13063=1 THEN DO;
            N21=8;
            H13062=1;
            IF H13064=. THEN H13064 = .N;
            ELSE H13064=.C;
         END;
         ELSE IF H13063=2 AND H13064 IN (2) THEN DO;
```

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```
            N21=9;
            H13062=1;
            H13064=.;
          END;
          ELSE IF H13063=2 AND H13064 IN (4,3,1,.) THEN DO;
            H13062=1;
            N21=10;
          END;
          ELSE IF H13063=3 THEN DO;
            H13062=1;
            N21=11;
          END;
          ELSE IF H13063=. THEN DO;
            N21=12;
          END;
        END;
      END;
  END;
  ELSE IF XSEXA=. AND H13062 IN (.) THEN N21=13;



  DROP AGE SEX;



/** Note 22 -- H13067, H13068:  seen doctor 3 or more times for same condition **/

  IF H13067=1 THEN N22=1;
  ELSE IF H13067 IN (2,.) AND H13068 IN (1,2) THEN DO;
     H13067=1;
     N22=2;
  END;
  ELSE IF H13067=2 AND H13068 IN (.) THEN DO;
     H13068=.N;
     N22=3;
  END;
  ELSE IF H13067=.  AND H13068=.  THEN N22=4;




/** Note 23 -- H13069, H13070:  need or take medicine prescribed by a doctor **/

  IF H13069=1 THEN N23=1;
  ELSE IF H13069 IN (2,.) AND H13070 IN (1,2) THEN DO;
     H13069=1;
     N23=2;
  END;
  ELSE IF H13069=2 AND H13070 IN (.) THEN DO;
     H13070=.N;
     N23=3;
  END;
  ELSE IF H13069=.  AND H13070=.  THEN N23=4;




/** Note 24 -- H13073, H13073A-H13073E: Hispanic or Latino origin or descent **/

  /* JMA
  ****Multiple responses were given to this question so H13073 is being created
  ****from the multiple responses.;
  */


  IF H13073B=1 THEN DO;
     N24=1;
     H13073=2;
  END;
  ELSE IF H13073E=1 THEN DO;
     N24=2;
     H13073=5;
  END;
  ELSE IF H13073C=1 THEN DO;
```

```
        N24=3;
        H13073=3;
     END;
     ELSE IF H13073D=1 THEN DO;
        N24=4;
        H13073=4;
     END;
     ELSE IF H13073A=1 THEN DO;
        N24=5;
        H13073=1;
     END;
     ELSE IF H13073A IN (2,.) AND H13073B IN (2,.) AND H13073C IN (2,.) AND
            H13073D IN (2,.) AND H13073E IN (2,.) THEN DO;
        N24=6;
        H13073=.;

     END;


/** Note 25 -- currently covered by Medicare:  H13074, H13075-H13079 **/

   ARRAY NOTE25 H13075-H13079;

   N25MARK = 0;

   DO OVER NOTE25;
      IF NOTE25 NOT IN (2,.D,.) THEN N25MARK+1;
   END;

   IF H13074 = 1 THEN N25=1;
   ELSE IF H13074 IN (2,.D) AND N25MARK = 0 THEN DO;
      N25=2;
      DO OVER NOTE25;
         IF NOTE25=. THEN NOTE25=.N;
         ELSE NOTE25=.C;
      END;
   END;
   ELSE IF H13074 IN (2,.D,.) AND N25MARK > 0 THEN DO;
      N25=3;
      H13074=1;
   END;
   ELSE IF H13074 = . AND N25MARK = 0 THEN N25=4;

   DROP N25MARK;


NOSURVEY:

/* missing values */

   ARRAY MISS MISS_9 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
   MISS_TOT=0;
   DO OVER MISS;
      MISS = 0;
   END;
   ARRAY MISSARAY &VARLIST2.;

   DO OVER MISSARAY;
      IF (MISSARAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
      ELSE IF (MISSARAY EQ -7) THEN MISS_7 = MISS_7 + 1;
      ELSE IF (MISSARAY EQ -6) THEN MISS_6 = MISS_6 + 1;
      ELSE IF (MISSARAY EQ -5) THEN MISS_5 = MISS_5 + 1;
      ELSE IF (MISSARAY EQ -4) THEN MISS_4 = MISS_4 + 1;
      ELSE IF (MISSARAY EQ -1) THEN MISS_1 = MISS_1 + 1;
   END;
   DO OVER MISS;
      MISS_TOT=MISS_TOT + MISS;
   END;

*****************************************;

 OUTPUT;
```

```
RUN;


proc contents data=out.cschm13q;
run;
```

F.2.B   Q1FY2013\PROGRAMS\CODINGSCHEME\CSCHM13Q.FMT - Include file for Coding Scheme for Quarter 1 FY2013.

```
/*  Formats for original answers to survey questions,
     after variables have been recoded */

     FORMAT H13001    H13001_O YN.

             H13003    H13003_O HPLAN1_.
             H13004    H13004_O HPTIME.

             S13AA01   S13AA01_O S12AA01_.
             S13AA03   S13AA03_O S12AA03_.
             S13AA05   S13AA05_O S12AA05_.

             S13AA04A  S13AA04AO YNNA.
             S13AA04B  S13AA04BO YNNA.
             S13AA04C  S13AA04CO YNNA.
             S13AA04D  S13AA04DO YNNA.
             S13AA04E  S13AA04EO YNNA.

             H13005    H13005_O PLACE.

             H13006 H13006_O   H13009 H13009_O   H13019 H13019_O
               YN.

             H13007    H13007_O OFTEN2_.
             H13008    H13008_O TIME1_.

             H13010    H13010_O OFTEN3_.
             H13011    H13011_O TIME2_.
             H13012    H13012_O OFTEN4_.

             H13013    H13013_O OFTEN4_.
             H13014    H13014_O OFTEN8_.
             H13015    H13015_O YN.
             H13016    H13016_O YNDEF.
             H13017    H13017_O YNDEF.
             H13018    H13018_O RATE3_.

             H13020    H13020_O OFTEN10_.

             H13021-H13024   H13021_O--H13024_O OFTEN5_.

             H13025    H13025_O YN.
             H13026    H13026_O OFTEN8_.
             H13027    H13027_O RATE6_.

             S13009    S13009_O YN.
             S13010    S13010_O PROB1_.

             H13028    H13028_O YN.
             H13029    H13029_O OFTEN9_.
             H13030    H13030_O SPCLST.
             H13031    H13031_O RATE2_.

             S13B01 S13B01_O MNTLHLTH.
             S13B02 S13B02_O YN.
             S13B03 S13B03_O PROB1_.
             S13B04 S13B04_O RATE5_.


             H13032    H13032_O YN.
             H13033    H13033_O OFTEN11_.
             H13034    H13034_O YN.
             H13035    H13035_O OFTEN12_.
             H13036    H13036_O YN.
             H13037    H13037_O OFTEN13_.
             H13038    H13038_O YN.
             H13039    H13039_O OFTEN14_.
             H13040    H13040_O YN.
             H13041    H13041_O OFTEN15_.
```

```
        H13042    H13042_O OFTEN15_.
        H13043    H13043_O YN.
        H13044    H13044_O OFTEN16_.
        H13045    H13045_O YNDNK.
        H13046    H13046_O OFTEN6_.
        H13047    H13047_O OFTEN6_.
        H13048    H13048_O RATE4_.

        H13049    H13049_O TIME5_.
        H13050    H13050_O YNBP_.

        S13015    S13015_O S12015_.

        H13051    H13051_O TIME7_.
        H13052    H13052_O YNDNK.
        H13053    H13053_O TIME8_.
        H13054    H13054_O OFTEN8_.
        H13055    H13055_O OFTEN8_.
        H13056    H13056_O OFTEN8_.

        H13058    H13058_O SEX.

        H13059B   H13059BO TIME16_.

        H13060 H13060_O   H13066 H13066_O
           YN.

        H13061    H13061_O TIME12_.
        H13062    H13062_O YNPREG.
        H13063    H13063_O PREG1_.
        H13064    H13064_O PREG2_.
        H13065    H13065_O HEALTH.

        H13067    H13067_O YN.
        H13068    H13068_O YN.
        H13069    H13069_O YN.

        H13070    H13070_O YN.

        S13B23    S13B23_O YN.
        S13B24    S13B24_O YN.
        S13B25    S13B25_O YN.
        S13B26    S13B26_O YN.

        H13071F H13071FO
        H13071I H13071IO
        H13072  H13072_O
           TIME14_.

        SREDA     SREDA_O  EDUC.

        H13073             HISP.

        SRAGE     SRAGE_O  AGEGRP.

        H13074    H13074_O YNDNK.
        H13075    H13075_O MEDA.
        H13076    H13076_O MEDB.
        H13077    H13077_O YNDNK.
        H13078    H13078_O MEDSUPP.
        H13079    H13079_O YNDNK.

        S13011    S13011_O AGREE2_.
        S13014    S13014_O SATISFY.

        S13N11    S13N11_O S09N11_.

        MISS_1    MISS_4-MISS_7 MISS_9 MISS_TOT 4.
        ;


LABEL H13001_O='Are you the person listed on envelope'
      H13001  ='Are you the person listed on envelope'
```

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```
H13002AO='Health plan(s) covered: TRICARE Prime'
H13002A ='Health plan(s) covered: TRICARE Prime'
H13002CO='Health plan(s) covered: TRICARE Ext/Stnd'
H13002C ='Health plan(s) covered: TRICARE Ext/Stnd'
H13002NO='Health plan(s) covered: TRICARE Plus'
H13002N ='Health plan(s) covered: TRICARE Plus'
H13002OO='Health plan(s) covered: TRICARE For Life'
H13002O ='Health plan(s) covered: TRICARE For Life'
H13002PO='Health plan(s) covered: TRICARE Supplmntl Ins'
H13002P ='Health plan(s) covered: TRICARE Supplmntl Ins'
H13002QO='Health plan(s) covered: TRICARE Reserve Select'
H13002Q ='Health plan(s) covered: TRICARE Reserve Select'
H13002SO='Health plan(s) covered: TRICARE Retired Reserve'
H13002S ='Health plan(s) covered: TRICARE Retired Reserve'
H13002TO='Health plan(s) covered: TRICARE Young Adult'
H13002T ='Health plan(s) covered: TRICARE Young Adult'
H13002UO='Health plan(s) covered: CHCBP'
H13002U ='Health plan(s) covered: CHCBP'
H13002FO='Health plan(s) covered: Medicare'
H13002F ='Health plan(s) covered: Medicare'
H13002GO='Health plan(s) covered: FEHBP'
H13002G ='Health plan(s) covered: FEHBP'
H13002HO='Health plan(s) covered: Medicaid'
H13002H ='Health plan(s) covered: Medicaid'
H13002IO='Health plan(s) covered: civilian HMO'
H13002I ='Health plan(s) covered: civilian HMO'
H13002JO='Health plan(s) covered: other civilian'
H13002J ='Health plan(s) covered: other civilian'
H13002KO='Health plan(s) covered: USFHP'
H13002K ='Health plan(s) covered: USFHP'
H13002MO='Health plan(s) covered: veterans'
H13002M ='Health plan(s) covered: veterans'
H13002RO='Health plan(s) covered: gov hlth ins-other cntry'
H13002R ='Health plan(s) covered: gov hlth ins-other cntry'
H13002LO='Health plan(s) covered: not sure'
H13002L ='Health plan(s) covered: not sure'
H13003_O='Which health plan did you use most'
H13003  ='Which health plan did you use most'
H13004_O='Yrs in a row with health plan'
H13004  ='Yrs in a row with health plan'
H13005_O='In lst yr:fclty use most for health care'
H13005  ='In lst yr:fclty use most for health care'
H13006_O='In lst yr:ill/injry/cond care right away'
H13006  ='In lst yr:ill/injry/cond care right away'
H13007_O='In lst yr:get urgnt care as soon as wntd'
H13007  ='In lst yr:get urgnt care as soon as wntd'
H13008_O='In lst yr:wait btwn try get care,see prv'
H13008  ='In lst yr:wait btwn try get care,see prv'
H13009_O='In lst yr:make appts non-urgnt hlth care'
H13009  ='In lst yr:make appts non-urgnt hlth care'
H13010_O='In lst yr:non-urg hlth cre appt whn wntd'
H13010  ='In lst yr:non-urg hlth cre appt whn wntd'
H13011_O='In lst yr:days btwn appt & see prvder'
H13011  ='In lst yr:days btwn appt & see prvder'
H13012_O='In lst yr:go to emrgncy rm for own care'
H13012  ='In lst yr:go to emrgncy rm for own care'
H13013_O='In lst yr:go to Dr office/clinic for care'
H13013  ='In lst yr:go to Dr office/clinic for care'
H13014  ='Lst yr: how often talk to doctor about illness prvntn'
H13014_O='Lst yr: how often talk to doctor about illness prvntn'
H13015  ='Lst yr: did doctor tell you more than 1 choice for trtmnt'
H13015_O='Lst yr: did doctor tell you more than 1 choice for trtmnt'
H13016  ='Lst yr: did talk to doctor about pros/cons of trtmnt'
H13016_O='Lst yr: did talk to doctor about pros/cons of trtmnt'
H13017  ='Lst yr: did doctor ask which trtmnt option best for you'
H13017_O='Lst yr: did doctor ask which trtmnt option best for you'
H13018_O='Rating of all health care in lst yr'
H13018  ='Rating of all health care in lst yr'
H13019_O='Have one person think of as personal Dr'
H13019  ='Have one person think of as personal Dr'
H13020  ='Lst yr: how often visit prsnl doctor for care for yourself'
H13020_O='Lst yr: how often visit prsnl doctor for care for yourself'
H13021_O='Lst yr: how oftn Drs listen to you'
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```
H13021  ='Lst yr: how oftn Drs listen to you'
H13022_O='Lst yr: how oftn Drs explain things'
H13022  ='Lst yr: how oftn Drs explain things'
H13023_O='Lst yr: how oftn Drs show respect'
H13023  ='Lst yr: how oftn Drs show respect'
H13024_O='Lst yr: how oftn Drs spend enough time'
H13024  ='Lst yr: how oftn Drs spend enough time'
H13025  ='Lst yr: did get care from doctor other than prsnl doctor'
H13025_O='Lst yr: did get care from doctor other than prsnl doctor'
H13026  ='Lst yr: how often prsnl doctor seemed infrmd of care from other doctors'
H13026_O='Lst yr: how often prsnl doctor seemed infrmd of care from other doctors'
H13027_O='Rating of your personal Dr'
H13027  ='Rating of your personal Dr'
H13028  ='Lst yr: did make any appointments to see spclst'
H13028_O='Lst yr: did make any appointments to see spclst'
H13029  ='Lst yr: how often easy to get appointments with spclsts'
H13029_O='Lst yr: how often easy to get appointments with spclsts'
H13030  ='Lst yr: how many spclsts seen'
H13030_O='Lst yr: how many spclsts seen'
H13031_O='Rating of specialist seen in lst yr'
H13031  ='Rating of specialist seen in lst yr'
H13032  ='Lst yr: did try to get care, test, or trtmnt through health plan'
H13032_O='Lst yr: did try to get care, test, or trtmnt through health plan'
H13033  ='Lst yr: how often easy to get care, test, or trtmnt'
H13033_O='Lst yr: how often easy to get care, test, or trtmnt'
H13034  ='Lst yr: did look for info from written material/Internet'
H13034_O='Lst yr: did look for info from written material/Internet'
H13035  ='Lst yr: how often written material/Internet provide needed info'
H13035_O='Lst yr: how often written material/Internet provide needed info'
H13036  ='Lst yr: did look for info from health plan on cost of service/equipment'
H13036_O='Lst yr: did look for info from health plan on cost of service/equipment'
H13037  ='Lst yr: how often able to find out cost of service/equipment'
H13037_O='Lst yr: how often able to find out cost of service/equipment'
H13038  ='Lst yr: did look for info from health plan on cost of prescription meds'
H13038_O='Lst yr: did look for info from health plan on cost of prescription meds'
H13039  ='Lst yr: how often able to find out cost of prescription meds'
H13039_O='Lst yr: how often able to find out cost of prescription meds'
H13040  ="Lst yr: did try to get info/help from health plan's cstmr service"
H13040_O="Lst yr: did try to get info/help from health plan's cstmr service"
H13041  ='Lst yr: how often did cstmr service give needed info/help'
H13041_O='Lst yr: how often did cstmr service give needed info/help'
H13042  ='Lst yr: how often did cstmr service treat with courtesy/respect'
H13042_O='Lst yr: how often did cstmr service treat with courtesy/respect'
H13043  ='Lst yr: did health plan give any forms to fill out'
H13043_O='Lst yr: did health plan give any forms to fill out'
H13044  ='Lst yr: how often were forms easy to fill out'
H13044_O='Lst yr: how often were forms easy to fill out'
H13045  ='Lst yr: send in any claims'
H13045_O='Lst yr: send in any claims'
H13046  ='Lst yr: how often did health plan handle claims quickly'
H13046_O='Lst yr: how often did health plan handle claims quickly'
H13047_O='Lst yr: how oftn handle claims correctly'
H13047  ='Lst yr: how oftn handle claims correctly'
H13048  ='Rating of all experience with hlth plan'
H13048_O='Rating of all experience with hlth plan'
H13049_O='Blood pressure: when lst reading'
H13049  ='Blood pressure: when lst reading'
H13050_O='Blood pressure: know if too high or not'
H13050  ='Blood pressure: know if too high or not'
H13051_O='When did you lst have a flu shot'
H13051  ='When did you lst have a flu shot'
H13052  ='Smoked at least 100 cigarettes in life'
H13052_O='Smoked at least 100 cigarettes in life'
H13053  ='Smoke or use tobacco everyday, some days or not at all'
H13053_O='Smoke or use tobacco everyday, some days or not at all'
H13054_O='Lst yr: how often advised to quit smoking or use tobacco'
H13054  ='Lst yr: how often advised to quit smoking or use tobacco'
H13055  ='Lst yr: how often recom medic assist quit smoking or using tobacco'
H13055_O='Lst yr: how often recom medic assist quit smoking or using tobacco'
H13056  ='Lst yr: how often discu meth/strag asst quit smoking or using tobacco'
H13056_O='Lst yr: how often discu meth/strag asst quit smoking or using tobacco'
H13057A ='Do you smoke or use: cigarettes'
H13057AO='Do you smoke or use: cigarettes'
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H13057B ='Do you smoke or use: dip, chewing tobacco, snuff, or snus'
H13057BO='Do you smoke or use: dip, chewing tobacco, snuff, or snus'
H13057C ='Do you smoke or use: cigars'
H13057CO='Do you smoke or use: cigars'
H13057D ='Do you smoke or use: pipes, bidis, or kreteks'
H13057DO='Do you smoke or use: pipes, bidis, or kreteks'
H13058_O='Are you male or female'
H13058  ='Are you male or female'
H13059BO='Lst have a Pap smear test'
H13059B ='Lst have a Pap smear test'
H13060_O='Are you under age 40'
H13060  ='Are you under age 40'
H13061_O='Lst time: breasts checked mammography'
H13061  ='Lst time: breasts checked mammography'
H13062_O='Been pregnant in lst yr or pregnant now'
H13062  ='Been pregnant in lst yr or pregnant now'
H13063_O='In what trimester is your pregnancy'
H13063  ='In what trimester is your pregnancy'
H13064_O='Trimester first received prenatal care'
H13064  ='Trimester first received prenatal care'
H13065_O='In gnrl, how would you rate ovrall hlth'
H13065  ='In gnrl, how would you rate ovrall hlth'
H13066_O='Impairment/Hlth prblm limit activities'
H13066  ='Impairment/Hlth prblm limit activities'
H13067  ='Lst yr: have seen doctor 3 or more times for same condition'
H13067_O='Lst yr: have seen doctor 3 or more times for same condition'
H13068  ='Has condition lasted for at least 3 months'
H13068_O='Has condition lasted for at least 3 months'
H13069  ='Need to take medicine prescribed by a doctor'
H13069_O='Need to take medicine prescribed by a doctor'
H13070  ='Medicine to treat condition that has lasted for at least 3 months'
H13070_O='Medicine to treat condition that has lasted for at least 3 months'
H13071FO='Height without shoes (feet)'
H13071F ='Height without shoes (feet)'
H13071IO='Height without shoes (inches)'
H13071I ='Height without shoes (inches)'
H13072_O='Weight without shoes'
H13072  ='Weight without shoes'
SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H13073  ='Are you Spanish/Hispanic/Latino'
H13073AO='Not Spanish/Hispanic/Latino'
H13073A ='Not Spanish/Hispanic/Latino'
H13073BO='Mexican, Mexican American, Chicano'
H13073B ='Mexican, Mexican American, Chicano'
H13073CO='Puerto Rican'
H13073C ='Puerto Rican'
H13073DO='Cuban'
H13073D ='Cuban'
H13073EO='Other Spanish, Hispanic, or Latino'
H13073E ='Other Spanish, Hispanic, or Latino'
SRRACEAO='Race: White'
SRRACEA ='Race: White'
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asian'
SRRACED ='Race: Asian'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'
H13074  ='Currently Covered Medicare'
H13074_O='Currently Covered Medicare'
H13075  ='Currently Covered Medicare Part A'
H13075_O='Currently Covered Medicare Part A'
H13076  ='Currently Covered Medicare Part B'
H13076_O='Currently Covered Medicare Part B'
H13077  ='Enrolled Medicare Advantage'
H13077_O='Enrolled Medicare Advantage'
H13078  ='Currently Covered Medicare Supplemental'
H13078_O='Currently Covered Medicare Supplemental'
```

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H13079  ='Enrolled Medicare Part D'
H13079_O='Enrolled Medicare Part D'

S13AA01_O='Prior health plan'
S13AA01='Prior health plan'
S13AA03_O='Main reason switched'
S13AA03='Main reason switched'
S13AA05_O='Changed doctors when switched plan'
S13AA05='Changed doctors when switched plan'
S13AA04AO='Prob w/ prior plan: expensive bills for services not covered'
S13AA04A='Prob w/ prior plan:expensive bills for services not covered'
S13AA04BO='Prob w/ prior plan: dr charged more than insurance would pay'
S13AA04B='Prob w/ prior plan: dr charged more than insurance would pay'
S13AA04CO="Prob w/ prior plan: dr's office would not accept my insurance"
S13AA04C="Prob w/ prior plan: dr's office would not accept my insurance"
S13AA04DO='Prob w/ prior plan: insurance did not pay bill promptly/denied payment'
S13AA04D='Prob w/ prior plan: insurance did not pay bill promptly/denied payment'
S13AA04EO='Prob w/ prior plan: plan did not include specialist I needed'
S13AA04E='Prob w/ prior plan: plan did not include specialist I needed'
S13AA02AO='Reason switched: I lost my job'
S13AA02A='Reason switched: I lost my job'
S13AA02BO='Reason switched: my spouse/parent lost his/her job'
S13AA02B='Reason switched: my spouse/parent lost his/her job'
S13AA02CO='Reason switched: I changed jobs'
S13AA02C='Reason switched: I changed jobs'
S13AA02DO='Reason switched: my spouse/parent changed jobs'
S13AA02D='Reason switched: my spouse/parent changed jobs'
S13AA02EO='Reason switched: I retired from a job that provided coverage'
S13AA02E='Reason switched: I retired from a job that provided coverage'
S13AA02FO='Reason switched: spouse/parent rtd from job that provided coverage'
S13AA02F='Reason switched: spouse/parent rtd from job that provided coverage'
S13AA02GO='Reason switched: moved to a new area'
S13AA02G='Reason switched: moved to a new area'
S13AA02HO='Reason switched: in the Select Reserves and became active'
S13AA02H='Reason switched: in the Select Reserves and became active'
S13AA02IO='Reason switched: spouse/parent activated in Select Reserves'
S13AA02I='Reason switched: spouse/parent activated in Select Reserves'
S13AA02JO='Reason switched: I am a Natl Grd/Reserve Member deactivated'
S13AA02J='Reason switched: I am a Natl Grd/Reserve Member deactivated'
S13AA02KO='Reason switched: spouse/parent deactivated Natl Grd/Reserve Member'
S13AA02K='Reason switched: spouse/parent deactivated Natl Grd/Reserve Member'
S13AA02LO='Reason switched: employer changed plans'
S13AA02L='Reason switched: employer changed plans'
S13AA02VO='Reason switched: employer stopped providing health coverage'
S13AA02V='Reason switched: employer stopped providing health coverage'
S13AA02MO='Reason switched: my dr/other health care provider left the plan'
S13AA02M='Reason switched: my dr/other health care provider left the plan'
S13AA02NO='Reason switched: I did not like the referral requirements'
S13AA02N='Reason switched: I did not like the referral requirements'
S13AA02OO='Reason switched: could not get appointments as soon as I wanted'
S13AA02O='Reason switched: could not get appointments as soon as I wanted'
S13AA02PO="Reason switched: dissatisfied with the plan's customer service"
S13AA02P="Reason switched: dissatisfied with the plan's customer service"
S13AA02QO='Reason switched: preferred new plan'
S13AA02Q='Reason switched: preferred new plan'
S13AA02RO="Reason switched: difficult to park at clinic/doctor's office"
S13AA02R="Reason switched: difficult to park at clinic/doctor's office"
S13AA02SO='Reason switched: travel too far to get needed care'
S13AA02S='Reason switched: travel too far to get needed care'
S13AA02TO='Reason switched: married, divorced, or widowed'
S13AA02T='Reason switched: married, divorced, or widowed'
S13AA02UO='Reason switched: became eligible for Medicare'
S13AA02U='Reason switched: became eligible for Medicare'
S13AA02WO='Reason switched: other'
S13AA02W='Reason switched: other'

S13009_O='Same prsnl doctor/nurse before this hlth plan'
S13009  ='Same prsnl doctor/nurse before this hlth plan'
S13010_O='Prblm getting prsnl doctor/nurse you are happy with'
S13010  ='Prblm getting prsnl doctor/nurse you are happy with'

S13B01_O='Self rate of overall mental/emotional health'
S13B01  ='Self rate of overall mental/emotional health'
```

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S13B02_O='Lst yr: needed treatmnt/cnslng-prsnl prob'
S13B02  ='Lst yr: needed treatmnt/cnslng-prsnl prob'
S13B03_O='Lst yr: prblm gttng needed treatmnt/cnslng'
S13B03  ='Lst yr: prblm gttng needed treatmnt/cnslng'
S13B04_O='Lst yr: rate of treatmnt/cnslng received'
S13B04  ='Lst yr: rate of treatmnt/cnslng received'

S13015  ='When did you last have cholesterol screening'
S13015_O='When did you last have cholesterol screening'

S13B23_O='Past month: nightmares/thoughts you did not want'
S13B23  ='Past month: nightmares/thoughts you did not want'
S13B24_O='Past month: tried not to think about or be reminded'
S13B24  ='Past month: tried not to think about or be reminded'
S13B25_O='Past month: constantly on guard, watchful, or startled'
S13B25  ='Past month: constantly on guard, watchful, or startled'
S13B26_O='Past month: felt numb or detached from others'
S13B26  ='Past month: felt numb or detached from others'

S13011  ='Agree/disagree: able to see provider when needed'
S13011_O='Agree/disagree: able to see provider when needed'
S13014  ='How satisfied with health care during last visit'
S13014_O='How satisfied with health care during last visit'

S13N11_O='Prefer civilian or military facilities for hlth care'
S13N11  ='Prefer civilian or military facilities for hlth care'
S13N12AO='Reason preferred: greater choice of doctors'
S13N12A ='Reason preferred: greater choice of doctors'
S13N12BO='Reason preferred: personal doctor at that facility type'
S13N12B ='Reason preferred: personal doctor at that facility type'
S13N12CO='Reason preferred: specialist at that facility type'
S13N12C ='Reason preferred: specialist at that facility type'
S13N12DO='Reason preferred: no military facilities near me'
S13N12D ='Reason preferred: no military facilities near me'
S13N12EO='Reason preferred: travel too far to civilian facility'
S13N12E ='Reason preferred: travel too far to civilian facility'
S13N12FO='Reason preferred: travel too far to military facility'
S13N12F ='Reason preferred: travel too far to military facility'
S13N12GO='Reason preferred: easier to get care'
S13N12G ='Reason preferred: easier to get care'
S13N12HO='Reason preferred: told to get care at military facility'
S13N12H ='Reason preferred: told to get care at military facility'
S13N12IO='Reason preferred: good value for out-of-pocket costs'
S13N12I ='Reason preferred: good value for out-of-pocket costs'
S13N12JO='Reason preferred: out-of-pocket costs are less'
S13N12J ='Reason preferred: out-of-pocket costs are less'
S13N12KO='Reason preferred: have not needed health care'
S13N12K ='Reason preferred: have not needed health care'
S13N12LO='Reason preferred: another reason'
S13N12L ='Reason preferred: another reason'
S13N12MO='Reason preferred: no preference'
S13N12M ='Reason preferred: no preference'


N1_Q1 = "Coding Scheme Note 1_Q1"
N1_AA1= "Coding Scheme Note 1_AA1"
N2    = "Coding Scheme Note 2"
N3    = "Coding Scheme Note 3"
N4    = "Coding Scheme Note 4"
N5    = "Coding Scheme Note 5"
N6    = "Coding Scheme Note 6"
N7    = "Coding Scheme Note 7"
N8    = "Coding Scheme Note 8"
N8_01 = "Coding Scheme Note 8_01"
N9    = "Coding Scheme Note 9"
N10   = "Coding Scheme Note 10"
N10_B1= "Coding Scheme Note 10_B1"
N11   = "Coding Scheme Note 11"
N12   = "Coding Scheme Note 12"
N13   = "Coding Scheme Note 13"
N14   = "Coding Scheme Note 14"
N15   = "Coding Scheme Note 15"
N16   = "Coding Scheme Note 16"
```

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   N17   = "Coding Scheme Note 17"
   N18   = "Coding Scheme Note 18"
   N19A  = "Coding Scheme Note 19A"
   N19B  = "Coding Scheme Note 19B"
   N20   = "Coding Scheme Note 20"
   N21   = "Coding Scheme Note 21"
   N22   = "Coding Scheme Note 22"
   N23   = "Coding Scheme Note 23"
   N24   = "Coding Scheme Note 24"
   N25   = "Coding Scheme Note 25"



   MISS_1 = "Count of: violates skip pattern"
   /*MISS_3 = "Count of: do not use other tobacco products response"*/
   MISS_4 = "Count of: incomplete grid error"
   MISS_5 = "Count of: scalable reponse of don't know"
   MISS_6 = "Count of: not applicable - valid skip"
   MISS_7 = "Count of: out-of-range error"
   MISS_9 = "Count of: no response - invalid skip"
   MISS_TOT = "Total number of missing responses"
   XSEXA = "Male or Female  - R"
;
```

```
*****************************************************************************;
*  Program:  Cschm13q.sas
*  Written:  06/04/2001
*   Author:  C. Rankin
*
*    Input:  MERGESYN.sas7bdat - Merged MPR Sampling, DEERS, and Synovate Response Data
*   Output:  CSCHM13Q.sas7bdat - Coding scheme file
*
* Modified: 9/20/2001 - Recodes removed (stored in recodes_old.sas)
*          10/31/2001 - Revised notes 16 and 17 (became notes 26 and 27)
*           3/22/2002 - Updated Variable names for Q1 2002 and added
*                       Include file RENAME.SAS to change the variable
*                       names from 01 to 02. Skipping 01 designation to make
*                       survey reflect year of fielding
*           5/09/2002 - Change to logic in TFL supplement
*           3/17/2003 - Updated Variables names for Q1 2003
*           4/11/2003 - Added note 19a to accomodate Q1 2003 error where
*                       an option on most of the questionnaires was omitted for
*                       H03062
*           3/28/2008 - Updated Variable names for Q2 FY 2008
*          12/14/2009 - Updated Variable names for Q1 FY 2010
*          12/01/2010 - Updated Variable names for Q1 FY 2011
*          12/09/2011 - Updated Variable names for Q1 FY 2012
*          12/15/2012 - Updated Variable names for Q1 FY 2013
*          12/15/2012 - Removed logic for handling check boxes for height and
*                       weight variables. Also no longer have to convert the
*                       weight variable from character to numeric
*          12/21/2012 - Added code on line 146 to correct out of range height (in)
*  Purpose:  Apply Coding Scheme Specifications to DoD Health Care Survey
*            Response Data, check for consistency in responses and skip
*            patterns
*  Include
*    files:  Cschm13q.fmt
*
*****************************************************************************;

OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;

LIBNAME LIBRARY    "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN         "..\..\DATA\AFINAL";
LIBNAME OUT        "..\..\DATA\AFINAL";

%LET INDATA=MERGESYN;
%LET OUTDATA=CSCHM13q;
%LET PERIOD=January, 2012 to December, 2012;

/* Variable names in survey -- become recoded varibles */

%Let varlist1 =


 H13001  H13002A H13002C H13002N H13002O H13002P H13002Q H13002S H13002T H13002U
 H13002F H13002G H13002H H13002I H13002J H13002K H13002M H13002R H13002L
 H13003  H13004
 S13J01  S13J02A S13J02B S13J02C S13J02D S13J02E S13J02F S13J02G S13J02H S13J02I
 S13J03  S13J04  S13J05  S13J06  S13J07A S13J07B S13J07C S13J07D S13J07E S13J07F
 S13J07G S13J07H S13J07I S13J07J S13J07K S13J07L S13J07M S13J07N S13J07O S13J08
 S13J09A S13J09B S13J09C S13J09D S13J09E S13J09F S13J09G S13J09H S13J09I S13J09J
 S13J09K S13J09L S13J10  S13J13A S13J13B S13J13C S13J13D S13J13E S13J13F S13J13G
 S13J13H S13J13I S13J13J S13J13K S13J13L S13J13M S13J13N S13J14
 H13005
 S13AC01 S13AC02A S13AC02B S13AC02C S13AC02D S13AC02E S13AC02F S13AC02G S13AC03
 S13AC04 S13AC05A S13AC05B S13AC05C S13AC05D S13AC05E S13AC05F S13AC05G
 H13006  H13007  H13008  H13009  H13010  H13011  H13012 H13013  H13014  H13015
 H13016  H13017  H13018  H13019  H13020  H13021  H13022 H13023  H13024  H13025
 H13026  H13027
 S13009  S13010
 H13028  H13029  H13030  H13031
```

```
 S13B01  S13B02  S13B03  S13B04
 H13032  H13033  H13034  H13035  H13036  H13037  H13038  H13039  H13040  H13041
 H13042  H13043  H13044  H13045  H13046  H13047  H13048  H13049  H13050  H13051
 H13052  H13053  H13054  H13055  H13056  H13057A H13057B H13057C H13057D H13058
 H13059B H13060  H13061  H13062  H13063  H13064  H13065  H13066  H13067  H13068
 H13069  H13070
 S13B23  S13B24  S13B25  S13B26
 H13071F H13071I H13072
 SREDA   H13073A H13073B H13073C H13073D H13073E
 SRRACEA SRRACEB SRRACEC SRRACED SRRACEE SRAGE
 H13074  H13075  H13076  H13077  H13078  H13079
 S13011  S13014
 ;

/*  _O variables are the original values from the survey response */

%Let varlist2 =

 H13001_O H13002AO H13002CO H13002NO H13002OO H13002PO H13002QO H13002SO H13002TO H13002UO
 H13002FO H13002GO H13002HO H13002IO H13002JO H13002KO H13002MO H13002RO H13002LO
 H13003_O H13004_O
 S13J01_O S13J02AO S13J02BO S13J02CO S13J02DO S13J02EO S13J02FO S13J02GO S13J02HO S13J02IO
 S13J03_O S13J04_O S13J05_O S13J06_O S13J07AO S13J07BO S13J07CO S13J07DO S13J07EO S13J07FO
 S13J07GO S13J07HO S13J07IO S13J07JO S13J07KO S13J07LO S13J07MO S13J07NO S13J07OO S13J08_O
 S13J09AO S13J09BO S13J09CO S13J09DO S13J09EO S13J09FO S13J09GO S13J09HO S13J09IO S13J09JO
 S13J09KO S13J09LO S13J10_O S13J13AO S13J13BO S13J13CO S13J13DO S13J13EO S13J13FO S13J13GO
 S13J13HO S13J13IO S13J13JO S13J13KO S13J13LO S13J13MO S13J13NO S13J14_O
 H13005_O
 S13AC01_O S13AC02AO S13AC02BO S13AC02CO S13AC02DO S13AC02EO S13AC02FO S13AC02GO S13AC03_O
 S13AC04_O S13AC05AO S13AC05BO S13AC05CO S13AC05DO S13AC05EO S13AC05FO S13AC05GO
 H13006_O H13007_O H13008_O H13009_O H13010_O H13011_O H13012_O H13013_O H13014_O H13015_O
 H13016_O H13017_O H13018_O H13019_O H13020_O H13021_O H13022_O H13023_O H13024_O H13025_O
 H13026_O H13027_O
 S13009_O S13010_O
 H13028_O H13029_O H13030_O H13031_O
 S13B01_O S13B02_O S13B03_O S13B04_O
 H13032_O H13033_O H13034_O H13035_O H13036_O H13037_O H13038_O H13039_O H13040_O H13041_O
 H13042_O H13043_O H13044_O H13045_O H13046_O H13047_O H13048_O H13049_O H13050_O H13051_O
 H13052_O H13053_O H13054_O H13055_O H13056_O H13057AO H13057BO H13057CO H13057DO H13058_O
 H13059BO H13060_O H13061_O H13062_O H13063_O H13064_O H13065_O H13066_O H13067_O H13068_O
 H13069_O H13070_O
 S13B23_O S13B24_O S13B25_O S13B26_O
 H13071FO H13071IO H13072_O
 SREDA_O   H13073AO H13073BO H13073CO H13073DO H13073EO
 SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O
 H13074_O H13075_O H13076_O H13077_O H13078_O H13079_O
 S13011_O S13014_O
 ;

TITLE  "DoD 2013 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";




DATA MERGESYN;

  SET IN.MERGESYN(RENAME=(S13J05  = S13J05CH));

**********************************************************************;
* Code added by Jacqueline Agufa 09/15/2004 to fix name of race variable;
**********************************************************************;

  RENAME SRACEA = SRRACEA;
  RENAME SRACEB = SRRACEB;
  RENAME SRACEC = SRRACEC;
  RENAME SRACED = SRRACED;
  RENAME SRACEE = SRRACEE;


  *** Correct odd height and weights Per Eric Schone;

  IF H13071F NOT IN (-9,.) THEN DO;
    IF H13071F < 2 OR
```

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```
      H13071F > 8
    THEN H13071F= -7;
   END;

  IF H13071I NOT IN (-9,.) THEN DO;
    IF H13071I > 11 then H13071I=-7;
   END;

  IF 0 <= H13072 < 40 OR
    H13072 > 500
  THEN H13072= -7;

  /* MER 12/1/10 Handle monthly cost variable similar to weight variable */
  S13J05= COMPRESS(S13J05CH,' ')*1;

  DROP S13J05CH;

  IF S13J05=0  AND S13J05N IN (-9)    THEN S13J05 =S13J05N;

RUN;


DATA OUT.CSCHM13q;

  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;
  %INCLUDE "CSCHM13q.FMT";


/* label and format statements for original variables */


   SET MERGESYN;



***************************************************************;
**** Recodes for invalid responses:***************************;
***************************************************************;


/* This is a version of the coding scheme and coding tables for the
   FY 2013 HCSDB Form A.
   The following tables outline the coding of screening questions (skip),
   and subsequent items to be answered (or not answered in a series
   following a skip question.) */

/* First set up new variables that capture the original values */
/* recode the initial numeric values to the SAS numeric values */
/* specified in the coding scheme                             */

  SEX=PNSEXCD;
  AGE=INPUT(DAGEQY,8.);

  ARRAY RECODE(*) &VARLIST1;
  ARRAY   ORIG(*) &VARLIST2;

  DO I = 1 to DIM(ORIG);
      ORIG(I) = RECODE(I);
      IF ORIG(I) < 0 THEN DO;
              IF ORIG(I)= -9 THEN RECODE(I)=.;
         ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
         ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
         ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
         ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
         ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
      END;
  END;
  DROP I;



/* recode selected responses to be 1=marked, 2=unmarked */
```

```
ARRAY   MARKED(*)
        H13002A H13002C H13002N H13002O H13002P H13002Q H13002S H13002T H13002U
        H13002F H13002G H13002H H13002I H13002J H13002K H13002M H13002R H13002L

        S13J02A S13J02B S13J02C S13J02D S13J02E S13J02F S13J02G S13J02H S13J02I
        S13J07A S13J07B S13J07C S13J07D S13J07E S13J07F S13J07G S13J07H S13J07I
        S13J07J S13J07K S13J07L S13J07M S13J07N S13J07O S13J09A S13J09B S13J09C
        S13J09D S13J09E S13J09F S13J09G S13J09H S13J09I S13J09J S13J09K S13J09L
        S13J13A S13J13B S13J13C S13J13D S13J13E S13J13F S13J13G S13J13H S13J13I
        S13J13J S13J13K S13J13L S13J13M S13J13N

        S13AC02A S13AC02B S13AC02C S13AC02D S13AC02E S13AC02F S13AC02G
        S13AC05A S13AC05B S13AC05C S13AC05D S13AC05E S13AC05F S13AC05G

        H13057A H13057B H13057C H13057D

        H13073A H13073B H13073C H13073D H13073E
        SRRACEA SRRACEB SRRACEC SRRACED SRRACEE

        ;


ARRAY INFORMAT(*)
        H13002AO H13002CO H13002NO H13002OO H13002PO H13002QO H13002SO H13002TO H13002UO
        H13002FO H13002GO H13002HO H13002IO H13002JO H13002KO H13002MO H13002RO H13002LO

        S13J02AO S13J02BO S13J02CO S13J02DO S13J02EO S13J02FO S13J02GO S13J02HO S13J02IO
        S13J07AO S13J07BO S13J07CO S13J07DO S13J07EO S13J07FO S13J07GO S13J07HO S13J07IO
        S13J07JO S13J07KO S13J07LO S13J07MO S13J07NO S13J07OO S13J09AO S13J09BO S13J09CO
        S13J09DO S13J09EO S13J09FO S13J09GO S13J09HO S13J09IO S13J09JO S13J09KO S13J09LO
        S13J13AO S13J13BO S13J13CO S13J13DO S13J13EO S13J13FO S13J13GO S13J13HO S13J13IO
        S13J13JO S13J13KO S13J13LO S13J13MO S13J13NO

        S13AC02AO S13AC02BO S13AC02CO S13AC02DO S13AC02EO S13AC02FO S13AC02GO
        S13AC05AO S13AC05BO S13AC05CO S13AC05DO S13AC05EO S13AC05FO S13AC05GO

        H13057AO H13057BO H13057CO H13057DO

        H13073AO H13073BO H13073CO H13073DO H13073EO
        SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO

        ;



DO J=1 TO DIM(INFORMAT);
    IF INFORMAT(J) NOT IN (.,-9) THEN MARKED(J)=1;
    ELSE MARKED(J)=2;
END;
DROP J;

FORMAT
        H13002A H13002C H13002N H13002O H13002P H13002Q H13002S H13002T H13002U
        H13002F H13002G H13002H H13002I H13002J H13002K H13002M H13002R H13002L

        S13J02A S13J02B S13J02C S13J02D S13J02E S13J02F S13J02G S13J02H S13J02I
        S13J07A S13J07B S13J07C S13J07D S13J07E S13J07F S13J07G S13J07H S13J07I
        S13J07J S13J07K S13J07L S13J07M S13J07N S13J07O S13J09A S13J09B S13J09C
        S13J09D S13J09E S13J09F S13J09G S13J09H S13J09I S13J09J S13J09K S13J09L
        S13J13A S13J13B S13J13C S13J13D S13J13E S13J13F S13J13G S13J13H S13J13I
        S13J13J S13J13K S13J13L S13J13M S13J13N

        S13AC02A S13AC02B S13AC02C S13AC02D S13AC02E S13AC02F S13AC02G
        S13AC05A S13AC05B S13AC05C S13AC05D S13AC05E S13AC05F S13AC05G

        H13057A H13057B H13057C H13057D

        H13073A H13073B H13073C H13073D H13073E
        SRRACEA SRRACEB SRRACEC SRRACED SRRACEE

        MARKED.;
```

```
   ********************************************************************;

/*  skip coding scheme for all surveys not returned  **/

 IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;



/** Note 1 -- H13003, H13004 health plan usage  **/

  IF H13003 > 0 OR H13003 =.D THEN N1=1;
  ELSE IF H13003=.N  THEN DO;
     IF H13004 NOT=. THEN DO;
        N1=2;
        H13004=.C;
     END;
     ELSE DO;
        N1=3;
        H13004=.N;
     END;
  END;
  ELSE IF H13003=.   THEN N1=4;



/** Note 1_J1 -- S13J01, S13J02A-S13J02I, S13J03-S13J06,
               S13J07A-S13J07O, S13J08, S13J09A-S13J09L,
               S13J10, S13J13A-S13J13N, S13J14: COBRA or retirement coverage
                       from a previous job or some other group **/
  ARRAY NOTE1J11  S13J02A--S13J02H;

  ARRAY NOTE1J12 S13J07A--S13J07O S13J09A--S13J09L S13J13A--S13J13N;

  ARRAY NOTE1J13  S13J03-S13J06 S13J08 S13J10 S13J14;

  N1J1MARK1=0;
  N1J1MARK2=0;

  DO OVER NOTE1J11;
     IF NOTE1J11 NOT IN (.,2) THEN N1J1MARK1+1;
  END;

  DO OVER NOTE1J12;
     IF NOTE1J12 NOT IN (.,2) THEN N1J1MARK2+1;
  END;

  DO OVER NOTE1J13;
     IF NOTE1J13 NOT IN (.,.D) THEN N1J1MARK2+1;
  END;


  IF S13J01=1 THEN N1_J1=1;
  ELSE IF S13J01 IN (2,.) AND N1J1MARK1 > 0 THEN DO;
     N1_J1=2;
     S13J01=1;
  END;
  ELSE IF S13J01=2 AND N1J1MARK1=0 THEN DO;
     N1_J1=3;
     DO OVER NOTE1J11;
        NOTE1J11=.N;
     END;
     IF S13J02I IN (.,2) THEN S13J02I=.N;
     ELSE S13J02I=.C;
     DO OVER NOTE1J12;
        IF NOTE1J12 IN (.,2) THEN NOTE1J12=.N;
        ELSE NOTE1J12=.C;
     END;
     DO OVER NOTE1J13;
        IF NOTE1J13=. THEN NOTE1J13=.N;
        ELSE NOTE1J13=.C;
     END;
  END;
  ELSE IF S13J01=. AND N1J1MARK1=0 THEN DO;
```

```
         IF N1J1MARK2 > 0 THEN DO;
            N1_J1=4;
            S13J01=1;
         END;
         ELSE DO;
            N1_J1=5;
            DO OVER NOTE1J11;
               NOTE1J11=.;
            END;
            S13J02I=.;
            DO OVER NOTE1J12;
               NOTE1J12=.;
            END;
         END;
      END;
   END;

   DROP N1J1MARK1 N1J1MARK2;


/** Note 1_J2 -- S13J03-S13J05: You/you and others covered in civilian policy **/

   ARRAY NOTE1J2  S13J04-S13J05;


   IF S13J03 IN (.N,.C) THEN N1_J2=1;
   ELSE IF S13J03 IN (1, 2)
   THEN DO;
      N1_J2=2;
   END;
   ELSE IF S13J03 IN (4)
        THEN DO;
      N1_J2=3;
      DO OVER NOTE1J2;
         IF NOTE1J2=. THEN NOTE1J2=.N;
         ELSE NOTE1J2=.C;
      END;
   END;
   ELSE IF S13J03 IN (.)  THEN N1_J2=4;


/** Note 1_J3 -- S13J04, S13J05: Insurance Coverage payment **/

   IF S13J04 IN(.N, .C) AND S13J05 IN (.N, .C) THEN N1_J3=1;
   ELSE IF S13J04 IN (1,2,.D,.) AND (S13J05 >0 or  S13J05 IN (.D, .) )
   THEN DO;
      N1_J3=2;
   END;
   ELSE IF S13J04 IN (1,2,.D,.) AND (S13J05=0) THEN DO;
      N1_J3=3;
      S13J04=3;
      S13J05=.C;
   END;
   ELSE IF S13J04=3 THEN DO;
      N1_J3=4;
      IF S13J05=. THEN S13J05=.N;
      ELSE S13J05=.C;
   END;


/** Note 1_J4 -- S13J06, S13J07A-S13J07O: Used civilian coverage **/

   ARRAY NOTE1J4  S13J07A S13J07B S13J07F S13J07I S13J07J S13J07G S13J07D
                  S13J07E S13J07C S13J07M S13J07N S13J07H S13J07O S13J07K S13J07L ;

   N1J4NMISS=0;

   DO OVER NOTE1J4;
      IF NOTE1J4 NOT IN (.,2) THEN N1J4NMISS+1;
   END;


   IF S13J06 IN (.N, .C) THEN N1_J4=1;
```

```
   ELSE IF S13J06 IN (.,1) AND N1J4NMISS > 0 THEN DO;
      N1_J4=2;
      S13J06=2;
   END;
   ELSE IF S13J06=1 AND N1J4NMISS=0 THEN DO;
      N1_J4=3;
      DO OVER NOTE1J4;
         NOTE1J4=.N;
      END;
   END;
   ELSE IF S13J06=2 THEN DO;
      N1_J4=4;
   END;
   ELSE IF S13J06=. AND N1J4NMISS=0 THEN DO;
      N1_J4=5;
      DO OVER NOTE1J4;
         IF NOTE1J4 NE . THEN NOTE1J4=.;
      END;
   END;

   DROP N1J4NMISS;


/** Note 1_J5 -- S13J08, S13J09A-S13J09L: Used TRICARE for health coverage **/

   ARRAY NOTE1J5  S13J09A S13J09D S13J09I S13J09J S13J09H S13J09C S13J09E
                  S13J09F S13J09B S13J09G S13J09K S13J09L;

   N1J5NMISS=0;

   DO OVER NOTE1J5;
      IF NOTE1J5 NOT IN (.,2) THEN N1J5NMISS+1;
   END;


   IF S13J08 IN (.N, .C) THEN N1_J5=1;
   ELSE IF S13J08 IN (.,1) AND N1J5NMISS > 0 THEN DO;
      N1_J5=2;
      S13J08=2;
   END;
   ELSE IF S13J08=1 AND N1J5NMISS=0 THEN DO;
      N1_J5=3;
      DO OVER NOTE1J5;
         NOTE1J5=.N;
      END;
   END;
   ELSE IF S13J08=2 THEN DO;
      N1_J5=4;
   END;
   ELSE IF S13J08=. AND N1J5NMISS=0 THEN DO;
      N1_J5=5;
      DO OVER NOTE1J5;
         IF NOTE1J5 NE . THEN NOTE1J5=.;
      END;
   END;

   DROP N1J5NMISS;


/** Note 1_J6 -- S13J10, S13J13A-S13J13N, S13J14: Dropped civilian coverage **/

   ARRAY NOTE1J6  S13J13A--S13J13N;

   N1J6NMISS=0;

   DO OVER NOTE1J6;
      IF NOTE1J6 NOT IN (.,2) THEN N1J6NMISS+1;
   END;

   IF S13J14 > 0 THEN N1J6NMISS+1;

   IF S13J10 IN (.N, .C) THEN N1_J6=1;
   ELSE IF S13J10=1 THEN N1_J6=2;
```

```
      ELSE IF S13J10 IN (.,2) AND N1J6NMISS > 0 THEN DO;
         N1_J6=3;
         S13J10=1;
      END;
      ELSE IF S13J10=2 AND N1J6NMISS=0 THEN DO;
         N1_J6=4;
         DO OVER NOTE1J6;
            NOTE1J6=.N;
         END;
         S13J14=.N;
      END;
      ELSE IF S13J10=. AND N1J6NMISS=0 THEN DO;
         N1_J6=5;
         DO OVER NOTE1J6;
            IF NOTE1J6 NE . THEN NOTE1J6=.;
         END;
         S13J14=.;
      END;

      DROP N1J6NMISS;


/** Note 1_AC1 -- H13005, S13AC01, S13AC02A-S13AC02G, S13AC03-S13AC04,
                   S13AC05A-S13AC05G: missed, cancelled, or rescheduled
                   appointments **/

   ARRAY NOTE1AC1_1  S13AC01 S13AC03 S13AC04;
   ARRAY NOTE1AC1_2  S13AC02A--S13AC02G S13AC05A--S13AC05G;

   IF H13005 < 5 THEN N1_AC1=1;
   ELSE DO;
      N1_AC1=2;
      DO OVER NOTE1AC1_1;
         IF NOTE1AC1_1 = . THEN NOTE1AC1_1 = .N;
         ELSE NOTE1AC1_1 = .C;
      END;
      DO OVER NOTE1AC1_2;
         IF NOTE1AC1_2 IN (.,2) THEN NOTE1AC1_2 = .N;
         ELSE NOTE1AC1_2 = .C;
      END;
   END;


/** Note 1_AC2 -- S13AC01, S13AC02A-S13AC02G: missed appointments **/

   ARRAY NOTE1AC2  S13AC02A--S13AC02G;

   N1AC2NMISS=0;

   DO OVER NOTE1AC2;
      IF NOTE1AC2 NOT IN (.,2) THEN N1AC2NMISS+1;
   END;

   IF S13AC01 IN (.N,.C) THEN N1_AC2=1;
   ELSE IF S13AC01=1 THEN N1_AC2=2;
   ELSE IF S13AC01 IN (.,2) AND N1AC2NMISS > 0 THEN DO;
      N1_AC2=3;
      S13AC01=1;
   END;
   ELSE IF S13AC01=2 AND N1AC2NMISS=0 THEN DO;
      N1_AC2=4;
      DO OVER NOTE1AC2;
         NOTE1AC2=.N;
      END;
   END;
   ELSE IF S13AC01=. AND N1AC2NMISS=0 THEN DO;
      N1_AC2=5;
      DO OVER NOTE1AC2;
         IF NOTE1AC2 NE . THEN NOTE1AC2=.;
      END;
   END;

   DROP N1AC2NMISS;
```

```
/** Note 1_AC3 -- S13AC03, S13AC04, S13AC05A-S13AC05G:
                  cancelled and rescheduled appointments **/

  ARRAY NOTE1AC3  S13AC05A--S13AC05G;

  N1AC3NMISS=0;

  DO OVER NOTE1AC3;
     IF NOTE1AC3 NOT IN (.,2) THEN N1AC3NMISS+1;
  END;

  IF S13AC04 > 0 THEN N1AC3NMISS+1;

  IF S13AC03 IN (.N,.C) THEN N1_AC3=1;
  ELSE IF S13AC03=1 THEN N1_AC3=2;
  ELSE IF S13AC03 IN (.,2) AND N1AC3NMISS > 0 THEN DO;
     N1_AC3=3;
     S13AC03=1;
  END;
  ELSE IF S13AC03=2 AND N1AC3NMISS=0 THEN DO;
     N1_AC3=4;
     DO OVER NOTE1AC3;
        NOTE1AC3=.N;
     END;
     S13AC04=.N;
  END;
  ELSE IF S13AC03=. AND N1AC3NMISS=0 THEN DO;
     N1_AC3=5;
     DO OVER NOTE1AC3;
        IF NOTE1AC3 NE . THEN NOTE1AC3=.;
     END;
  END;

  DROP N1AC3NMISS;


/** Note 2 -- H13006,H13007,H13008:  illness or injury **/

  ARRAY NOTE2 H13007 H13008;
  N2MARK=0;
  N2NMISS=0;
  N2NN=0;

  DO OVER NOTE2;
     IF NOTE2 NE . THEN N2NMISS+1;
     IF NOTE2 NOT IN (.N,.) THEN N2MARK+1;
     IF NOTE2 EQ .N THEN N2NN+1;
  END;


  IF H13006=1 AND N2NMISS=0 THEN DO;
      N2=1;
  END;
  ELSE IF H13006 IN (1,.) AND N2NMISS>0 AND N2MARK=0 THEN DO;
     H13006=2;
     N2=2;
     DO OVER NOTE2;
        IF NOTE2=. THEN NOTE2=.N;
        ELSE NOTE2=.C;
     END;
  END;
  ELSE IF H13006=1 AND N2MARK=1 AND N2NN=1 THEN  DO;
     DO OVER NOTE2;
        IF NOTE2=.N THEN NOTE2=.;
     END;
     N2=3;
  END;
  ELSE IF H13006=1 AND N2MARK>0 THEN DO;
     N2=4;
  END;
  ELSE IF H13006=2 AND N2MARK=1 AND N2NN=1  THEN  DO;
```

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```
         H13007=.C;
         H13008=.C;
         N2=5;
      END;
   ELSE IF H13006 IN (2,.) AND N2MARK>0 THEN DO;
      H13006=1;
      N2=6;
      DO OVER NOTE2;
         IF NOTE2=.N THEN NOTE2=.;
      END;
   END;
   ELSE IF H13006=2 AND (N2NMISS=0 OR (N2NMISS>0 AND N2MARK=0)) THEN DO;
      N2=7;
      DO OVER NOTE2;
         IF NOTE2=. THEN NOTE2=.N;
         ELSE NOTE2=.C;
      END;
   END;
   ELSE IF H13006=.  AND N2NMISS=0 THEN N2=8;


   DROP N2NMISS N2MARK N2NN;


/** Note 3 -- H13009,H13010,H13011:  regular or routine healthcare **/

   ARRAY Note3 H13010 H13011;
   N3MARK=0;
   N3NMISS=0;
   N3NN=0;

   DO OVER Note3;
      IF Note3 NE . THEN N3NMISS+1;
      IF Note3 NOT IN (.N,.) THEN N3MARK+1;
      IF Note3 EQ .N THEN N3NN+1;
   END;

   IF H13009=1 AND N3NMISS=0 THEN DO;
        N3=1;
   END;
   ELSE IF H13009 IN (1,.) AND N3NMISS>0 AND N3MARK=0 THEN DO;
      H13009=2;
      N3=2;
      DO OVER Note3;
         IF Note3=. THEN Note3=.N;
         ELSE Note3=.C;
      END;
   END;
   ELSE IF H13009=1 AND N3MARK=1 AND N3NN=1 THEN  DO;
      DO OVER Note3;
         IF Note3=.N THEN Note3=.;
      END;
      N3=3;
   END;
   ELSE IF H13009=1 AND N3MARK>0 THEN DO;
      N3=4;
   END;
   ELSE IF H13009=2 AND N3MARK=1 AND N3NN=1  THEN  DO;
      H13010=.C;
      H13011=.C;
      N3=5;
   END;
   ELSE IF H13009 IN (2,.) AND N3MARK>0 THEN DO;
      H13009=1;
      N3=6;
      DO OVER Note3;
         IF Note3=.N THEN Note3=.;
      END;
   END;
   ELSE IF H13009=2 AND (N3NMISS=0 OR (N3NMISS>0 AND N3MARK=0)) THEN DO;
      N3=7;
      DO OVER Note3;
         IF Note3=. THEN Note3=.N;
```

```
            ELSE Note3=.C;
      END;
  END;
  ELSE IF H13009=.  AND N3NMISS=0 THEN N3=8;


  DROP N3NMISS N3MARK N3NN;


/** Note 4 -- H13013, H13014-H13018: doctor's office or clinic **/

  ARRAY NOTE4  H13014-H13018;

  N4MARK=0;
  N4NMISS=0;

  DO OVER NOTE4;
      IF NOTE4 NE . THEN N4NMISS+1;
      IF NOTE4 NOT IN  (., .N) THEN N4MARK+1;
  END;


  IF H13013=1 THEN DO;
      N4=1;
      DO OVER NOTE4;
         IF NOTE4=. THEN NOTE4=.N;
         ELSE NOTE4=.C;
      END;
  END;
  ELSE IF H13013 IN (2,3,4,5,6,7,.) AND N4NMISS>0 AND N4MARK=0 THEN DO;
      H13013=1;
      N4=2;
      DO OVER NOTE4;
         IF NOTE4=. THEN NOTE4=.N;
         ELSE NOTE4=.C;
      END;
  END;
  ELSE IF H13013 IN (2,3,4,5,6,7) AND (N4NMISS=0 OR N4MARK>0) THEN DO;
      DO OVER NOTE4;
         IF NOTE4=.N THEN NOTE4=.;
      END;
      N4=3;
  END;
  ELSE IF H13013=.  AND N4NMISS=0 THEN N4=4;
  ELSE IF H13013 IN (.) AND N4MARK>0 THEN DO;
      N4=5;
      DO OVER NOTE4;
         IF NOTE4=.N THEN NOTE4=.;
      END;
  END;

  DROP N4NMISS N4MARK;


/** Note 5 -- H13015, H13016-H13017: doctor's office or clinic- treatment **/

 IF H13015 IN (.N,.C) THEN N5=1;
 ELSE IF H13015= 1  THEN N5=2;
 ELSE IF H13015 IN (2,.) AND H13016 IN (1,2) THEN  DO;
     N5=3;
     H13015=1;
 END;
 ELSE IF H13015 IN (2,.) AND (H13016 IN (3,4,.) AND H13017 IN (1,2)) THEN  DO;
     N5=4;
     H13015=1;
 END;
 ELSE IF H13015 IN (2) AND (H13016 IN (3,4,.) AND H13017 IN (3,4,.)) THEN  DO;
     N5=5;
     IF H13016 = . THEN H13016 = .N;
     ELSE H13016 = .C;
     IF H13017 = . THEN H13017 = .N;
     ELSE H13017 = .C;
 END;
```

```
  ELSE IF H13015 IN (.) AND (H13016 IN (3,4,.) AND H13017 IN (3,4,.)) THEN  DO;
     N5=6;
  END;


/** Note 6 -- H13019, H13020-H13027, S13009: personal doctor **/
/* MER 07/01/09 */

  ARRAY NOTE6  H13021-H13024;

  N6MARK=0;

  DO OVER NOTE6;
     IF NOTE6 NOT IN  (., .N) THEN N6MARK+1;
  END;

  IF H13020 NOT IN (0,.) THEN N6MARK+1;


  IF H13019 = 1  THEN DO;
     N6=1;
     IF H13027=.N THEN H13027=.;
  END;
  ELSE IF H13019 in (2,.) AND H13027 in (0,1,2,3,4,5,6,7,8,9,10) THEN DO;
     N6=2;
     H13019=1;
  END;
  ELSE IF H13019 in (2,.) AND N6MARK>0 AND H13027 = . THEN DO;
     N6=3;
     H13019=1;
  END;
  ELSE IF H13019 = 2 AND N6MARK>0 AND H13027 = .N THEN DO;
     N6=4;
     IF H13020=. THEN H13020=.N;
     ELSE H13020=.C;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
     IF H13025=. THEN H13025=.N;
     ELSE H13025=.C;
     IF H13026=. THEN H13026=.N;
     ELSE H13026=.C;
     IF S13009=. THEN S13009=.N;
     ELSE S13009=.C;
     H13027=.C;
  END;
  ELSE IF H13019 = 2 AND N6MARK=0 AND H13027 in (.N,.) THEN DO;
     N6=5;
     IF H13020=. THEN H13020=.N;
     ELSE H13020=.C;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
     IF H13025=. THEN H13025=.N;
     ELSE H13025=.C;
     IF H13026=. THEN H13026=.N;
     ELSE H13026=.C;
     IF S13009=. THEN S13009=.N;
     ELSE S13009=.C;
     IF H13027=. THEN H13027=.N;
     ELSE H13027=.C;
  END;
  ELSE IF H13019 = . AND H13027 = .N THEN DO; /* MER 07/31/09 combined rows 6 and 7 */
     N6=6;
     H13019=2;
     IF H13020=. THEN H13020=.N;
     ELSE H13020=.C;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
```

```
      IF H13025=. THEN H13025=.N;
      ELSE H13025=.C;
      IF H13026=. THEN H13026=.N;
      ELSE H13026=.C;
      IF S13009=. THEN S13009=.N;
      ELSE S13009=.C;
      H13027=.C;
   END;
   ELSE IF H13019 = . AND N6MARK=0 AND H13027 = . THEN N6=7;

   DROP N6MARK;


/** Note 7 -- H13020, H13021-H13026: personal doctor visit **/

   ARRAY NOTE7  H13021-H13024;

   N7MARK=0;
   N7NMISS=0;

   DO OVER NOTE7;
      IF NOTE7 NE . THEN N7NMISS+1;
      IF NOTE7 NOT IN  (., .N) THEN N7MARK+1;
   END;


   IF H13020 IN (.N, .C) THEN N7=1;
   ELSE IF H13020=0 THEN DO;
      N7=2;
      DO OVER NOTE7;
         IF NOTE7=. THEN NOTE7=.N;
         ELSE NOTE7=.C;
      END;
      IF H13025=. THEN H13025=.N;
      ELSE H13025=.C;
      IF H13026=. THEN H13026=.N;
      ELSE H13026=.C;
   END;
   ELSE IF H13020 IN (1,2,3,4,5,6,.) AND N7NMISS>0 AND N7MARK=0 THEN DO;
      H13020=0;
      N7=3;
      DO OVER NOTE7;
         IF NOTE7=. THEN NOTE7=.N;
         ELSE NOTE7=.C;
      END;
      IF H13025=. THEN H13025=.N;
      ELSE H13025=.C;
      IF H13026=. THEN H13026=.N;
      ELSE H13026=.C;
   END;
   ELSE IF H13020 IN (1,2,3,4,5,6,.) AND (N7NMISS=0 OR N7MARK>0) THEN DO;
      DO OVER NOTE7;
         IF NOTE7=.N THEN NOTE7=.;
      END;
      N7=4;
   END;

   DROP N7NMISS N7MARK;


/** Note 8 -- H13025, H13026:  care from another doctor or healthcare provider **/

   IF H13025 IN (.N, .C) THEN N8=1;
   ELSE IF H13025=1 THEN N8=2;
   ELSE IF H13025 IN (2,.) AND H13026 IN (1,2,3,4) THEN DO;
      H13025=1;
      N8=3;
   END;
   ELSE IF H13025=2 AND H13026 IN (.) THEN DO;
      H13026=.N;
      N8=4;
   END;
   ELSE IF H13025=.  AND H13026=.  THEN N8=5;
```

```
/** Note 8_01 -- S13009, S13010:  problem getting new personal doctor or nurse **/

   IF S13009 IN (.N,.C) THEN N8_01=1; /* MER 07/31/09 gave each S13009 value its own row for
analysis purposes */
   ELSE IF S13009=1 THEN DO;
       N8_01=2;
       IF S13010=. THEN S13010=.N;
       ELSE S13010=.C;
   END;
   ELSE IF S13009=2 THEN N8_01=3;
   ELSE IF S13009=. THEN N8_01=4;  /* MER 07/31/09 eliminated backward coding for missing S13009
*/


/** Note 9 -- H13028, H13029-H13031:  needed to see a specialist in last 12 months **/

   ARRAY NOTE9  H13029 H13031;

   N9MARK=0;
   N9NMISS=0;

   DO OVER NOTE9;
       IF NOTE9 NE . THEN N9NMISS+1;
       IF NOTE9 NOT IN  (., .N) THEN N9MARK+1;
   END;

   IF H13030 NE . THEN N9NMISS+1;
   IF H13030 NOT IN (.,0) THEN N9MARK+1;


   IF H13028 IN (1)  THEN DO;
       N9=1;
       IF H13029=.N THEN H13029=.;
   END;
   ELSE IF H13028 in (2,.) AND N9MARK>0 THEN DO;
       N9=2;
       H13028=1;
       IF H13029=.N THEN H13029=.;
   END;
   ELSE IF H13028 in (2) THEN DO;
       N9=3;
       DO OVER NOTE9;
          IF NOTE9=. THEN NOTE9=.N;
          ELSE NOTE9=.C;
       END;
       IF H13030=. THEN H13030=.N;
       ELSE H13030=.C;
   END;
   ELSE IF H13028=.  AND N9NMISS>0 AND N9MARK=0 THEN DO;
       N9=4;
       H13028=2;
       DO OVER NOTE9;
          IF NOTE9=. THEN NOTE9=.N;
          ELSE NOTE9=.C;
       END;
       IF H13030=. THEN H13030=.N;
       ELSE H13030=.C;
   END;
   ELSE IF H13028=.  AND N9NMISS=0 THEN N9=5;

   DROP N9NMISS N9MARK;


/** Note 10 -- H13030, H13031: saw a specialist in last 12 months **/

   IF H13030 IN (.N,.C) AND H13031 IN (.N,.C) THEN N10=1;
   ELSE IF H13030 IN (1,2,3,4,5) AND H13031 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N10=2;
   ELSE IF H13030 IN (1,2,3,4,5,.) AND H13031 = .N THEN DO;
       N10=3;
       H13030=0;
       H13031=.C;
```

```
       END;
     ELSE IF H13030 = 0 THEN DO;
        N10=4;
        IF H13031 = . THEN H13031 = .N;
        ELSE H13031 = .C;
     END;
     ELSE IF H13030 = . AND H13031 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N10=5;


/** Note 10_B1 -- S13B02, S13B03-S13B04: overall mental health **/

   ARRAY NOTE10B1  S13B03-S13B04;

   N10B1MARK=0;
   N10B1NMISS=0;

   DO OVER NOTE10B1;
       IF NOTE10B1 NE . THEN N10B1NMISS+1;
       IF NOTE10B1 NOT IN  (., .N) THEN N10B1MARK+1;
   END;

   IF S13B02 = 1 THEN DO;
      N10_B1=1;
      DO OVER NOTE10B1;
         IF NOTE10B1=.N THEN NOTE10B1=.;
      END;
   END;
   ELSE IF S13B02 IN (2,.) AND (N10B1MARK>0) THEN DO;
      N10_B1=2;
      S13B02=1;
      DO OVER NOTE10B1;
         IF NOTE10B1=.N THEN NOTE10B1=.;
      END;
   END;
   ELSE IF S13B02=2  AND (N10B1NMISS=0 OR (N10B1NMISS > 0 AND N10B1MARK = 0)) THEN DO;
      N10_B1=3;
      DO OVER NOTE10B1;
         IF NOTE10B1 = . THEN NOTE10B1=.N;
         ELSE NOTE10B1 = .C;
      END;
   END;
   ELSE IF S13B02 IN (.) AND (N10B1NMISS > 0 AND N10B1MARK = 0) THEN DO;
      N10_B1=4;
      S13B02=2;
      DO OVER NOTE10B1;
         IF NOTE10B1 = . THEN NOTE10B1=.N;
         ELSE NOTE10B1 = .C;
      END;
   END;
   ELSE IF S13B02 IN (.) AND N10B1NMISS=0 THEN N10_B1=5;

   DROP N10B1NMISS N10B1MARK;


/** Note 11 -- H13032, H13033:  tried to get care, tests, or treatment from health plan**/

   IF H13032=1 AND H13033 IN (1,2,3,4,.) THEN N11=1;
   ELSE IF H13032 IN (1,.) AND H13033=.N THEN DO;
      H13032=2;
      H13033=.C;
      N11=2;
   END;
   ELSE IF H13032 IN (2,.) AND H13033 IN (1,2,3,4) THEN DO;
      H13032=1;
      N11=3;
   END;
   ELSE IF H13032=2 AND H13033 IN (.,.N) THEN DO;
      IF H13033=. THEN H13033=.N;
      ELSE H13033=.C;
      N11=4;
   END;
   ELSE IF H13032=.  AND H13033=.  THEN N11=5;
```

```
/** Note 12 -- H13034, H13035:  look for info in written materials or on internet**/
  IF H13034=1 AND H13035 IN (1,2,3,4,.) THEN N12=1;
  ELSE IF H13034 IN (1,.) AND H13035=.N THEN DO;
     N12=2;
     H13034=2;
     H13035=.C;
  END;
  ELSE IF H13034 IN (2,.) AND H13035 IN (1,2,3,4) THEN DO;
     N12=3;
     H13034=1;
  END;
  ELSE IF H13034=2 AND H13035 IN (.N,.) THEN DO;
     N12=4;
     IF H13035=. THEN H13035=.N;
     ELSE H13035=.C;
  END;
  ELSE IF H13034=. AND H13035=. THEN N12=5;


/** Note 13 -- H13036, H13037:  tried to get cost of service/equipment from health plan**/

  IF H13036=1 AND H13037 IN (1,2,3,4,.) THEN N13=1;
  ELSE IF H13036 IN (1,.) AND H13037=.N THEN DO;
     H13036=2;
     H13037=.C;
     N13=2;
  END;
  ELSE IF H13036 IN (2,.) AND H13037 IN (1,2,3,4) THEN DO;
     H13036=1;
     N13=3;
  END;
  ELSE IF H13036=2 AND H13037 IN (.,.N) THEN DO;
     IF H13037=. THEN H13037=.N;
     ELSE H13037=.C;
     N13=4;
  END;
  ELSE IF H13036=.  AND H13037=.  THEN N13=5;


/** Note 14 -- H13038, H13039:  tried to get cost of prescription meds from health plan**/

  IF H13038=1 AND H13039 IN (1,2,3,4,.) THEN N14=1;
  ELSE IF H13038 IN (1,.) AND H13039=.N THEN DO;
     H13038=2;
     H13039=.C;
     N14=2;
  END;
  ELSE IF H13038 IN (2,.) AND H13039 IN (1,2,3,4) THEN DO;
     H13038=1;
     N14=3;
  END;
  ELSE IF H13038=2 AND H13039 IN (.,.N) THEN DO;
     IF H13039=. THEN H13039=.N;
     ELSE H13039=.C;
     N14=4;
  END;
  ELSE IF H13038=.  AND H13039=.  THEN N14=5;


/** Note 15 -- H13040, H13041-H13042: tried to use health plan's customer service  **/

  ARRAY NOTE15  H13041-H13042;

  N15MARK=0;
  N15NMISS=0;

  DO OVER NOTE15;
     IF NOTE15 NE . THEN N15NMISS+1;
     IF NOTE15 NOT IN  (., .N) THEN N15MARK+1;
  END;

  IF H13040 = 1 AND (N15MARK>0 OR N15NMISS=0) THEN DO;
```

```
       DO OVER NOTE15;
          IF NOTE15=.N THEN NOTE15=.;
       END;
       N15=1;
   END;
   ELSE IF H13040 IN (1,.) AND (N15NMISS > 0 AND N15MARK = 0) THEN DO;
       N15=2;
       H13040=2;
       DO OVER NOTE15;
          IF NOTE15 = . THEN NOTE15=.N;
          ELSE NOTE15 = .C;
       END;
   END;
   ELSE IF H13040 IN (2,.) AND (N15MARK>0) THEN DO;
       N15=3;
       H13040=1;
       DO OVER NOTE15;
          IF NOTE15=.N THEN NOTE15=.;
       END;
   END;
   ELSE IF H13040=2  AND (N15NMISS=0 OR (N15NMISS > 0 AND N15MARK = 0)) THEN DO;
       N15=4;
       DO OVER NOTE15;
          IF NOTE15 = . THEN NOTE15=.N;
          ELSE NOTE15 = .C;
       END;
   END;
   ELSE IF H13040 IN (.) AND N15NMISS=0 THEN N15=5;

   DROP N15NMISS N15MARK;


/** Note 16 -- H13043, H13044:  received forms to fill out from health plan **/

   IF H13043=1 AND H13044 IN (1,2,3,4,.) THEN N16=1;
   ELSE IF H13043 IN (1,.) AND H13044=.N THEN DO;
       H13043=2;
       H13044=.C;
       N16=2;
   END;
   ELSE IF H13043 IN (2,.) AND H13044 IN (1,2,3,4) THEN DO;
       H13043=1;
       N16=3;
   END;
   ELSE IF H13043=2 AND H13044 IN (.,.N) THEN DO;
       IF H13044=. THEN H13044=.N;
       ELSE H13044=.C;
       N16=4;
   END;
   ELSE IF H13043=.  AND H13044=.  THEN N16=5;


/** Note 17 -- H13045, H13046-H13047: claims to health plan **/

   ARRAY NOTE17 H13046-H13047;
   N17MARK=0;
   N17NDK=0;

   DO OVER NOTE17;
       IF NOTE17 NOT IN (.N,.D,.) THEN N17MARK+1; /* At least one is marked */
       IF NOTE17 NOT IN (.,.D) THEN N17NDK+1; /* All are missing or blank or dnk */
   END;

   IF H13045=1 AND (N17MARK>0 OR N17NDK=0) THEN DO;
       N17=1;
       DO OVER NOTE17;
          IF NOTE17=.N THEN NOTE17=.;
       END;
   END;
   ELSE IF H13045 IN (1,.,.D) AND N17MARK=0 AND N17NDK>0 THEN DO;
       N17=2;
       H13045=2;
       DO OVER NOTE17;
```

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```
         IF NOTE17=. THEN NOTE17=.N;
         ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H13045 IN (2,.,.D) AND N17MARK>0
         THEN DO;
      H13045=1;
      N17=3;
      DO OVER NOTE17;
         IF NOTE17=.N THEN NOTE17=.;
      END;
   END;
   ELSE IF H13045 IN (2) AND N17MARK=0 THEN DO;
      N17=4;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
         ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H13045 IN (.D) AND N17NDK=0 THEN DO;
      N17=5;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
         ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H13045 IN (.) AND N17NDK=0 THEN N17=6;

   DROP N17MARK N17NDK;



/** Note 18 -- smoking:  H13053, H13054-H13056, H13057A-H13057D  **/

   ARRAY NOTE18a H13054 H13055 H13056;
   ARRAY NOTE18b H13057A--H13057D;

   N18MARK = 0;

   DO OVER NOTE18b;
      IF NOTE18b NOT IN (2,.) THEN N18MARK+1;
   END;

   IF H13053 IN (3,4,.) THEN N18=1;
   ELSE IF H13053 IN (2,.D) AND N18MARK = 0 THEN DO;
      N18=2;
      DO OVER NOTE18a;
         IF NOTE18a=. THEN NOTE18a=.N;
         ELSE NOTE18a=.C;
      END;
      DO OVER NOTE18b;
         IF NOTE18b IN (2,.) THEN NOTE18b=.N;
         ELSE NOTE18b=.C;
      END;
   END;
   ELSE IF H13053 = 2 AND N18MARK > 0 THEN DO;
      N18=3;
      H13053=.;
   END;
   ELSE IF H13053 = .D AND N18MARK > 0 THEN DO;
      N18=4;
      DO OVER NOTE18a;
         IF NOTE18a=. THEN NOTE18a=.N;
         ELSE NOTE18a=.C;
      END;
      DO OVER NOTE18b;
         IF NOTE18b IN (2,.) THEN NOTE18b=.N;
         ELSE NOTE18b=.C;
      END;
   END;

   DROP N18MARK;
```

```
/** Note 19a - gender H13058, SEX, H13059B--H13064,
              XSEXA */

/* 1/21/98 use SRSEX & responses to gender specific questions
   if there is discrepancy between SRSEX and SEX */
/* set imputed FMALE and MALE based on gender specific questions */


  ARRAY fmaleval H13059B H13060 H13061 H13062 H13063 H13064
                  ;

  cntfmale=0;
  DO OVER fmaleval;              /* mammogram/pap smear/PREGNANT*/
     IF fmaleval>0 THEN cntfmale=cntfmale+1;
  END;

  IF cntfmale>0 THEN FMALE=1;
  ELSE FMALE = 0;


  IF H13058=. THEN DO;
     IF (SEX='F' AND FMALE) THEN DO;
        N19a=1;
        XSEXA=2;
     END;
     ELSE IF (SEX='F' AND FMALE=0) THEN DO;
        N19a=2;
        XSEXA=2;
     END;
     ELSE IF (SEX='M' AND FMALE) THEN DO;
        N19a=3;
        XSEXA=1;
     END;
     ELSE IF (SEX='M' AND FMALE=0) THEN DO;
        N19a=4;
        XSEXA=1;
     END;
     ELSE IF ((SEX IN ('Z',' ') AND FMALE)) THEN DO;
        N19a=5;
        XSEXA=2;
     END;
     ELSE IF (SEX='Z' AND FMALE=0) THEN DO;
        N19a=6;
        XSEXA=.;
     END;
     ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
        N19a=7;
        XSEXA=.;
     END;
  END;
  ELSE IF (H13058=1) THEN DO;
     IF FMALE=0 THEN DO;
        N19a=8;
        XSEXA=1;
     END;
     ELSE IF FMALE THEN DO;
        IF SEX='F' THEN DO;
           N19a=9;
           XSEXA=2;
        END;
        ELSE DO;
           N19a=10;
           XSEXA=1;
        END;
     END;
  END;
  ELSE IF (H13058=2) THEN DO;
     IF FMALE THEN DO;
       N19a=11;
       XSEXA=2;
     END;
     ELSE IF FMALE=0 THEN DO;
```

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```
              IF SEX='M' THEN DO;
                N19a=12;
                 XSEXA=1;
              END;
              ELSE DO;
                  N19a=13;
                   XSEXA=2;
              END;
           END;
       END;


/* Note 19b - gender vs mammogram/paps/pregnancy */

     ARRAY NOTE19b H13059B H13060 H13061 H13062 H13063 H13064
                  ;
    IF XSEXA=1 THEN DO;   /* male */
       IF FMALE=0 THEN DO;
          N19b=1;
          DO OVER NOTE19b;
             NOTE19b=.N;
          END;
       END;   /* valid skip */
       ELSE IF FMALE=1 THEN DO;
          N19b=2;
          DO OVER NOTE19b;
             IF NOTE19b=. THEN NOTE19b = .N;
             ELSE NOTE19b=.C;
          END;
       END;   /* inconsistent response */
    END;
    ELSE IF XSEXA=2 THEN  N19b=3; /* female */
    ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
       N19b=4;
       DO OVER NOTE19b;
          NOTE19b=.;
       END;
    END;


    DROP FMALE CNTFMALE;



/* Note 20- breast exam for female 40 or over  */

   IF XSEXA=1 THEN DO;  /* male */
      IF  (H13060=.C OR H13060=.N) AND (H13061=.C OR H13061=.N)
      THEN N20 = 1;
   END;
   ELSE IF XSEXA=2 THEN DO;
      IF H13060=2 THEN N20=2;          /* female 40 or over */
      ELSE IF H13060=1 THEN DO;   /* female < 40 */
         IF H13061 NE . THEN H13061=.C;
         ELSE H13061=.N;
         N20=3;
      END;
      ELSE IF H13060=. THEN DO;
         IF H13061 NE . THEN DO;
            H13060=2;
            N20=4;
         END;
         ELSE IF H13061=.  THEN DO;
            IF AGE<40 THEN DO;
               H13060 = 1;
               H13061=.N;
               N20=5;
            END;
            ELSE IF AGE >= 40 THEN DO;
               H13060=2;
               N20=6;
            END;
            ELSE IF AGE=. THEN N20=7;
```

```
         END;
      END;
   END;
   ELSE IF XSEXA=. THEN N20=8;



/* Note 21 - gender vs Pregnancy */


   IF XSEXA=1 THEN N21=1;           /* male    */
   ELSE IF XSEXA=2 THEN DO;         /* female  */
      IF H13062=1 THEN DO;          /* pregnant */
         IF H13063=1 THEN DO;
            N21=2;
            IF H13064=. THEN H13064 = .N;
            ELSE H13064=.C;
         END;
         ELSE IF H13063=2 AND H13064 IN (2) THEN DO;
            N21=3;
            H13064=.;
         END;
         ELSE IF H13063=2 AND H13064 IN (4,3,1,.) THEN DO;
            N21=4;
         END;
         ELSE IF H13063 IN (3,.) THEN N21=5;
      END;
      ELSE IF H13062=2 THEN DO;
         IF H13063=. THEN H13063 = .N;
         ELSE H13063=.C;
         N21=6;
      END;
      ELSE IF H13062=3 THEN DO;
         N21=7;
         IF H13063=. THEN H13063 = .N;
         ELSE H13063=.C;
         IF H13064=. THEN H13064=.N;
         ELSE H13064=.C;
      END;
      ELSE IF H13062 IN (.) THEN DO;
         IF H13063=1 THEN DO;
            N21=8;
            H13062=1;
            IF H13064=. THEN H13064 = .N;
            ELSE H13064=.C;
         END;
         ELSE IF H13063=2 AND H13064 IN (2) THEN DO;
            N21=9;
            H13062=1;
            H13064=.;
         END;
         ELSE IF H13063=2 AND H13064 IN (4,3,1,.) THEN DO;
            H13062=1;
            N21=10;
         END;
         ELSE IF H13063=3 THEN DO;
            H13062=1;
            N21=11;
         END;
         ELSE IF H13063=. THEN DO;
            N21=12;
         END;
      END;
   END;
   ELSE IF XSEXA=. AND H13062 IN (.) THEN N21=13;



   DROP AGE SEX;



/** Note 22 -- H13067, H13068:  seen doctor 3 or more times for same condition **/
```

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```
   IF H13067=1 THEN N22=1;
   ELSE IF H13067 IN (2,.) AND H13068 IN (1,2) THEN DO;
      H13067=1;
      N22=2;
   END;
   ELSE IF H13067=2 AND H13068 IN (.) THEN DO;
      H13068=.N;
      N22=3;
   END;
   ELSE IF H13067=.  AND H13068=.  THEN N22=4;




/** Note 23 -- H13069, H13070:  need or take medicine prescribed by a doctor **/

   IF H13069=1 THEN N23=1;
   ELSE IF H13069 IN (2,.) AND H13070 IN (1,2) THEN DO;
      H13069=1;
      N23=2;
   END;
   ELSE IF H13069=2 AND H13070 IN (.) THEN DO;
      H13070=.N;
      N23=3;
   END;
   ELSE IF H13069=.  AND H13070=.  THEN N23=4;



/** Note 24 -- H13073, H13073A-H13073E: Hispanic or Latino origin or descent **/

   /* JMA
   ****Multiple responses were given to this question so H13073 is being created
   ****from the multiple responses.;
   */


   IF H13073B=1 THEN DO;
      N24=1;
      H13073=2;
   END;
   ELSE IF H13073E=1 THEN DO;
      N24=2;
      H13073=5;
   END;
   ELSE IF H13073C=1 THEN DO;
      N24=3;
      H13073=3;
   END;
   ELSE IF H13073D=1 THEN DO;
      N24=4;
      H13073=4;
   END;
   ELSE IF H13073A=1 THEN DO;
      N24=5;
      H13073=1;
   END;
   ELSE IF H13073A IN (2,.) AND H13073B IN (2,.) AND H13073C IN (2,.) AND
           H13073D IN (2,.) AND H13073E IN (2,.) THEN DO;
      N24=6;
      H13073=.;

   END;


/** Note 25 -- currently covered by Medicare:  H13074, H13075-H13079 **/

   ARRAY NOTE25 H13075-H13079;

   N25MARK = 0;

   DO OVER NOTE25;
```

```
      IF NOTE25 NOT IN (2,.D,.) THEN N25MARK+1;
   END;

   IF H13074 = 1 THEN N25=1;
   ELSE IF H13074 IN (2,.D) AND N25MARK = 0 THEN DO;
      N25=2;
      DO OVER NOTE25;
         IF NOTE25=. THEN NOTE25=.N;
         ELSE NOTE25=.C;
      END;
   END;
   ELSE IF H13074 IN (2,.D,.) AND N25MARK > 0 THEN DO;
      N25=3;
      H13074=1;
   END;
   ELSE IF H13074 = . AND N25MARK = 0 THEN N25=4;

   DROP N25MARK;


NOSURVEY:

/* missing values */

   ARRAY MISS MISS_9 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
   MISS_TOT=0;
   DO OVER MISS;
      MISS = 0;
   END;
   ARRAY MISSARAY &VARLIST2.;

   DO OVER MISSARAY;
      IF (MISSARAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
      ELSE IF (MISSARAY EQ -7) THEN MISS_7 = MISS_7 + 1;
      ELSE IF (MISSARAY EQ -6) THEN MISS_6 = MISS_6 + 1;
      ELSE IF (MISSARAY EQ -5) THEN MISS_5 = MISS_5 + 1;
      ELSE IF (MISSARAY EQ -4) THEN MISS_4 = MISS_4 + 1;
      ELSE IF (MISSARAY EQ -1) THEN MISS_1 = MISS_1 + 1;
   END;
   DO OVER MISS;
      MISS_TOT=MISS_TOT + MISS;
   END;

******************************************;

 OUTPUT;

RUN;


proc contents data=out.cschm13q;
run;
```

F.2.D   Q2FY2013\PROGRAMS\CODINGSCHEME\CSCHM13Q.FMT - Include file for Coding Scheme for Quarter 2 FY2013.

```
/*  Formats for original answers to survey questions,
     after variables have been recoded */

     FORMAT H13001    H13001_O YN.

            H13003    H13003_O HPLAN1_.
            H13004    H13004_O HPTIME.

            S13J01    S13J01_O
            S13J06    S13J06_O
            S13J08    S13J08_O
            S13J10    S13J10_O
               YN.

            S13J03    S13J03_O YNPOL6_.
            S13J04    S13J04_O YNPOL5_.
            S13J05    S13J05_O AMOUNT.
            S13J14    S13J14_O S12J14_.

            S13AC01   S13AC01_O
            S13AC03   S13AC03_O
               YN.

            S13AC04   S13AC04_O S13AC04_.

            H13005    H13005_O PLACE.

            H13006 H13006_O    H13009 H13009_O    H13019 H13019_O
              YN.

            H13007    H13007_O OFTEN2_.
            H13008    H13008_O TIME1_.

            H13010    H13010_O OFTEN3_.
            H13011    H13011_O TIME2_.
            H13012    H13012_O OFTEN4_.

            H13013    H13013_O OFTEN4_.
            H13014    H13014_O OFTEN8_.
            H13015    H13015_O YN.
            H13016    H13016_O YNDEF.
            H13017    H13017_O YNDEF.
            H13018    H13018_O RATE3_.

            H13020    H13020_O OFTEN10_.

            H13021-H13024    H13021_O--H13024_O OFTEN5_.

            H13025    H13025_O YN.
            H13026    H13026_O OFTEN8_.
            H13027    H13027_O RATE6_.

            S13009    S13009_O YN.
            S13010    S13010_O PROB1_.

            H13028    H13028_O YN.
            H13029    H13029_O OFTEN9_.
            H13030    H13030_O SPCLST.
            H13031    H13031_O RATE2_.

            S13B01 S13B01_O MNTLHLTH.
            S13B02 S13B02_O YN.
            S13B03 S13B03_O PROB1_.
            S13B04 S13B04_O RATE5_.


            H13032    H13032_O YN.
            H13033    H13033_O OFTEN11_.
            H13034    H13034_O YN.
```

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H13035    H13035_O OFTEN12_.
H13036    H13036_O YN.
H13037    H13037_O OFTEN13_.
H13038    H13038_O YN.
H13039    H13039_O OFTEN14_.
H13040    H13040_O YN.
H13041    H13041_O OFTEN15_.
H13042    H13042_O OFTEN15_.
H13043    H13043_O YN.
H13044    H13044_O OFTEN16_.
H13045    H13045_O YNDNK.
H13046    H13046_O OFTEN6_.
H13047    H13047_O OFTEN6_.
H13048    H13048_O RATE4_.

H13049    H13049_O TIME5_.
H13050    H13050_O YNBP_.

H13051    H13051_O TIME7_.
H13052    H13052_O YNDNK.
H13053    H13053_O TIME8_.
H13054    H13054_O OFTEN8_.
H13055    H13055_O OFTEN8_.
H13056    H13056_O OFTEN8_.

H13058    H13058_O SEX.

H13059B   H13059BO TIME16_.

H13060 H13060_O    H13066 H13066_O
   YN.

H13061    H13061_O TIME12_.
H13062    H13062_O YNPREG.
H13063    H13063_O PREG1_.
H13064    H13064_O PREG2_.
H13065    H13065_O HEALTH.

H13067    H13067_O YN.
H13068    H13068_O YN.
H13069    H13069_O YN.

H13070    H13070_O YN.

S13B23    S13B23_O YN.
S13B24    S13B24_O YN.
S13B25    S13B25_O YN.
S13B26    S13B26_O YN.

H13071F H13071FO
H13071I H13071IO
H13072  H13072_O
  TIME14_.

SREDA     SREDA_O  EDUC.

H13073             HISP.

SRAGE     SRAGE_O  AGEGRP.

H13074    H13074_O YNDNK.
H13075    H13075_O MEDA.
H13076    H13076_O MEDB.
H13077    H13077_O YNDNK.
H13078    H13078_O MEDSUPP.
H13079    H13079_O YNDNK.

S13011    S13011_O AGREE2_.
S13014    S13014_O SATISFY.

MISS_1    MISS_4-MISS_7 MISS_9 MISS_TOT 4.
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LABEL H13001_O='Are you the person listed on envelope'
      H13001  ='Are you the person listed on envelope'
      H13002AO='Health plan(s) covered: TRICARE Prime'
      H13002A ='Health plan(s) covered: TRICARE Prime'
      H13002CO='Health plan(s) covered: TRICARE Ext/Stnd'
      H13002C ='Health plan(s) covered: TRICARE Ext/Stnd'
      H13002NO='Health plan(s) covered: TRICARE Plus'
      H13002N ='Health plan(s) covered: TRICARE Plus'
      H13002OO='Health plan(s) covered: TRICARE For Life'
      H13002O ='Health plan(s) covered: TRICARE For Life'
      H13002PO='Health plan(s) covered: TRICARE Supplmntl Ins'
      H13002P ='Health plan(s) covered: TRICARE Supplmntl Ins'
      H13002QO='Health plan(s) covered: TRICARE Reserve Select'
      H13002Q ='Health plan(s) covered: TRICARE Reserve Select'
      H13002SO='Health plan(s) covered: TRICARE Retired Reserve'
      H13002S ='Health plan(s) covered: TRICARE Retired Reserve'
      H13002TO='Health plan(s) covered: TRICARE Young Adult'
      H13002T ='Health plan(s) covered: TRICARE Young Adult'
      H13002UO='Health plan(s) covered: CHCBP'
      H13002U ='Health plan(s) covered: CHCBP'
      H13002FO='Health plan(s) covered: Medicare'
      H13002F ='Health plan(s) covered: Medicare'
      H13002GO='Health plan(s) covered: FEHBP'
      H13002G ='Health plan(s) covered: FEHBP'
      H13002HO='Health plan(s) covered: Medicaid'
      H13002H ='Health plan(s) covered: Medicaid'
      H13002IO='Health plan(s) covered: civilian HMO'
      H13002I ='Health plan(s) covered: civilian HMO'
      H13002JO='Health plan(s) covered: other civilian'
      H13002J ='Health plan(s) covered: other civilian'
      H13002KO='Health plan(s) covered: USFHP'
      H13002K ='Health plan(s) covered: USFHP'
      H13002MO='Health plan(s) covered: veterans'
      H13002M ='Health plan(s) covered: veterans'
      H13002RO='Health plan(s) covered: gov hlth ins-other cntry'
      H13002R ='Health plan(s) covered: gov hlth ins-other cntry'
      H13002LO='Health plan(s) covered: not sure'
      H13002L ='Health plan(s) covered: not sure'
      H13003_O='Which health plan did you use most'
      H13003  ='Which health plan did you use most'
      H13004_O='Yrs in a row with health plan'
      H13004  ='Yrs in a row with health plan'
      H13005_O='In lst yr:fclty use most for health care'
      H13005  ='In lst yr:fclty use most for health care'
      H13006_O='In lst yr:ill/injry/cond care right away'
      H13006  ='In lst yr:ill/injry/cond care right away'
      H13007_O='In lst yr:get urgnt care as soon as wntd'
      H13007  ='In lst yr:get urgnt care as soon as wntd'
      H13008_O='In lst yr:wait btwn try get care,see prv'
      H13008  ='In lst yr:wait btwn try get care,see prv'
      H13009_O='In lst yr:make appts non-urgnt hlth care'
      H13009  ='In lst yr:make appts non-urgnt hlth care'
      H13010_O='In lst yr:non-urg hlth cre appt whn wntd'
      H13010  ='In lst yr:non-urg hlth cre appt whn wntd'
      H13011_O='In lst yr:days btwn appt & see prvder'
      H13011  ='In lst yr:days btwn appt & see prvder'
      H13012_O='In lst yr:go to emrgncy rm for own care'
      H13012  ='In lst yr:go to emrgncy rm for own care'
      H13013_O='In lst yr:go to Dr office/clinic for care'
      H13013  ='In lst yr:go to Dr office/clinic for care'
      H13014  ='Lst yr: how often talk to doctor about illness prvntn'
      H13014_O='Lst yr: how often talk to doctor about illness prvntn'
      H13015  ='Lst yr: did doctor tell you more than 1 choice for trtmnt'
      H13015_O='Lst yr: did doctor tell you more than 1 choice for trtmnt'
      H13016  ='Lst yr: did talk to doctor about pros/cons of trtmnt'
      H13016_O='Lst yr: did talk to doctor about pros/cons of trtmnt'
      H13017  ='Lst yr: did doctor ask which trtmnt option best for you'
      H13017_O='Lst yr: did doctor ask which trtmnt option best for you'
      H13018_O='Rating of all health care in lst yr'
      H13018  ='Rating of all health care in lst yr'
      H13019_O='Have one person think of as personal Dr'
      H13019  ='Have one person think of as personal Dr'
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H13020  ='Lst yr: how often visit prsnl doctor for care for yourself'
H13020_O='Lst yr: how often visit prsnl doctor for care for yourself'
H13021_O='Lst yr: how oftn Drs listen to you'
H13021  ='Lst yr: how oftn Drs listen to you'
H13022_O='Lst yr: how oftn Drs explain things'
H13022  ='Lst yr: how oftn Drs explain things'
H13023_O='Lst yr: how oftn Drs show respect'
H13023  ='Lst yr: how oftn Drs show respect'
H13024_O='Lst yr: how oftn Drs spend enough time'
H13024  ='Lst yr: how oftn Drs spend enough time'
H13025  ='Lst yr: did get care from doctor other than prsnl doctor'
H13025_O='Lst yr: did get care from doctor other than prsnl doctor'
H13026  ='Lst yr: how often prsnl doctor seemed infrmd of care from other doctors'
H13026_O='Lst yr: how often prsnl doctor seemed infrmd of care from other doctors'
H13027_O='Rating of your personal Dr'
H13027  ='Rating of your personal Dr'
H13028  ='Lst yr: did make any appointments to see spclst'
H13028_O='Lst yr: did make any appointments to see spclst'
H13029  ='Lst yr: how often easy to get appointments with spclsts'
H13029_O='Lst yr: how often easy to get appointments with spclsts'
H13030  ='Lst yr: how many spclsts seen'
H13030_O='Lst yr: how many spclsts seen'
H13031_O='Rating of specialist seen in lst yr'
H13031  ='Rating of specialist seen in lst yr'
H13032  ='Lst yr: did try to get care, test, or trtmnt through health plan'
H13032_O='Lst yr: did try to get care, test, or trtmnt through health plan'
H13033  ='Lst yr: how often easy to get care, test, or trtmnt'
H13033_O='Lst yr: how often easy to get care, test, or trtmnt'
H13034  ='Lst yr: did look for info from written material/Internet'
H13034_O='Lst yr: did look for info from written material/Internet'
H13035  ='Lst yr: how often written material/Internet provide needed info'
H13035_O='Lst yr: how often written material/Internet provide needed info'
H13036  ='Lst yr: did look for info from health plan on cost of service/equipment'
H13036_O='Lst yr: did look for info from health plan on cost of service/equipment'
H13037  ='Lst yr: how often able to find out cost of service/equipment'
H13037_O='Lst yr: how often able to find out cost of service/equipment'
H13038  ='Lst yr: did look for info from health plan on cost of prescription meds'
H13038_O='Lst yr: did look for info from health plan on cost of prescription meds'
H13039  ='Lst yr: how often able to find out cost of prescription meds'
H13039_O='Lst yr: how often able to find out cost of prescription meds'
H13040  ="Lst yr: did try to get info/help from health plan's cstmr service"
H13040_O="Lst yr: did try to get info/help from health plan's cstmr service"
H13041  ='Lst yr: how often did cstmr service give needed info/help'
H13041_O='Lst yr: how often did cstmr service give needed info/help'
H13042  ='Lst yr: how often did cstmr service treat with courtesy/respect'
H13042_O='Lst yr: how often did cstmr service treat with courtesy/respect'
H13043  ='Lst yr: did health plan give any forms to fill out'
H13043_O='Lst yr: did health plan give any forms to fill out'
H13044  ='Lst yr: how often were forms easy to fill out'
H13044_O='Lst yr: how often were forms easy to fill out'
H13045  ='Lst yr: send in any claims'
H13045_O='Lst yr: send in any claims'
H13046  ='Lst yr: how often did health plan handle claims quickly'
H13046_O='Lst yr: how often did health plan handle claims quickly'
H13047_O='Lst yr: how oftn handle claims correctly'
H13047  ='Lst yr: how oftn handle claims correctly'
H13048  ='Rating of all experience with hlth plan'
H13048_O='Rating of all experience with hlth plan'
H13049_O='Blood pressure: when lst reading'
H13049  ='Blood pressure: when lst reading'
H13050_O='Blood pressure: know if too high or not'
H13050  ='Blood pressure: know if too high or not'
H13051_O='When did you lst have a flu shot'
H13051  ='When did you lst have a flu shot'
H13052  ='Smoked at least 100 cigarettes in life'
H13052_O='Smoked at least 100 cigarettes in life'
H13053  ='Smoke or use tobacco everyday, some days or not at all'
H13053_O='Smoke or use tobacco everyday, some days or not at all'
H13054_O='Lst yr: how often advised to quit smoking or use tobacco'
H13054  ='Lst yr: how often advised to quit smoking or use tobacco'
H13055  ='Lst yr: how often recom medic assist quit smoking or using tobacco'
H13055_O='Lst yr: how often recom medic assist quit smoking or using tobacco'
H13056  ='Lst yr: how often discu meth/strag asst quit smoking or using tobacco'
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H13056_O='Lst yr: how often discu meth/strag asst quit smoking or using tobacco'
H13057A ='Do you smoke or use: cigarettes'
H13057AO='Do you smoke or use: cigarettes'
H13057B ='Do you smoke or use: dip, chewing tobacco, snuff, or snus'
H13057BO='Do you smoke or use: dip, chewing tobacco, snuff, or snus'
H13057C ='Do you smoke or use: cigars'
H13057CO='Do you smoke or use: cigars'
H13057D ='Do you smoke or use: pipes, bidis, or kreteks'
H13057DO='Do you smoke or use: pipes, bidis, or kreteks'
H13058_O='Are you male or female'
H13058  ='Are you male or female'
H13059BO='Lst have a Pap smear test'
H13059B ='Lst have a Pap smear test'
H13060_O='Are you under age 40'
H13060  ='Are you under age 40'
H13061_O='Lst time: breasts checked mammography'
H13061  ='Lst time: breasts checked mammography'
H13062_O='Been pregnant in lst yr or pregnant now'
H13062  ='Been pregnant in lst yr or pregnant now'
H13063_O='In what trimester is your pregnancy'
H13063  ='In what trimester is your pregnancy'
H13064_O='Trimester first received prenatal care'
H13064  ='Trimester first received prenatal care'
H13065_O='In gnrl, how would you rate ovrall hlth'
H13065  ='In gnrl, how would you rate ovrall hlth'
H13066_O='Impairment/Hlth prblm limit activities'
H13066  ='Impairment/Hlth prblm limit activities'
H13067  ='Lst yr: have seen doctor 3 or more times for same condition'
H13067_O='Lst yr: have seen doctor 3 or more times for same condition'
H13068  ='Has condition lasted for at least 3 months'
H13068_O='Has condition lasted for at least 3 months'
H13069  ='Need to take medicine prescribed by a doctor'
H13069_O='Need to take medicine prescribed by a doctor'
H13070  ='Medicine to treat condition that has lasted for at least 3 months'
H13070_O='Medicine to treat condition that has lasted for at least 3 months'
H13071FO='Height without shoes (feet)'
H13071F ='Height without shoes (feet)'
H13071IO='Height without shoes (inches)'
H13071I ='Height without shoes (inches)'
H13072_O='Weight without shoes'
H13072  ='Weight without shoes'
SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H13073  ='Are you Spanish/Hispanic/Latino'
H13073AO='Not Spanish/Hispanic/Latino'
H13073A ='Not Spanish/Hispanic/Latino'
H13073BO='Mexican, Mexican American, Chicano'
H13073B ='Mexican, Mexican American, Chicano'
H13073CO='Puerto Rican'
H13073C ='Puerto Rican'
H13073DO='Cuban'
H13073D ='Cuban'
H13073EO='Other Spanish, Hispanic, or Latino'
H13073E ='Other Spanish, Hispanic, or Latino'
SRRACEAO='Race: White'
SRRACEA ='Race: White'
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asian'
SRRACED ='Race: Asian'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'
H13074  ='Currently Covered Medicare'
H13074_O='Currently Covered Medicare'
H13075  ='Currently Covered Medicare Part A'
H13075_O='Currently Covered Medicare Part A'
H13076  ='Currently Covered Medicare Part B'
H13076_O='Currently Covered Medicare Part B'
H13077  ='Enrolled Medicare Advantage'
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H13077_O='Enrolled Medicare Advantage'
H13078  ='Currently Covered Medicare Supplemental'
H13078_O='Currently Covered Medicare Supplemental'
H13079  ='Enrolled Medicare Part D'
H13079_O='Enrolled Medicare Part D'

S13J01_O='Can obtain civilian hlth ins for self'
S13J01  ='Can obtain civilian hlth ins for self'
S13J02AO='Obtain civ cvrg: my current employer'
S13J02A ='Obtain civ cvrg: my current employer'
S13J02BO='Obtain civ cvrg: prev-emplyr COBRA '
S13J02B ='Obtain civ cvrg: prev-emplyr COBRA '
S13J02CO='Obtain civ cvrg: prev-emplyr retirement'
S13J02C ='Obtain civ cvrg: prev-emplyr retirement'
S13J02DO='Obtain civ cvrg: family mem employer'
S13J02D ='Obtain civ cvrg: family mem employer'
S13J02EO='Obtain civ cvrg: fam mem prv-employer COBRA'
S13J02E ='Obtain civ cvrg: fam mem prv-employer COBRA'
S13J02FO='Obtain civ cvrg: fam mem retirement'
S13J02F ='Obtain civ cvrg: fam mem retirement'
S13J02GO='Obtain civ cvrg: another organization'
S13J02G ='Obtain civ cvrg: another organization'
S13J02HO='Obtain civ cvrg: government program'
S13J02H ='Obtain civ cvrg: government program'
S13J02IO="Obtain civ cvrg: don't know"
S13J02I ="Obtain civ cvrg: don't know"
S13J03_O="Are you/fam covered by a civilian policy"
S13J03  ="Are you/fam covered by a civilian policy"
S13J04_O="Pay all or part of civilian insrnc premimum"
S13J04  ="Pay all or part of civilian insrnc premimum"
S13J05_O="How much per mnth you/fam pay for coverage"
S13J05  ="How much per mnth you/fam pay for coverage"
S13J06_O="Used civilian coverage in past year"
S13J06  ="Used civilian coverage in past year"
S13J07AO='Not used civ cvrg: not available'
S13J07A ='Not used civ cvrg: not available'
S13J07BO='Not used civ cvrg: better choice of drs with TRICARE'
S13J07B ='Not used civ cvrg: better choice of drs with TRICARE'
S13J07CO="Not used civ cvrg: don't want to pay premium"
S13J07C ="Not used civ cvrg: don't want to pay premium"
S13J07DO='Not used civ cvrg: TRICARE better customer service'
S13J07D ='Not used civ cvrg: TRICARE better customer service'
S13J07EO='Not used civ cvrg: benefits are poor'
S13J07E ='Not used civ cvrg: benefits are poor'
S13J07FO='Not used civ cvrg: personal Dr not available'
S13J07F ='Not used civ cvrg: personal Dr not available'
S13J07GO='Not used civ cvrg: always want military hlth care'
S13J07G ='Not used civ cvrg: always want military hlth care'
S13J07HO='Not used civ cvrg: TRICARE costs less'
S13J07H ='Not used civ cvrg: TRICARE costs less'
S13J07IO="Not used civ cvrg: prefer military drs"
S13J07I ="Not used civ cvrg: prefer military drs"
S13J07JO="Not used civ cvrg: prefer military hospitals"
S13J07J ="Not used civ cvrg: prefer military hospitals"
S13J07KO="Not used civ cvrg: have not needed health care"
S13J07K ="Not used civ cvrg: have not needed health care"
S13J07LO="Not used civ cvrg: another reason"
S13J07L ="Not used civ cvrg: another reason"
S13J07MO="Not used civ cvrg: employer bonus"
S13J07M ="Not used civ cvrg: employer bonus"
S13J07NO="Not used civ cvrg: family member employer bonus"
S13J07N ="Not used civ cvrg: family member employer bonus"
S13J07OO="Not used civ cvrg: better qlty care thru TRICARE"
S13J07O ="Not used civ cvrg: better qlty care thru TRICARE"
S13J08_O="Used TRICARE for non-prscrp drug hlth care"
S13J08  ="Used TRICARE for non-prscrp drug hlth care"
S13J09AO='Not used TRICARE: better choice of civ drs'
S13J09A ='Not used TRICARE: better choice of civ drs'
S13J09BO="Not used TRICARE: don't want to pay premium"
S13J09B ="Not used TRICARE: don't want to pay premium"
S13J09CO='Not used TRICARE: better civ customer service'
S13J09C ='Not used TRICARE: better civ customer service'
S13J09DO='Not used TRICARE: personal Dr not available'
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S13J09D ='Not used TRICARE: personal Dr not available'
S13J09EO='Not used TRICARE: benefits are poor'
S13J09E ='Not used TRICARE: benefits are poor'
S13J09FO='Not used TRICARE: easier to get civ care'
S13J09F ='Not used TRICARE: easier to get civ care'
S13J09GO='Not used TRICARE: civ plan costs less'
S13J09G ='Not used TRICARE: civ plan costs less'
S13J09HO='Not used TRICARE: no mil fclty near me'
S13J09H ='Not used TRICARE: no mil fclty near me'
S13J09IO="Not used TRICARE: prefer civilian drs"
S13J09I ="Not used TRICARE: prefer civilian drs"
S13J09JO="Not used TRICARE: prefer civilian hospitals"
S13J09J ="Not used TRICARE: prefer civilian hospitals"
S13J09KO="Not used TRICARE: have not needed health care"
S13J09K ="Not used TRICARE: have not needed health care"
S13J09LO="Not used TRICARE: another reason"
S13J09L ="Not used TRICARE: another reason"
S13J10_O="Dropped civ coverage in past year"
S13J10  ="Dropped civ coverage in past year"
S13J13AO="Dropped civ cvrg: lost job"
S13J13A ="Dropped civ cvrg: lost job"
S13J13BO="Dropped civ cvrg: spouse or parent lost job"
S13J13B ="Dropped civ cvrg: spouse or parent lost job"
S13J13CO="Dropped civ cvrg: changed jobs"
S13J13C ="Dropped civ cvrg: changed jobs"
S13J13DO="Dropped civ cvrg: spouse or parent changed jobs"
S13J13D ="Dropped civ cvrg: spouse or parent changed jobs"
S13J13EO="Dropped civ cvrg: retired from job"
S13J13E ="Dropped civ cvrg: retired from job"
S13J13FO="Dropped civ cvrg: spouse or parent retired"
S13J13F ="Dropped civ cvrg: spouse or parent retired"
S13J13GO="Dropped civ cvrg: moved to new location"
S13J13G ="Dropped civ cvrg: moved to new location"
S13J13HO="Dropped civ cvrg: you/spouse/parent became active rsrvst"
S13J13H ="Dropped civ cvrg: you/spouse/parent became active rsrvst"
S13J13IO="Dropped civ cvrg: you/spouse/parent returned to select rsrv"
S13J13I ="Dropped civ cvrg: you/spouse/parent returned to select rsrv"
S13J13JO="Dropped civ cvrg: employer changed plans"
S13J13J ="Dropped civ cvrg: employer changed plans"
S13J13KO="Dropped civ cvrg: found less expensive plan"
S13J13K ="Dropped civ cvrg: found less expensive plan"
S13J13LO="Dropped civ cvrg: married, divorced, or widowed"
S13J13L ="Dropped civ cvrg: married, divorced, or widowed"
S13J13MO="Dropped civ cvrg: went on Medicare"
S13J13M ="Dropped civ cvrg: went on Medicare"
S13J13NO="Dropped civ cvrg: problems with health plan"
S13J13N ="Dropped civ cvrg: problems with health plan"
S13J14_O="Main reason dropped civ cvrg"
S13J14  ="Main reason dropped civ cvrg"

S13AC01  ="Lst yr: missed appointment at this fclty"
S13AC01_O="Lst yr: missed appointment at this fclty"
S13AC02A ="Missed apptmt: forgot about appointment"
S13AC02AO="Missed apptmt: forgot about appointment"
S13AC02B ="Missed apptmt: felt better"
S13AC02BO="Missed apptmt: felt better"
S13AC02C ="Missed apptmt: felt worse"
S13AC02CO="Missed apptmt: felt worse"
S13AC02D ="Missed apptmt: got care somewhere else"
S13AC02DO="Missed apptmt: got care somewhere else"
S13AC02E ="Missed apptmt: scheduling conflict"
S13AC02EO="Missed apptmt: scheduling conflict"
S13AC02F ="Missed apptmt: difficulty getting to fclty"
S13AC02FO="Missed apptmt: difficulty getting to fclty"
S13AC02G ="Missed apptmt: other"
S13AC02GO="Missed apptmt: other"
S13AC03  ="Lst yr: cancel/resched appointment at this fclty"
S13AC03_O="Lst yr: cancel/resched appointment at this fclty"
S13AC04  ="Lst yr: how many appointments cancel/resched"
S13AC04_O="Lst yr: how many appointments cancel/resched"
S13AC05A ="Cncl/resched apptmt: forgot about appointment"
S13AC05AO="Cncl/resched apptmt: forgot about appointment"
S13AC05B ="Cncl/resched apptmt: felt better"
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S13AC05BO="Cncl/resched apptmt: felt better"
S13AC05C ="Cncl/resched apptmt: felt worse"
S13AC05CO="Cncl/resched apptmt: felt worse"
S13AC05D ="Cncl/resched apptmt: got care somewhere else"
S13AC05DO="Cncl/resched apptmt: got care somewhere else"
S13AC05E ="Cncl/resched apptmt: scheduling conflict"
S13AC05EO="Cncl/resched apptmt: scheduling conflict"
S13AC05F ="Cncl/resched apptmt: difficulty getting to fclty"
S13AC05FO="Cncl/resched apptmt: difficulty getting to fclty"
S13AC05G ="Cncl/resched apptmt: other"
S13AC05GO="Cncl/resched apptmt: other"

S13009_O='Same prsnl doctor/nurse before this hlth plan'
S13009  ='Same prsnl doctor/nurse before this hlth plan'
S13010_O='Prblm getting prsnl doctor/nurse you are happy with'
S13010  ='Prblm getting prsnl doctor/nurse you are happy with'

S13B01_O='Self rate of overall mental/emotional health'
S13B01  ='Self rate of overall mental/emotional health'
S13B02_O='Lst yr: needed treatmnt/cnslng-prsnl prob'
S13B02  ='Lst yr: needed treatmnt/cnslng-prsnl prob'
S13B03_O='Lst yr: prblm gttng needed treatmnt/cnslng'
S13B03  ='Lst yr: prblm gttng needed treatmnt/cnslng'
S13B04_O='Lst yr: rate of treatmnt/cnslng received'
S13B04  ='Lst yr: rate of treatmnt/cnslng received'

S13B23_O='Past month: nightmares/thoughts you did not want'
S13B23  ='Past month: nightmares/thoughts you did not want'
S13B24_O='Past month: tried not to think about or be reminded'
S13B24  ='Past month: tried not to think about or be reminded'
S13B25_O='Past month: constantly on guard, watchful, or startled'
S13B25  ='Past month: constantly on guard, watchful, or startled'
S13B26_O='Past month: felt numb or detached from others'
S13B26  ='Past month: felt numb or detached from others'

S13011  ='Agree/disagree: able to see provider when needed'
S13011_O='Agree/disagree: able to see provider when needed'
S13014  ='How satisfied with health care during last visit'
S13014_O='How satisfied with health care during last visit'


N1    = "Coding Scheme Note 1"
N1_J1 = "Coding Scheme Note 1_J1"
N1_J2 = "Coding Scheme Note 1_J2"
N1_J3 = "Coding Scheme Note 1_J3"
N1_J4 = "Coding Scheme Note 1_J4"
N1_J5 = "Coding Scheme Note 1_J5"
N1_J6 = "Coding Scheme Note 1_J6"
N1_AC1= "Coding Scheme Note 1_AC1"
N1_AC2= "Coding Scheme Note 1_AC2"
N1_AC3= "Coding Scheme Note 1_AC3"
N2    = "Coding Scheme Note 2"
N3    = "Coding Scheme Note 3"
N4    = "Coding Scheme Note 4"
N5    = "Coding Scheme Note 5"
N6    = "Coding Scheme Note 6"
N7    = "Coding Scheme Note 7"
N8    = "Coding Scheme Note 8"
N8_01 = "Coding Scheme Note 8_01"
N9    = "Coding Scheme Note 9"
N10   = "Coding Scheme Note 10"
N10_B1= "Coding Scheme Note 10_B1"
N11   = "Coding Scheme Note 11"
N12   = "Coding Scheme Note 12"
N13   = "Coding Scheme Note 13"
N14   = "Coding Scheme Note 14"
N15   = "Coding Scheme Note 15"
N16   = "Coding Scheme Note 16"
N17   = "Coding Scheme Note 17"
N18   = "Coding Scheme Note 18"
N19A  = "Coding Scheme Note 19A"
N19B  = "Coding Scheme Note 19B"
N20   = "Coding Scheme Note 20"
```

```
   N21   = "Coding Scheme Note 21"
   N22   = "Coding Scheme Note 22"
   N23   = "Coding Scheme Note 23"
   N24   = "Coding Scheme Note 24"
   N25   = "Coding Scheme Note 25"



   MISS_1 = "Count of: violates skip pattern"
   /*MISS_3 = "Count of: do not use other tobacco products response"*/
   MISS_4 = "Count of: incomplete grid error"
   MISS_5 = "Count of: scalable reponse of don't know"
   MISS_6 = "Count of: not applicable - valid skip"
   MISS_7 = "Count of: out-of-range error"
   MISS_9 = "Count of: no response - invalid skip"
   MISS_TOT = "Total number of missing responses"
   XSEXA = "Male or Female  - R"
 ;
```

F.2.E Q3FY2013\PROGRAMS\CODINGSCHEME\CSCHM13Q.SAS - Implement Coding Scheme and Coding Tables for Quarter 3 FY2013.

```
******************************************************************************;
*  Program:  Cschm13q.sas
*  Written:  06/04/2001
*   Author:  C. Rankin
*
*    Input:  MERGESYN.sas7bdat - Merged MPR Sampling, DEERS, and Synovate Response Data
*   Output:  CSCHM13Q.sas7bdat - Coding scheme file
*
* Modified:  9/20/2001 - Recodes removed (stored in recodes_old.sas)
*           10/31/2001 - Revised notes 16 and 17 (became notes 26 and 27)
*            3/22/2002 - Updated Variable names for Q1 2002 and added
*                        Include file RENAME.SAS to change the variable
*                        names from 01 to 02. Skipping 01 designation to make
*                        survey reflect year of fielding
*            5/09/2002 - Change to logic in TFL supplement
*            3/17/2003 - Updated Variables names for Q1 2003
*            4/11/2003 - Added note 19a to accomodate Q1 2003 error where
*                        an option on most of the questionnaires was omitted for
*                        H03062
*            3/28/2008 - Updated Variable names for Q2 FY 2008
*           12/14/2009 - Updated Variable names for Q1 FY 2010
*           12/01/2010 - Updated Variable names for Q1 FY 2011
*           12/09/2011 - Updated Variable names for Q1 FY 2012
*           12/15/2012 - Updated Variable names for Q1 FY 2013
*           12/15/2012 - Removed logic for handling check boxes for height and
*                        weight variables. Also no longer have to convert the
*                        weight variable from character to numeric
*           12/21/2012 - Added code on line 146 to correct out of range height (in)
*  Purpose:  Apply Coding Scheme Specifications to DoD Health Care Survey
*            Response Data, check for consistency in responses and skip
*            patterns
*  Include
*    files:  Cschm13q.fmt
*
******************************************************************************;

OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2 VARLENCHK=NOWARN;
*OPTIONS OBS=100;

LIBNAME LIBRARY    "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN         "..\..\DATA\AFINAL";
LIBNAME OUT        "..\..\DATA\AFINAL";

%LET INDATA=MERGESYN;
%LET OUTDATA=CSCHM13q;
%LET PERIOD=April, 2012 to March, 2013;

/* Variable names in survey -- become recoded varibles */

%Let varlist1 =


 H13001  H13002A H13002C H13002N H13002O H13002P H13002Q H13002S H13002T H13002U
 H13002F H13002G H13002H H13002I H13002J H13002K H13002M H13002R H13002L
 H13003  H13004
 H13005  H13006  H13007  H13008  H13009  H13010  H13011  H13012 H13013  H13014
 H13015  H13016  H13017  H13018
 S13C09  S13C10  S13C11  S13C12  S13C13  S13C14
 H13019  H13020  H13021  H13022 H13023  H13024  H13025  H13026  H13027
 S13009  S13010
 H13028  H13029  H13030  H13031
 S13B01  S13B02  S13B03  S13B04
 H13032  H13033  H13034  H13035  H13036  H13037  H13038  H13039  H13040  H13041
 H13042  H13043  H13044  H13045  H13046  H13047  H13048  H13049  H13050
 S13Q08  S13Q01  S13Q02  S13Q03  S13Q04  S13Q05
 H13051  H13052  H13053  H13054  H13055  H13056  H13057A H13057B H13057C H13057D H13058
 H13059B H13060  H13061  H13062  H13063  H13064  H13065  H13066  H13067  H13068
 H13069  H13070
 S13B23  S13B24  S13B25  S13B26
```

```
 H13071F  H13071I  H13072
 SREDA    H13073A  H13073B  H13073C  H13073D  H13073E
 SRRACEA  SRRACEB  SRRACEC  SRRACED  SRRACEE  SRAGE
 H13074   H13075   H13076   H13077   H13078   H13079
 S13011   S13014
 ;

/*  _O variables are the original values from the survey response */

%Let varlist2 =

 H13001_O  H13002AO  H13002CO  H13002NO  H13002OO  H13002PO  H13002QO  H13002SO  H13002TO  H13002UO
 H13002FO  H13002GO  H13002HO  H13002IO  H13002JO  H13002KO  H13002MO  H13002RO  H13002LO
 H13003_O  H13004_O
 H13005_O  H13006_O  H13007_O  H13008_O  H13009_O  H13010_O  H13011_O  H13012_O  H13013_O  H13014_O
 H13015_O  H13016_O  H13017_O  H13018_O
 S13C09_O  S13C10_O  S13C11_O  S13C12_O  S13C13_O  S13C14_O
 H13019_O  H13020_O  H13021_O  H13022_O  H13023_O  H13024_O  H13025_O  H13026_O  H13027_O
 S13009_O  S13010_O
 H13028_O  H13029_O  H13030_O  H13031_O
 S13B01_O  S13B02_O  S13B03_O  S13B04_O
 H13032_O  H13033_O  H13034_O  H13035_O  H13036_O  H13037_O  H13038_O  H13039_O  H13040_O  H13041_O
 H13042_O  H13043_O  H13044_O  H13045_O  H13046_O  H13047_O  H13048_O  H13049_O  H13050_O
 S13Q08_O  S13Q01_O  S13Q02_O  S13Q03_O  S13Q04_O  S13Q05_O
 H13051_O  H13052_O  H13053_O  H13054_O  H13055_O  H13056_O  H13057AO  H13057BO  H13057CO  H13057DO
 H13058_O
 H13059BO  H13060_O  H13061_O  H13062_O  H13063_O  H13064_O  H13065_O  H13066_O  H13067_O  H13068_O
 H13069_O  H13070_O
 S13B23_O  S13B24_O  S13B25_O  S13B26_O
 H13071FO  H13071IO  H13072_O
 SREDA_O   H13073AO  H13073BO  H13073CO  H13073DO  H13073EO
 SRRACEAO  SRRACEBO  SRRACECO  SRRACEDO  SRRACEEO  SRAGE_O
 H13074_O  H13075_O  H13076_O  H13077_O  H13078_O  H13079_O
 S13011_O  S13014_O
 ;

TITLE  "DoD 2013 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";



DATA MERGESYN;

  SET IN.MERGESYN;

*********************************************************************;
* Code added by Jacqueline Agufa 09/15/2004 to fix name of race variable;
*********************************************************************;

  RENAME SRACEA = SRRACEA;
  RENAME SRACEB = SRRACEB;
  RENAME SRACEC = SRRACEC;
  RENAME SRACED = SRRACED;
  RENAME SRACEE = SRRACEE;


  *** Correct odd height and weights Per Eric Schone;

  IF H13071F NOT IN (-9,.) THEN DO;
    IF H13071F < 2 OR
       H13071F >= 8
    THEN H13071F= -7;
  END;

  IF H13071I NOT IN (-9,.) THEN DO;
    IF H13071I > 11 then H13071I=-7;
  END;

  IF 0 <= H13072 < 40 OR
     H13072 > 500
  THEN H13072= -7;
```

```
   RUN;


   DATA OUT.CSCHM13q;

     LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
     INFORMAT &VARLIST2. 4.;
     %INCLUDE "CSCHM13q.FMT";


   /* label and format statements for original variables */


       SET MERGESYN;



   ****************************************************************;
   **** Recodes for invalid responses:***************************;
   ****************************************************************;


   /* This is a version of the coding scheme and coding tables for the
      FY 2013 HCSDB Form A.
      The following tables outline the coding of screening questions (skip),
      and subsequent items to be answered (or not answered in a series
      following a skip question.) */

   /* First set up new variables that capture the original values */
   /* recode the initial numeric values to the SAS numeric values */
   /* specified in the coding scheme                              */

     SEX=PNSEXCD;
     AGE=INPUT(DAGEQY,8.);

     ARRAY RECODE(*) &VARLIST1;
     ARRAY   ORIG(*) &VARLIST2;

     DO I = 1 to DIM(ORIG);
         ORIG(I) = RECODE(I);
         IF ORIG(I) < 0 THEN DO;
                 IF ORIG(I)= -9 THEN RECODE(I)=.;
            ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
            ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
            ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
            ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
            ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
         END;
     END;
     DROP I;



   /* recode selected responses to be 1=marked, 2=unmarked */

     ARRAY   MARKED(*)
             H13002A H13002C H13002N H13002O H13002P H13002Q H13002S H13002T H13002U
             H13002F H13002G H13002H H13002I H13002J H13002K H13002M H13002R H13002L

             H13057A H13057B H13057C H13057D

             H13073A H13073B H13073C H13073D H13073E
             SRRACEA SRRACEB SRRACEC SRRACED SRRACEE

             ;


     ARRAY INFORMAT(*)
             H13002AO H13002CO H13002NO H13002OO H13002PO H13002QO H13002SO H13002TO H13002UO
             H13002FO H13002GO H13002HO H13002IO H13002JO H13002KO H13002MO H13002RO H13002LO

             H13057AO H13057BO H13057CO H13057DO
```

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```
          H13073AO H13073BO H13073CO H13073DO H13073EO
          SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO

          ;


   DO J=1 TO DIM(INFORMAT);
       IF INFORMAT(J) NOT IN (.,-9) THEN MARKED(J)=1;
       ELSE MARKED(J)=2;
   END;
   DROP J;

   FORMAT
          H13002A H13002C H13002N H13002O H13002P H13002Q H13002S H13002T H13002U
          H13002F H13002G H13002H H13002I H13002J H13002K H13002M H13002R H13002L

          H13057A H13057B H13057C H13057D

          H13073A H13073B H13073C H13073D H13073E
          SRRACEA SRRACEB SRRACEC SRRACED SRRACEE

          MARKED.;


***********************************************************************;

/*  skip coding scheme for all surveys not returned  **/

 IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;



/** Note 1 -- H13003, H13004 health plan usage  **/

   IF H13003 > 0 OR H13003 =.D THEN N1=1;
   ELSE IF H13003=.N  THEN DO;
       IF H13004 NOT=. THEN DO;
          N1=2;
          H13004=.C;
       END;
       ELSE DO;
          N1=3;
          H13004=.N;
       END;
   END;
   ELSE IF H13003=.   THEN N1=4;




/** Note 2 -- H13006,H13007,H13008:  illness or injury **/

   ARRAY NOTE2 H13007 H13008;
   N2MARK=0;
   N2NMISS=0;
   N2NN=0;

   DO OVER NOTE2;
       IF NOTE2 NE . THEN N2NMISS+1;
       IF NOTE2 NOT IN (.N,.) THEN N2MARK+1;
       IF NOTE2 EQ .N THEN N2NN+1;
   END;


   IF H13006=1 AND N2NMISS=0 THEN DO;
       N2=1;
   END;
   ELSE IF H13006 IN (1,.) AND N2NMISS>0 AND N2MARK=0 THEN DO;
       H13006=2;
       N2=2;
       DO OVER NOTE2;
          IF NOTE2=. THEN NOTE2=.N;
```

```
              ELSE NOTE2=.C;
          END;
      END;
      ELSE IF H13006=1 AND N2MARK=1 AND N2NN=1 THEN  DO;
          DO OVER NOTE2;
              IF NOTE2=.N THEN NOTE2=.;
          END;
          N2=3;
      END;
      ELSE IF H13006=1 AND N2MARK>0 THEN DO;
          N2=4;
      END;
      ELSE IF H13006=2 AND N2MARK=1 AND N2NN=1  THEN  DO;
          H13007=.C;
          H13008=.C;
          N2=5;
      END;
      ELSE IF H13006 IN (2,.) AND N2MARK>0 THEN DO;
          H13006=1;
          N2=6;
          DO OVER NOTE2;
              IF NOTE2=.N THEN NOTE2=.;
          END;
      END;
      ELSE IF H13006=2 AND (N2NMISS=0 OR (N2NMISS>0 AND N2MARK=0)) THEN DO;
          N2=7;
          DO OVER NOTE2;
              IF NOTE2=. THEN NOTE2=.N;
              ELSE NOTE2=.C;
          END;
      END;
      ELSE IF H13006=.  AND N2NMISS=0 THEN N2=8;


      DROP N2NMISS N2MARK N2NN;


  /** Note 3 -- H13009,H13010,H13011:  regular or routine healthcare **/

      ARRAY Note3 H13010 H13011;
      N3MARK=0;
      N3NMISS=0;
      N3NN=0;

      DO OVER Note3;
          IF Note3 NE . THEN N3NMISS+1;
          IF Note3 NOT IN (.N,.) THEN N3MARK+1;
          IF Note3 EQ .N THEN N3NN+1;
      END;

      IF H13009=1 AND N3NMISS=0 THEN DO;
           N3=1;
      END;
      ELSE IF H13009 IN (1,.) AND N3NMISS>0 AND N3MARK=0 THEN DO;
          H13009=2;
          N3=2;
          DO OVER Note3;
              IF Note3=. THEN Note3=.N;
              ELSE Note3=.C;
          END;
      END;
      ELSE IF H13009=1 AND N3MARK=1 AND N3NN=1 THEN  DO;
          DO OVER Note3;
              IF Note3=.N THEN Note3=.;
          END;
          N3=3;
      END;
      ELSE IF H13009=1 AND N3MARK>0 THEN DO;
          N3=4;
      END;
      ELSE IF H13009=2 AND N3MARK=1 AND N3NN=1  THEN  DO;
          H13010=.C;
          H13011=.C;
```

```
      N3=5;
   END;
   ELSE IF H13009 IN (2,.) AND N3MARK>0 THEN DO;
      H13009=1;
      N3=6;
      DO OVER Note3;
         IF Note3=.N THEN Note3=.;
      END;
   END;
   ELSE IF H13009=2 AND (N3NMISS=0 OR (N3NMISS>0 AND N3MARK=0)) THEN DO;
      N3=7;
      DO OVER Note3;
         IF Note3=. THEN Note3=.N;
         ELSE Note3=.C;
      END;
   END;
   ELSE IF H13009=.  AND N3NMISS=0 THEN N3=8;


   DROP N3NMISS N3MARK N3NN;


/** Note 4 -- H13013, H13014-H13018: doctor's office or clinic **/

   ARRAY NOTE4  H13014-H13018;

   N4MARK=0;
   N4NMISS=0;

   DO OVER NOTE4;
      IF NOTE4 NE . THEN N4NMISS+1;
      IF NOTE4 NOT IN  (., .N) THEN N4MARK+1;
   END;


   IF H13013=1 THEN DO;
      N4=1;
      DO OVER NOTE4;
         IF NOTE4=. THEN NOTE4=.N;
         ELSE NOTE4=.C;
      END;
   END;
   ELSE IF H13013 IN (2,3,4,5,6,7,.) AND N4NMISS>0 AND N4MARK=0 THEN DO;
      H13013=1;
      N4=2;
      DO OVER NOTE4;
         IF NOTE4=. THEN NOTE4=.N;
         ELSE NOTE4=.C;
      END;
   END;
   ELSE IF H13013 IN (2,3,4,5,6,7) AND (N4NMISS=0 OR N4MARK>0) THEN DO;
      DO OVER NOTE4;
         IF NOTE4=.N THEN NOTE4=.;
      END;
      N4=3;
   END;
   ELSE IF H13013=.  AND N4NMISS=0 THEN N4=4;
   ELSE IF H13013 IN (.) AND N4MARK>0 THEN DO;
      N4=5;
      DO OVER NOTE4;
         IF NOTE4=.N THEN NOTE4=.;
      END;
   END;

   DROP N4NMISS N4MARK;


/** Note 5 -- H13015, H13016-H13017: doctor's office or clinic- treatment **/

 IF H13015 IN (.N,.C) THEN N5=1;
 ELSE IF H13015= 1  THEN N5=2;
 ELSE IF H13015 IN (2,.) AND H13016 IN (1,2) THEN  DO;
      N5=3;
```

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```
          H13015=1;
    END;
    ELSE IF H13015 IN (2,.) AND (H13016 IN (3,4,.) AND H13017 IN (1,2)) THEN  DO;
          N5=4;
          H13015=1;
    END;
    ELSE IF H13015 IN (2) AND (H13016 IN (3,4,.) AND H13017 IN (3,4,.)) THEN  DO;
          N5=5;
          IF H13016 = . THEN H13016 = .N;
          ELSE H13016 = .C;
          IF H13017 = . THEN H13017 = .N;
          ELSE H13017 = .C;
    END;
    ELSE IF H13015 IN (.) AND (H13016 IN (3,4,.) AND H13017 IN (3,4,.)) THEN  DO;
          N5=6;
    END;




/** Note 5A1 -- S13C09, S13C10: special medical equipment **/

    IF S13C09 = 1 AND S13C10 IN (1,2,3,.) THEN N5A1=1;
    ELSE IF S13C09 IN (1,.) AND S13C10 = .N THEN DO;
          N5A1=2;
          S13C09=2;
          S13C10=.C;
    END;
    ELSE IF S13C09 IN (2,.) AND S13C10 IN (1,2,3) THEN DO;
          N5A1=3;
          S13C09=1;
    END;
    ELSE IF S13C09 = 2 AND S13C10 IN (.N,.) THEN DO;
          N5A1=4;
          IF S13C10 = . THEN S13C10 = .N;
          ELSE S13C10 = .C;
    END;
    ELSE IF S13C09 = . AND S13C10 = . THEN N5A1=5;




/** Note 5A2 -- S13C11, S13C12: special therapy **/

    IF S13C11 = 1 AND S13C12 IN (1,2,3,.) THEN N5A2=1;
    ELSE IF S13C11 IN (1,.) AND S13C12 = .N THEN DO;
          N5A2=2;
          S13C11=2;
          S13C12=.C;
    END;
    ELSE IF S13C11 IN (2,.) AND S13C12 IN (1,2,3) THEN DO;
          N5A2=3;
          S13C11=1;
    END;
    ELSE IF S13C11 = 2 AND S13C12 IN (.N,.) THEN DO;
          N5A2=4;
          IF S13C12 = . THEN S13C12 = .N;
          ELSE S13C12 = .C;
    END;
    ELSE IF S13C11 = . AND S13C12 = . THEN N5A2=5;




/** Note 5A3 -- S13C13, S13C14: home health care **/

    IF S13C13 = 1 AND S13C14 IN (1,2,3,.) THEN N5A3=1;
    ELSE IF S13C13 IN (1,.) AND S13C14 = .N THEN DO;
          N5A3=2;
          S13C13=2;
          S13C14=.C;
    END;
    ELSE IF S13C13 IN (2,.) AND S13C14 IN (1,2,3) THEN DO;
          N5A3=3;
          S13C13=1;
    END;
```

```
   ELSE IF S13C13 = 2 AND S13C14 IN (.N,.) THEN DO;
      N5A3=4;
      IF S13C14 = . THEN S13C14 = .N;
      ELSE S13C14 = .C;
   END;
   ELSE IF S13C13 = . AND S13C14 = . THEN N5A3=5;



/** Note 6 -- H13019, H13020-H13027, S13009: personal doctor **/
/* MER 07/01/09 */

   ARRAY NOTE6  H13021-H13024;

   N6MARK=0;

   DO OVER NOTE6;
      IF NOTE6 NOT IN  (., .N) THEN N6MARK+1;
   END;

   IF H13020 NOT IN (0,.) THEN N6MARK+1;


   IF H13019 = 1  THEN DO;
      N6=1;
      IF H13027=.N THEN H13027=.;
   END;
   ELSE IF H13019 in (2,.) AND H13027 in (0,1,2,3,4,5,6,7,8,9,10) THEN DO;
      N6=2;
      H13019=1;
   END;
   ELSE IF H13019 in (2,.) AND N6MARK>0 AND H13027 = . THEN DO;
      N6=3;
      H13019=1;
   END;
   ELSE IF H13019 = 2 AND N6MARK>0 AND H13027 = .N THEN DO;
      N6=4;
      IF H13020=. THEN H13020=.N;
      ELSE H13020=.C;
      DO OVER NOTE6;
         IF NOTE6=. THEN NOTE6=.N;
         ELSE NOTE6=.C;
      END;
      IF H13025=. THEN H13025=.N;
      ELSE H13025=.C;
      IF H13026=. THEN H13026=.N;
      ELSE H13026=.C;
      IF S13009=. THEN S13009=.N;
      ELSE S13009=.C;
      H13027=.C;
   END;
   ELSE IF H13019 = 2 AND N6MARK=0 AND H13027 in (.N,.) THEN DO;
      N6=5;
      IF H13020=. THEN H13020=.N;
      ELSE H13020=.C;
      DO OVER NOTE6;
         IF NOTE6=. THEN NOTE6=.N;
         ELSE NOTE6=.C;
      END;
      IF H13025=. THEN H13025=.N;
      ELSE H13025=.C;
      IF H13026=. THEN H13026=.N;
      ELSE H13026=.C;
      IF S13009=. THEN S13009=.N;
      ELSE S13009=.C;
      IF H13027=. THEN H13027=.N;
      ELSE H13027=.C;
   END;
   ELSE IF H13019 = . AND H13027 = .N THEN DO; /* MER 07/31/09 combined rows 6 and 7 */
      N6=6;
      H13019=2;
      IF H13020=. THEN H13020=.N;
      ELSE H13020=.C;
```

```
      DO OVER NOTE6;
         IF NOTE6=. THEN NOTE6=.N;
         ELSE NOTE6=.C;
      END;
      IF H13025=. THEN H13025=.N;
      ELSE H13025=.C;
      IF H13026=. THEN H13026=.N;
      ELSE H13026=.C;
      IF S13009=. THEN S13009=.N;
      ELSE S13009=.C;
      H13027=.C;
   END;
   ELSE IF H13019 = . AND N6MARK=0 AND H13027 = . THEN N6=7;

   DROP N6MARK;


/** Note 7 -- H13020, H13021-H13026: personal doctor visit **/

   ARRAY NOTE7  H13021-H13024;

  N7MARK=0;
  N7NMISS=0;

  DO OVER NOTE7;
      IF NOTE7 NE . THEN N7NMISS+1;
      IF NOTE7 NOT IN  (., .N) THEN N7MARK+1;
   END;


   IF H13020 IN (.N, .C) THEN N7=1;
   ELSE IF H13020=0 THEN DO;
      N7=2;
      DO OVER NOTE7;
         IF NOTE7=. THEN NOTE7=.N;
         ELSE NOTE7=.C;
      END;
      IF H13025=. THEN H13025=.N;
      ELSE H13025=.C;
      IF H13026=. THEN H13026=.N;
      ELSE H13026=.C;
   END;
   ELSE IF H13020 IN (1,2,3,4,5,6,.) AND N7NMISS>0 AND N7MARK=0 THEN DO;
      H13020=0;
      N7=3;
      DO OVER NOTE7;
         IF NOTE7=. THEN NOTE7=.N;
         ELSE NOTE7=.C;
      END;
      IF H13025=. THEN H13025=.N;
      ELSE H13025=.C;
      IF H13026=. THEN H13026=.N;
      ELSE H13026=.C;
   END;
   ELSE IF H13020 IN (1,2,3,4,5,6,.) AND (N7NMISS=0 OR N7MARK>0) THEN DO;
      DO OVER NOTE7;
         IF NOTE7=.N THEN NOTE7=.;
      END;
      N7=4;
   END;

   DROP N7NMISS N7MARK;


/** Note 8 -- H13025, H13026:  care from another doctor or healthcare provider **/

   IF H13025 IN (.N, .C) THEN N8=1;
   ELSE IF H13025=1 THEN N8=2;
   ELSE IF H13025 IN (2,.) AND H13026 IN (1,2,3,4) THEN DO;
      H13025=1;
      N8=3;
   END;
   ELSE IF H13025=2 AND H13026 IN (.) THEN DO;
```

```
      H13026=.N;
      N8=4;
   END;
   ELSE IF H13025=.  AND H13026=.  THEN N8=5;


/** Note 8_01 -- S13009, S13010:  problem getting new personal doctor or nurse **/

   IF S13009 IN (.N,.C) THEN N8_01=1; /* MER 07/31/09 gave each S13009 value its own row for
analysis purposes */
   ELSE IF S13009=1 THEN DO;
      N8_01=2;
      IF S13010=. THEN S13010=.N;
      ELSE S13010=.C;
   END;
   ELSE IF S13009=2 THEN N8_01=3;
   ELSE IF S13009=. THEN N8_01=4;  /* MER 07/31/09 eliminated backward coding for missing S13009
*/


/** Note 9 -- H13028, H13029-H13031:  needed to see a specialist in last 12 months **/

   ARRAY NOTE9  H13029 H13031;

   N9MARK=0;
   N9NMISS=0;

   DO OVER NOTE9;
      IF NOTE9 NE . THEN N9NMISS+1;
      IF NOTE9 NOT IN  (., .N) THEN N9MARK+1;
   END;

   IF H13030 NE . THEN N9NMISS+1;
   IF H13030 NOT IN (.,0) THEN N9MARK+1;


   IF H13028 IN (1)  THEN DO;
      N9=1;
      IF H13029=.N THEN H13029=.;
   END;
   ELSE IF H13028 in (2,.) AND N9MARK>0 THEN DO;
      N9=2;
      H13028=1;
      IF H13029=.N THEN H13029=.;
   END;
   ELSE IF H13028 in (2) THEN DO;
      N9=3;
      DO OVER NOTE9;
         IF NOTE9=. THEN NOTE9=.N;
         ELSE NOTE9=.C;
      END;
      IF H13030=. THEN H13030=.N;
      ELSE H13030=.C;
   END;
   ELSE IF H13028=.  AND N9NMISS>0 AND N9MARK=0 THEN DO;
      N9=4;
      H13028=2;
      DO OVER NOTE9;
         IF NOTE9=. THEN NOTE9=.N;
         ELSE NOTE9=.C;
      END;
      IF H13030=. THEN H13030=.N;
      ELSE H13030=.C;
   END;
   ELSE IF H13028=.  AND N9NMISS=0 THEN N9=5;

   DROP N9NMISS N9MARK;


/** Note 10 -- H13030, H13031: saw a specialist in last 12 months **/

   IF H13030 IN (.N,.C) AND H13031 IN (.N,.C) THEN N10=1;
   ELSE IF H13030 IN (1,2,3,4,5) AND H13031 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N10=2;
```

```
     ELSE IF H13030 IN (1,2,3,4,5,.) AND H13031 = .N THEN DO;
        N10=3;
        H13030=0;
        H13031=.C;
     END;
     ELSE IF H13030 = 0 THEN DO;
        N10=4;
        IF H13031 = . THEN H13031 = .N;
        ELSE H13031 = .C;
     END;
     ELSE IF H13030 = . AND H13031 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N10=5;


/** Note 10_B1 -- S13B02, S13B03-S13B04: overall mental health **/

   ARRAY NOTE10B1  S13B03-S13B04;

   N10B1MARK=0;
   N10B1NMISS=0;

   DO OVER NOTE10B1;
      IF NOTE10B1 NE . THEN N10B1NMISS+1;
      IF NOTE10B1 NOT IN  (., .N) THEN N10B1MARK+1;
   END;

   IF S13B02 = 1 THEN DO;
      N10_B1=1;
      DO OVER NOTE10B1;
         IF NOTE10B1=.N THEN NOTE10B1=.;
      END;
   END;
   ELSE IF S13B02 IN (2,.) AND (N10B1MARK>0) THEN DO;
      N10_B1=2;
      S13B02=1;
      DO OVER NOTE10B1;
         IF NOTE10B1=.N THEN NOTE10B1=.;
      END;
   END;
   ELSE IF S13B02=2  AND (N10B1NMISS=0 OR (N10B1NMISS > 0 AND N10B1MARK = 0)) THEN DO;
      N10_B1=3;
      DO OVER NOTE10B1;
         IF NOTE10B1 = . THEN NOTE10B1=.N;
         ELSE NOTE10B1 = .C;
      END;
   END;
   ELSE IF S13B02 IN (.) AND (N10B1NMISS > 0 AND N10B1MARK = 0) THEN DO;
      N10_B1=4;
      S13B02=2;
      DO OVER NOTE10B1;
         IF NOTE10B1 = . THEN NOTE10B1=.N;
         ELSE NOTE10B1 = .C;
      END;
   END;
   ELSE IF S13B02 IN (.) AND N10B1NMISS=0 THEN N10_B1=5;

   DROP N10B1NMISS N10B1MARK;


/** Note 11 -- H13032, H13033:  tried to get care, tests, or treatment from health plan**/

   IF H13032=1 AND H13033 IN (1,2,3,4,.) THEN N11=1;
   ELSE IF H13032 IN (1,.) AND H13033=.N THEN DO;
      H13032=2;
      H13033=.C;
      N11=2;
   END;
   ELSE IF H13032 IN (2,.) AND H13033 IN (1,2,3,4) THEN DO;
      H13032=1;
      N11=3;
   END;
   ELSE IF H13032=2 AND H13033 IN (.,.N) THEN DO;
      IF H13033=. THEN H13033=.N;
      ELSE H13033=.C;
```

```
        N11=4;
    END;
    ELSE IF H13032=.  AND H13033=.  THEN N11=5;


/** Note 12 -- H13034, H13035:  look for info in written materials or on internet**/
    IF H13034=1 AND H13035 IN (1,2,3,4,.) THEN N12=1;
    ELSE IF H13034 IN (1,.) AND H13035=.N THEN DO;
        N12=2;
        H13034=2;
        H13035=.C;
    END;
    ELSE IF H13034 IN (2,.) AND H13035 IN (1,2,3,4) THEN DO;
        N12=3;
        H13034=1;
    END;
    ELSE IF H13034=2 AND H13035 IN (.N,.) THEN DO;
        N12=4;
        IF H13035=. THEN H13035=.N;
        ELSE H13035=.C;
    END;
    ELSE IF H13034=. AND H13035=. THEN N12=5;


/** Note 13 -- H13036, H13037:  tried to get cost of service/equipment from health plan**/

    IF H13036=1 AND H13037 IN (1,2,3,4,.) THEN N13=1;
    ELSE IF H13036 IN (1,.) AND H13037=.N THEN DO;
        H13036=2;
        H13037=.C;
        N13=2;
    END;
    ELSE IF H13036 IN (2,.) AND H13037 IN (1,2,3,4) THEN DO;
        H13036=1;
        N13=3;
    END;
    ELSE IF H13036=2 AND H13037 IN (.,.N) THEN DO;
        IF H13037=. THEN H13037=.N;
        ELSE H13037=.C;
        N13=4;
    END;
    ELSE IF H13036=.  AND H13037=.  THEN N13=5;


/** Note 14 -- H13038, H13039:  tried to get cost of prescription meds from health plan**/

    IF H13038=1 AND H13039 IN (1,2,3,4,.) THEN N14=1;
    ELSE IF H13038 IN (1,.) AND H13039=.N THEN DO;
        H13038=2;
        H13039=.C;
        N14=2;
    END;
    ELSE IF H13038 IN (2,.) AND H13039 IN (1,2,3,4) THEN DO;
        H13038=1;
        N14=3;
    END;
    ELSE IF H13038=2 AND H13039 IN (.,.N) THEN DO;
        IF H13039=. THEN H13039=.N;
        ELSE H13039=.C;
        N14=4;
    END;
    ELSE IF H13038=.  AND H13039=.  THEN N14=5;


/** Note 15 -- H13040, H13041-H13042: tried to use health plan's customer service  **/

    ARRAY NOTE15  H13041-H13042;

    N15MARK=0;
    N15NMISS=0;

    DO OVER NOTE15;
        IF NOTE15 NE . THEN N15NMISS+1;
```

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```
       IF NOTE15 NOT IN  (., .N) THEN N15MARK+1;
    END;

  IF H13040 = 1 AND (N15MARK>0 OR N15NMISS=0) THEN DO;
     DO OVER NOTE15;
        IF NOTE15=.N THEN NOTE15=.;
     END;
     N15=1;
  END;
  ELSE IF H13040 IN (1,.) AND (N15NMISS > 0 AND N15MARK = 0) THEN DO;
     N15=2;
     H13040=2;
     DO OVER NOTE15;
        IF NOTE15 = . THEN NOTE15=.N;
        ELSE NOTE15 = .C;
     END;
  END;
  ELSE IF H13040 IN (2,.) AND (N15MARK>0) THEN DO;
     N15=3;
     H13040=1;
     DO OVER NOTE15;
        IF NOTE15=.N THEN NOTE15=.;
     END;
  END;
  ELSE IF H13040=2  AND (N15NMISS=0 OR (N15NMISS > 0 AND N15MARK = 0)) THEN DO;
     N15=4;
     DO OVER NOTE15;
        IF NOTE15 = . THEN NOTE15=.N;
        ELSE NOTE15 = .C;
     END;
  END;
  ELSE IF H13040 IN (.) AND N15NMISS=0 THEN N15=5;

  DROP N15NMISS N15MARK;


/** Note 16 -- H13043, H13044:  received forms to fill out from health plan **/

  IF H13043=1 AND H13044 IN (1,2,3,4,.) THEN N16=1;
  ELSE IF H13043 IN (1,.) AND H13044=.N THEN DO;
     H13043=2;
     H13044=.C;
     N16=2;
  END;
  ELSE IF H13043 IN (2,.) AND H13044 IN (1,2,3,4) THEN DO;
     H13043=1;
     N16=3;
  END;
  ELSE IF H13043=2 AND H13044 IN (.,.N) THEN DO;
     IF H13044=. THEN H13044=.N;
     ELSE H13044=.C;
     N16=4;
  END;
  ELSE IF H13043=.  AND H13044=.  THEN N16=5;


/** Note 17 -- H13045, H13046-H13047: claims to health plan **/

  ARRAY NOTE17 H13046-H13047;
  N17MARK=0;
  N17NDK=0;

  DO OVER NOTE17;
     IF NOTE17 NOT IN (.N,.D,.) THEN N17MARK+1; /* At least one is marked */
     IF NOTE17 NOT IN (.,.D) THEN N17NDK+1; /* All are missing or blank or dnk */
  END;

  IF H13045=1 AND (N17MARK>0 OR N17NDK=0) THEN DO;
     N17=1;
     DO OVER NOTE17;
        IF NOTE17=.N THEN NOTE17=.;
     END;
  END;
```

```
   ELSE IF H13045 IN (1,.,.D) AND N17MARK=0 AND N17NDK>0 THEN DO;
      N17=2;
      H13045=2;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
          ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H13045 IN (2,.,.D) AND N17MARK>0
        THEN DO;
      H13045=1;
      N17=3;
      DO OVER NOTE17;
         IF NOTE17=.N THEN NOTE17=.;
      END;
   END;
   ELSE IF H13045 IN (2) AND N17MARK=0 THEN DO;
      N17=4;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
          ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H13045 IN (.D) AND N17NDK=0 THEN DO;
      N17=5;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
          ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H13045 IN (.) AND N17NDK=0 THEN N17=6;

   DROP N17MARK N17NDK;

/** NOTE17_Q0  -- S13Q08, S11Q01-S11Q05: Age and colon cancer tests  **/
   ARRAY NOTE17Q0 S13Q01-S13Q05;
   N17Q0MARK=0;

   IF S13Q08 = 1 THEN DO;
      N17_Q0 = 1;
      DO OVER NOTE17Q0;
         IF NOTE17Q0 = . THEN NOTE17Q0 = .N;
          ELSE NOTE17Q0 = .C;
      END;
   END;
   ELSE IF S13Q08 = 2 THEN N17_Q0 = 2;
   ELSE IF S13Q08 = . THEN DO;
       DO OVER NOTE17Q0;
         IF NOTE17Q0 NE . THEN N17Q0MARK = N17Q0MARK+1;
       END;
       IF N17Q0MARK>0 THEN DO;
          N17_Q0 = 3;
          S13Q08 = 2;
       END;
       ELSE IF N17Q0MARK = 0 THEN N17_Q0=4;
   END;

DROP N17Q0MARK;

/** NOTE17_Q1  -- S13Q01, S13Q02: Blood stool test   **/

   IF S13Q01 IN (.N, .C) AND S13Q02 IN (.N, .C) THEN N17_Q1=0;

   ELSE IF S13Q01=1 AND S13Q02 IN (1,2,3,4,.,.D) THEN N17_Q1=1;
   ELSE IF S13Q01 IN (1,.) AND S13Q02=.N THEN DO;
      S13Q01=2;
      S13Q02=.C;
      N17_Q1=2;
   END;
   ELSE IF S13Q01 IN (2,.D, .) AND S13Q02 IN (1,2,3,4) THEN DO;
      S13Q01=1;
      N17_Q1=3;
   END;
```

```
   ELSE IF S13Q01 IN (2, .D) AND S13Q02 IN (.N,.,.D) THEN DO;
      IF S13Q02=. THEN   S13Q02=.N;
      ELSE S13Q02=.C;
      N17_Q1=4;
   END;
   ELSE IF S13Q01 <0  AND S13Q02 < 0  THEN N17_Q1=5;



/** Note 17_Q2 -- S13Q03, S13Q04-S13Q05: Sigmoidoscopy and colonoscopy **/

   IF S13Q03 IN (.N, .C) AND S13Q04 IN (.N, .C) AND S13Q05 IN (.N, .C) THEN N17_Q2=0;

   IF N17_Q2 NE 0 THEN DO;

   ARRAY NOTE17Q2 S13Q04-S13Q05;
   N17Q2MARK=0;
   N17Q2NMISS=0;
   N17Q2DNK=0;

   DO OVER NOTE17Q2;
      IF NOTE17Q2 NE . THEN N17Q2NMISS+1;
      IF NOTE17Q2 NOT IN (.N,.) THEN N17Q2MARK+1;
      IF NOTE17Q2 = .D THEN N17Q2DNK+1;
   END;

   IF S13Q03=1 AND (N17Q2NMISS=0 OR N17Q2MARK>0) THEN N17_Q2=1;  /* N17Q2NMISS=0 means "all are
blank" */
                                                     /* N17Q2MARK>0 means "unmarked or
don't know" OR "at least one is marked" */
   ELSE IF S13Q03 IN (1,.,.D) AND N17Q2NMISS>0 AND N17Q2MARK=0 THEN DO;  /* "blank or NA" */
      N17_Q2=2;
      S13Q03=2;
      DO OVER NOTE17Q2;
         IF NOTE17Q2=. THEN NOTE17Q2=.N;
         ELSE NOTE17Q2=.C;
      END;
   END;
   ELSE IF S13Q03 IN (2,.,.D) AND N17Q2MARK>N17Q2DNK THEN DO;  /* "at least one is marked" */
      N17_Q2=3;
      S13Q03=1;
   END;
   ELSE IF S13Q03 = 2 AND N17Q2MARK=N17Q2DNK THEN DO;  /* N17Q2MARK=N17Q2DNK means none are
"marked".  This translates to */
                                           /* either "all are blank" OR "blank or NA"
OR "unmarked or don't know */
      N17_Q2=4;
      DO OVER NOTE17Q2;
         IF NOTE17Q2=. THEN NOTE17Q2=.N;
         ELSE NOTE17Q2=.C;
      END;
   END;
   ELSE IF S13Q03 = .D AND (N17Q2NMISS=0 OR (N17Q2DNK>0 AND N17Q2DNK=N17Q2MARK)) THEN DO;  /*
N17Q2NMISS=0 means "all are blank" */
                                                                                  /*
N17Q2DNK=N17Q2MARK means none are "marked", but combined with */
                                                                                  /*
N17Q2DNK>0 this translates to "unmarked or don't know" */
      N17_Q2=5;
      DO OVER NOTE17Q2;
         IF NOTE17Q2=. THEN NOTE17Q2=.N;
         ELSE NOTE17Q2=.C;
      END;
   END;
   ELSE IF S13Q03 =. AND (N17Q2NMISS=0 OR (N17Q2DNK>0 AND N17Q2DNK=N17Q2MARK)) THEN N17_Q2=6;  /*
Same as above for N17_Q2=5 */

   DROP N17Q2NMISS N17Q2MARK N17Q2DNK;

   END;

/** Note 18 -- smoking:  H13053, H13054-H13056, H13057A-H13057D  **/
```

```
   ARRAY NOTE18a H13054 H13055 H13056;
   ARRAY NOTE18b H13057A--H13057D;

   N18MARK = 0;

   DO OVER NOTE18b;
       IF NOTE18b NOT IN (2,.) THEN N18MARK+1;
   END;

   IF H13053 IN (3,4,.) THEN N18=1;
   ELSE IF H13053 IN (2,.D) AND N18MARK = 0 THEN DO;
       N18=2;
       DO OVER NOTE18a;
           IF NOTE18a=. THEN NOTE18a=.N;
           ELSE NOTE18a=.C;
       END;
       DO OVER NOTE18b;
           IF NOTE18b IN (2,.) THEN NOTE18b=.N;
           ELSE NOTE18b=.C;
       END;
   END;
   ELSE IF H13053 = 2 AND N18MARK > 0 THEN DO;
       N18=3;
       H13053=.;
   END;
   ELSE IF H13053 = .D AND N18MARK > 0 THEN DO;
       N18=4;
       DO OVER NOTE18a;
           IF NOTE18a=. THEN NOTE18a=.N;
           ELSE NOTE18a=.C;
       END;
       DO OVER NOTE18b;
           IF NOTE18b IN (2,.) THEN NOTE18b=.N;
           ELSE NOTE18b=.C;
       END;
   END;

   DROP N18MARK;


/** Note 19a - gender H13058, SEX, H13059B--H13064,
              XSEXA */

/* 1/21/98 use SRSEX & responses to gender specific questions
    if there is discrepancy between SRSEX and SEX */
/* set imputed FMALE and MALE based on gender specific questions */


   ARRAY fmaleval H13059B H13060 H13061 H13062 H13063 H13064
                    ;

   cntfmale=0;
   DO OVER fmaleval;              /* mammogram/pap smear/PREGNANT*/
       IF fmaleval>0 THEN cntfmale=cntfmale+1;
   END;

   IF cntfmale>0 THEN FMALE=1;
   ELSE FMALE = 0;


   IF H13058=. THEN DO;
       IF (SEX='F' AND FMALE) THEN DO;
           N19a=1;
           XSEXA=2;
       END;
       ELSE IF (SEX='F' AND FMALE=0) THEN DO;
           N19a=2;
           XSEXA=2;
       END;
       ELSE IF (SEX='M' AND FMALE) THEN DO;
           N19a=3;
           XSEXA=1;
       END;
```

```
        ELSE IF (SEX='M' AND FMALE=0) THEN DO;
            N19a=4;
            XSEXA=1;
        END;
        ELSE IF ((SEX IN ('Z',' ') AND FMALE)) THEN DO;
            N19a=5;
            XSEXA=2;
        END;
        ELSE IF (SEX='Z' AND FMALE=0) THEN DO;
            N19a=6;
            XSEXA=.;
        END;
        ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
            N19a=7;
            XSEXA=.;
        END;
    END;
    ELSE IF (H13058=1) THEN DO;
        IF FMALE=0 THEN DO;
            N19a=8;
            XSEXA=1;
        END;
        ELSE IF FMALE THEN DO;
            IF SEX='F' THEN DO;
                N19a=9;
                XSEXA=2;
            END;
            ELSE DO;
                N19a=10;
                XSEXA=1;
            END;
        END;
    END;
    ELSE IF (H13058=2) THEN DO;
        IF FMALE THEN DO;
          N19a=11;
          XSEXA=2;
        END;
        ELSE IF FMALE=0 THEN DO;
            IF SEX='M' THEN DO;
              N19a=12;
              XSEXA=1;
            END;
            ELSE DO;
                N19a=13;
                XSEXA=2;
            END;
        END;
    END;
END;


/* Note 19b - gender vs mammogram/paps/pregnancy */

    ARRAY NOTE19b H13059B H13060 H13061 H13062 H13063 H13064
                  ;
  IF XSEXA=1 THEN DO;   /* male */
     IF FMALE=0 THEN DO;
        N19b=1;
        DO OVER NOTE19b;
           NOTE19b=.N;
        END;
     END;   /* valid skip */
     ELSE IF FMALE=1 THEN DO;
        N19b=2;
        DO OVER NOTE19b;
           IF NOTE19b=. THEN NOTE19b = .N;
           ELSE NOTE19b=.C;
        END;
     END;   /* inconsistent response */
  END;
  ELSE IF XSEXA=2 THEN  N19b=3; /* female */
  ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
     N19b=4;
```

```
      DO OVER NOTE19b;
         NOTE19b=.;
      END;
   END;



   DROP FMALE CNTFMALE;



/* Note 20- breast exam for female 40 or over  */

   IF XSEXA=1 THEN DO;  /* male */
      IF  (H13060=.C OR H13060=.N) AND (H13061=.C OR H13061=.N)
      THEN N20 = 1;
   END;
   ELSE IF XSEXA=2 THEN DO;
      IF H13060=2 THEN N20=2;             /* female 40 or over */
      ELSE IF H13060=1 THEN DO;    /* female < 40 */
         IF H13061 NE . THEN H13061=.C;
         ELSE H13061=.N;
         N20=3;
      END;
      ELSE IF H13060=. THEN DO;
         IF H13061 NE . THEN DO;
            H13060=2;
            N20=4;
         END;
         ELSE IF H13061=.  THEN DO;
            IF AGE<40 THEN DO;
               H13060 = 1;
               H13061=.N;
               N20=5;
            END;
            ELSE IF AGE >= 40 THEN DO;
               H13060=2;
               N20=6;
            END;
            ELSE IF AGE=. THEN N20=7;
         END;
      END;
   END;
   ELSE IF XSEXA=. THEN N20=8;



/* Note 21 - gender vs Pregnancy */


   IF XSEXA=1 THEN N21=1;            /* male     */
   ELSE IF XSEXA=2 THEN DO;          /* female   */
      IF H13062=1 THEN DO;          /* pregnant */
         IF H13063=1 THEN DO;
            N21=2;
            IF H13064=. THEN H13064 = .N;
            ELSE H13064=.C;
         END;
         ELSE IF H13063=2 AND H13064 IN (2) THEN DO;
            N21=3;
            H13064=.;
         END;
         ELSE IF H13063=2 AND H13064 IN (4,3,1,.) THEN DO;
            N21=4;
         END;
         ELSE IF H13063 IN (3,.) THEN N21=5;
      END;
      ELSE IF H13062=2 THEN DO;
         IF H13063=. THEN H13063 = .N;
         ELSE H13063=.C;
         N21=6;
      END;
      ELSE IF H13062=3 THEN DO;
         N21=7;
```

```
            IF H13063=. THEN H13063 = .N;
            ELSE H13063=.C;
            IF H13064=. THEN H13064=.N;
            ELSE H13064=.C;
        END;
      ELSE IF H13062 IN (.) THEN DO;
            IF H13063=1 THEN DO;
                N21=8;
                H13062=1;
                IF H13064=. THEN H13064 = .N;
                ELSE H13064=.C;
            END;
            ELSE IF H13063=2 AND H13064 IN (2) THEN DO;
                N21=9;
                H13062=1;
                H13064=.;
            END;
            ELSE IF H13063=2 AND H13064 IN (4,3,1,.) THEN DO;
                H13062=1;
                N21=10;
            END;
            ELSE IF H13063=3 THEN DO;
                H13062=1;
                N21=11;
            END;
            ELSE IF H13063=. THEN DO;
                N21=12;
            END;
        END;
    END;
  ELSE IF XSEXA=. AND H13062 IN (.) THEN N21=13;



  DROP AGE SEX;



/** Note 22 -- H13067, H13068:  seen doctor 3 or more times for same condition **/

  IF H13067=1 THEN N22=1;
  ELSE IF H13067 IN (2,.) AND H13068 IN (1,2) THEN DO;
     H13067=1;
     N22=2;
  END;
  ELSE IF H13067=2 AND H13068 IN (.) THEN DO;
     H13068=.N;
     N22=3;
  END;
  ELSE IF H13067=.  AND H13068=.  THEN N22=4;



/** Note 23 -- H13069, H13070:  need or take medicine prescribed by a doctor **/

  IF H13069=1 THEN N23=1;
  ELSE IF H13069 IN (2,.) AND H13070 IN (1,2) THEN DO;
     H13069=1;
     N23=2;
  END;
  ELSE IF H13069=2 AND H13070 IN (.) THEN DO;
     H13070=.N;
     N23=3;
  END;
  ELSE IF H13069=.  AND H13070=.  THEN N23=4;



/** Note 24 -- H13073, H13073A-H13073E: Hispanic or Latino origin or descent **/

  /* JMA
  ****Multiple responses were given to this question so H13073 is being created
```

```
   ****from the multiple responses.;
   */


   IF H13073B=1 THEN DO;
      N24=1;
      H13073=2;
   END;
   ELSE IF H13073E=1 THEN DO;
      N24=2;
      H13073=5;
   END;
   ELSE IF H13073C=1 THEN DO;
      N24=3;
      H13073=3;
   END;
   ELSE IF H13073D=1 THEN DO;
      N24=4;
      H13073=4;
   END;
   ELSE IF H13073A=1 THEN DO;
      N24=5;
      H13073=1;
   END;
   ELSE IF H13073A IN (2,.) AND H13073B IN (2,.) AND H13073C IN (2,.) AND
          H13073D IN (2,.) AND H13073E IN (2,.) THEN DO;
      N24=6;
      H13073=.;

   END;


/** Note 25 -- currently covered by Medicare:  H13074, H13075-H13079 **/

   ARRAY NOTE25 H13075-H13079;

   N25MARK = 0;

   DO OVER NOTE25;
      IF NOTE25 NOT IN (2,.D,.) THEN N25MARK+1;
   END;

   IF H13074 = 1 THEN N25=1;
   ELSE IF H13074 IN (2,.D) AND N25MARK = 0 THEN DO;
      N25=2;
      DO OVER NOTE25;
          IF NOTE25=. THEN NOTE25=.N;
          ELSE NOTE25=.C;
      END;
   END;
   ELSE IF H13074 IN (2,.D,.) AND N25MARK > 0 THEN DO;
      N25=3;
      H13074=1;
   END;
   ELSE IF H13074 = . AND N25MARK = 0 THEN N25=4;

   DROP N25MARK;


NOSURVEY:

/* missing values */

   ARRAY MISS MISS_9 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
   MISS_TOT=0;
   DO OVER MISS;
      MISS = 0;
   END;
   ARRAY MISSARAY &VARLIST2.;

   DO OVER MISSARAY;
      IF (MISSARAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
      ELSE IF (MISSARAY EQ -7) THEN MISS_7 = MISS_7 + 1;
```

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```
      ELSE IF (MISSARAY EQ -6) THEN MISS_6 = MISS_6 + 1;
      ELSE IF (MISSARAY EQ -5) THEN MISS_5 = MISS_5 + 1;
      ELSE IF (MISSARAY EQ -4) THEN MISS_4 = MISS_4 + 1;
      ELSE IF (MISSARAY EQ -1) THEN MISS_1 = MISS_1 + 1;
   END;
  DO OVER MISS;
      MISS_TOT=MISS_TOT + MISS;
   END;

*******************************************;

 OUTPUT;

RUN;


proc contents data=out.cschm13q;
run;
```

F.2.F   Q3FY2013\PROGRAMS\CODINGSCHEME\CSCHM13Q.FMT - Include file for Coding Scheme for Quarter 3 FY2013.

```
/*  Formats for original answers to survey questions,
     after variables have been recoded */

       FORMAT H13001   H13001_O YN.

              H13003   H13003_O HPLAN1_.
              H13004   H13004_O HPTIME.


              H13005   H13005_O PLACE.

              H13006 H13006_O   H13009 H13009_O   H13019 H13019_O
                 YN.

              H13007   H13007_O OFTEN2_.
              H13008   H13008_O TIME1_.

              H13010   H13010_O OFTEN3_.
              H13011   H13011_O TIME2_.
              H13012   H13012_O OFTEN4_.

              H13013   H13013_O OFTEN4_.
              H13014   H13014_O OFTEN8_.
              H13015   H13015_O YN.
              H13016   H13016_O YNDEF.
              H13017   H13017_O YNDEF.
              H13018   H13018_O RATE3_.

              S13C09   S13C09_O YN.
              S13C10   S13C10_O S13C10_.
              S13C11   S13C11_O YN.
              S13C12   S13C12_O S13C12_.
              S13C13   S13C13_O YN.
              S13C14   S13C14_O S13C14_.

              H13020   H13020_O OFTEN10_.

              H13021-H13024   H13021_O--H13024_O OFTEN5_.

              H13025   H13025_O YN.
              H13026   H13026_O OFTEN8_.
              H13027   H13027_O RATE6_.

              S13009   S13009_O YN.
              S13010   S13010_O PROB1_.

              H13028   H13028_O YN.
              H13029   H13029_O OFTEN9_.
              H13030   H13030_O SPCLST.
              H13031   H13031_O RATE2_.

              S13B01 S13B01_O MNTLHLTH.
              S13B02 S13B02_O YN.
              S13B03 S13B03_O PROB1_.
              S13B04 S13B04_O RATE5_.


              H13032   H13032_O YN.
              H13033   H13033_O OFTEN11_.
              H13034   H13034_O YN.
              H13035   H13035_O OFTEN12_.
              H13036   H13036_O YN.
              H13037   H13037_O OFTEN13_.
              H13038   H13038_O YN.
              H13039   H13039_O OFTEN14_.
              H13040   H13040_O YN.
              H13041   H13041_O OFTEN15_.
              H13042   H13042_O OFTEN15_.
              H13043   H13043_O YN.
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H13044    H13044_O OFTEN16_.
H13045    H13045_O YNDNK.
H13046    H13046_O OFTEN6_.
H13047    H13047_O OFTEN6_.
H13048    H13048_O RATE4_.
H13049    H13049_O TIME5_.
H13050    H13050_O YNBP_.

S13Q08    S13Q08_O YN.
S13Q01    S13Q01_O YNDNK.
S13Q02    S13Q02_O COLON1_.
S13Q03    S13Q03_O YNDNK.
S13Q04    S13Q04_O COLON2_.
S13Q05    S13Q05_O COLON3_.

H13051    H13051_O TIME7_.
H13052    H13052_O YNDNK.
H13053    H13053_O TIME8_.
H13054    H13054_O OFTEN8_.
H13055    H13055_O OFTEN8_.
H13056    H13056_O OFTEN8_.

H13058    H13058_O SEX.

H13059B  H13059BO TIME16_.

H13060 H13060_O   H13066 H13066_O
    YN.

H13061    H13061_O TIME12_.
H13062    H13062_O YNPREG.
H13063    H13063_O PREG1_.
H13064    H13064_O PREG2_.
H13065    H13065_O HEALTH.

H13067    H13067_O YN.
H13068    H13068_O YN.
H13069    H13069_O YN.

H13070    H13070_O YN.

S13B23    S13B23_O YN.
S13B24    S13B24_O YN.
S13B25    S13B25_O YN.
S13B26    S13B26_O YN.

H13071F H13071FO
H13071I H13071IO
H13072  H13072_O
   TIME14_.

SREDA     SREDA_O  EDUC.

H13073             HISP.

SRAGE     SRAGE_O  AGEGRP.

H13074    H13074_O YNDNK.
H13075    H13075_O MEDA.
H13076    H13076_O MEDB.
H13077    H13077_O YNDNK.
H13078    H13078_O MEDSUPP.
H13079    H13079_O YNDNK.

S13011    S13011_O AGREE2_.
S13014    S13014_O SATISFY.

MISS_1    MISS_4-MISS_7 MISS_9 MISS_TOT 4.
  ;


LABEL H13001_O='Are you the person listed on envelope'
      H13001  ='Are you the person listed on envelope'
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```
H13002AO='Health plan(s) covered: TRICARE Prime'
H13002A ='Health plan(s) covered: TRICARE Prime'
H13002CO='Health plan(s) covered: TRICARE Ext/Stnd'
H13002C ='Health plan(s) covered: TRICARE Ext/Stnd'
H13002NO='Health plan(s) covered: TRICARE Plus'
H13002N ='Health plan(s) covered: TRICARE Plus'
H13002OO='Health plan(s) covered: TRICARE For Life'
H13002O ='Health plan(s) covered: TRICARE For Life'
H13002PO='Health plan(s) covered: TRICARE Supplmntl Ins'
H13002P ='Health plan(s) covered: TRICARE Supplmntl Ins'
H13002QO='Health plan(s) covered: TRICARE Reserve Select'
H13002Q ='Health plan(s) covered: TRICARE Reserve Select'
H13002SO='Health plan(s) covered: TRICARE Retired Reserve'
H13002S ='Health plan(s) covered: TRICARE Retired Reserve'
H13002TO='Health plan(s) covered: TRICARE Young Adult'
H13002T ='Health plan(s) covered: TRICARE Young Adult'
H13002UO='Health plan(s) covered: CHCBP'
H13002U ='Health plan(s) covered: CHCBP'
H13002FO='Health plan(s) covered: Medicare'
H13002F ='Health plan(s) covered: Medicare'
H13002GO='Health plan(s) covered: FEHBP'
H13002G ='Health plan(s) covered: FEHBP'
H13002HO='Health plan(s) covered: Medicaid'
H13002H ='Health plan(s) covered: Medicaid'
H13002IO='Health plan(s) covered: civilian HMO'
H13002I ='Health plan(s) covered: civilian HMO'
H13002JO='Health plan(s) covered: other civilian'
H13002J ='Health plan(s) covered: other civilian'
H13002KO='Health plan(s) covered: USFHP'
H13002K ='Health plan(s) covered: USFHP'
H13002MO='Health plan(s) covered: veterans'
H13002M ='Health plan(s) covered: veterans'
H13002RO='Health plan(s) covered: gov hlth ins-other cntry'
H13002R ='Health plan(s) covered: gov hlth ins-other cntry'
H13002LO='Health plan(s) covered: not sure'
H13002L ='Health plan(s) covered: not sure'
H13003_O='Which health plan did you use most'
H13003  ='Which health plan did you use most'
H13004_O='Yrs in a row with health plan'
H13004  ='Yrs in a row with health plan'
H13005_O='In lst yr:fclty use most for health care'
H13005  ='In lst yr:fclty use most for health care'
H13006_O='In lst yr:ill/injry/cond care right away'
H13006  ='In lst yr:ill/injry/cond care right away'
H13007_O='In lst yr:get urgnt care as soon as wntd'
H13007  ='In lst yr:get urgnt care as soon as wntd'
H13008_O='In lst yr:wait btwn try get care,see prv'
H13008  ='In lst yr:wait btwn try get care,see prv'
H13009_O='In lst yr:make appts non-urgnt hlth care'
H13009  ='In lst yr:make appts non-urgnt hlth care'
H13010_O='In lst yr:non-urg hlth cre appt whn wntd'
H13010  ='In lst yr:non-urg hlth cre appt whn wntd'
H13011_O='In lst yr:days btwn appt & see prvder'
H13011  ='In lst yr:days btwn appt & see prvder'
H13012_O='In lst yr:go to emrgncy rm for own care'
H13012  ='In lst yr:go to emrgncy rm for own care'
H13013_O='In lst yr:go to Dr office/clinic for care'
H13013  ='In lst yr:go to Dr office/clinic for care'
H13014  ='Lst yr: how often talk to doctor about illness prvntn'
H13014_O='Lst yr: how often talk to doctor about illness prvntn'
H13015  ='Lst yr: did doctor tell you more than 1 choice for trtmnt'
H13015_O='Lst yr: did doctor tell you more than 1 choice for trtmnt'
H13016  ='Lst yr: did talk to doctor about pros/cons of trtmnt'
H13016_O='Lst yr: did talk to doctor about pros/cons of trtmnt'
H13017  ='Lst yr: did doctor ask which trtmnt option best for you'
H13017_O='Lst yr: did doctor ask which trtmnt option best for you'
H13018_O='Rating of all health care in lst yr'
H13018  ='Rating of all health care in lst yr'
H13019_O='Have one person think of as personal Dr'
H13019  ='Have one person think of as personal Dr'
H13020  ='Lst yr: how often visit prsnl doctor for care for yourself'
H13020_O='Lst yr: how often visit prsnl doctor for care for yourself'
H13021_O='Lst yr: how oftn Drs listen to you'
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H13021  ='Lst yr: how oftn Drs listen to you'
H13022_O='Lst yr: how oftn Drs explain things'
H13022  ='Lst yr: how oftn Drs explain things'
H13023_O='Lst yr: how oftn Drs show respect'
H13023  ='Lst yr: how oftn Drs show respect'
H13024_O='Lst yr: how oftn Drs spend enough time'
H13024  ='Lst yr: how oftn Drs spend enough time'
H13025  ='Lst yr: did get care from doctor other than prsnl doctor'
H13025_O='Lst yr: did get care from doctor other than prsnl doctor'
H13026  ='Lst yr: how often prsnl doctor seemed infrmd of care from other doctors'
H13026_O='Lst yr: how often prsnl doctor seemed infrmd of care from other doctors'
H13027_O='Rating of your personal Dr'
H13027  ='Rating of your personal Dr'
H13028  ='Lst yr: did make any appointments to see spclst'
H13028_O='Lst yr: did make any appointments to see spclst'
H13029  ='Lst yr: how often easy to get appointments with spclsts'
H13029_O='Lst yr: how often easy to get appointments with spclsts'
H13030  ='Lst yr: how many spclsts seen'
H13030_O='Lst yr: how many spclsts seen'
H13031_O='Rating of specialist seen in lst yr'
H13031  ='Rating of specialist seen in lst yr'
H13032  ='Lst yr: did try to get care, test, or trtmnt through health plan'
H13032_O='Lst yr: did try to get care, test, or trtmnt through health plan'
H13033  ='Lst yr: how often easy to get care, test, or trtmnt'
H13033_O='Lst yr: how often easy to get care, test, or trtmnt'
H13034  ='Lst yr: did look for info from written material/Internet'
H13034_O='Lst yr: did look for info from written material/Internet'
H13035  ='Lst yr: how often written material/Internet provide needed info'
H13035_O='Lst yr: how often written material/Internet provide needed info'
H13036  ='Lst yr: did look for info from health plan on cost of service/equipment'
H13036_O='Lst yr: did look for info from health plan on cost of service/equipment'
H13037  ='Lst yr: how often able to find out cost of service/equipment'
H13037_O='Lst yr: how often able to find out cost of service/equipment'
H13038  ='Lst yr: did look for info from health plan on cost of prescription meds'
H13038_O='Lst yr: did look for info from health plan on cost of prescription meds'
H13039  ='Lst yr: how often able to find out cost of prescription meds'
H13039_O='Lst yr: how often able to find out cost of prescription meds'
H13040  ="Lst yr: did try to get info/help from health plan's cstmr service"
H13040_O="Lst yr: did try to get info/help from health plan's cstmr service"
H13041  ='Lst yr: how often did cstmr service give needed info/help'
H13041_O='Lst yr: how often did cstmr service give needed info/help'
H13042  ='Lst yr: how often did cstmr service treat with courtesy/respect'
H13042_O='Lst yr: how often did cstmr service treat with courtesy/respect'
H13043  ='Lst yr: did health plan give any forms to fill out'
H13043_O='Lst yr: did health plan give any forms to fill out'
H13044  ='Lst yr: how often were forms easy to fill out'
H13044_O='Lst yr: how often were forms easy to fill out'
H13045  ='Lst yr: send in any claims'
H13045_O='Lst yr: send in any claims'
H13046  ='Lst yr: how often did health plan handle claims quickly'
H13046_O='Lst yr: how often did health plan handle claims quickly'
H13047_O='Lst yr: how oftn handle claims correctly'
H13047  ='Lst yr: how oftn handle claims correctly'
H13048  ='Rating of all experience with hlth plan'
H13048_O='Rating of all experience with hlth plan'
H13049_O='Blood pressure: when lst reading'
H13049  ='Blood pressure: when lst reading'
H13050_O='Blood pressure: know if too high or not'
H13050  ='Blood pressure: know if too high or not'
H13051_O='When did you lst have a flu shot'
H13051  ='When did you lst have a flu shot'
H13052  ='Smoked at least 100 cigarettes in life'
H13052_O='Smoked at least 100 cigarettes in life'
H13053  ='Smoke or use tobacco everyday, some days or not at all'
H13053_O='Smoke or use tobacco everyday, some days or not at all'
H13054_O='Lst yr: how often advised to quit smoking or use tobacco'
H13054  ='Lst yr: how often advised to quit smoking or use tobacco'
H13055  ='Lst yr: how often recom medic assist quit smoking or using tobacco'
H13055_O='Lst yr: how often recom medic assist quit smoking or using tobacco'
H13056  ='Lst yr: how often discu meth/strag asst quit smoking or using tobacco'
H13056_O='Lst yr: how often discu meth/strag asst quit smoking or using tobacco'
H13057A ='Do you smoke or use: cigarettes'
H13057AO='Do you smoke or use: cigarettes'
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H13057B ='Do you smoke or use: dip, chewing tobacco, snuff, or snus'
H13057BO='Do you smoke or use: dip, chewing tobacco, snuff, or snus'
H13057C ='Do you smoke or use: cigars'
H13057CO='Do you smoke or use: cigars'
H13057D ='Do you smoke or use: pipes, bidis, or kreteks'
H13057DO='Do you smoke or use: pipes, bidis, or kreteks'
H13058_O='Are you male or female'
H13058  ='Are you male or female'
H13059BO='Lst have a Pap smear test'
H13059B ='Lst have a Pap smear test'
H13060_O='Are you under age 40'
H13060  ='Are you under age 40'
H13061_O='Lst time: breasts checked mammography'
H13061  ='Lst time: breasts checked mammography'
H13062_O='Been pregnant in lst yr or pregnant now'
H13062  ='Been pregnant in lst yr or pregnant now'
H13063_O='In what trimester is your pregnancy'
H13063  ='In what trimester is your pregnancy'
H13064_O='Trimester first received prenatal care'
H13064  ='Trimester first received prenatal care'
H13065_O='In gnrl, how would you rate ovrall hlth'
H13065  ='In gnrl, how would you rate ovrall hlth'
H13066_O='Impairment/Hlth prblm limit activities'
H13066  ='Impairment/Hlth prblm limit activities'
H13067  ='Lst yr: have seen doctor 3 or more times for same condition'
H13067_O='Lst yr: have seen doctor 3 or more times for same condition'
H13068  ='Has condition lasted for at least 3 months'
H13068_O='Has condition lasted for at least 3 months'
H13069  ='Need to take medicine prescribed by a doctor'
H13069_O='Need to take medicine prescribed by a doctor'
H13070  ='Medicine to treat condition that has lasted for at least 3 months'
H13070_O='Medicine to treat condition that has lasted for at least 3 months'
H13071FO='Height without shoes (feet)'
H13071F ='Height without shoes (feet)'
H13071IO='Height without shoes (inches)'
H13071I ='Height without shoes (inches)'
H13072_O='Weight without shoes'
H13072  ='Weight without shoes'
SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H13073  ='Are you Spanish/Hispanic/Latino'
H13073AO='Not Spanish/Hispanic/Latino'
H13073A ='Not Spanish/Hispanic/Latino'
H13073BO='Mexican, Mexican American, Chicano'
H13073B ='Mexican, Mexican American, Chicano'
H13073CO='Puerto Rican'
H13073C ='Puerto Rican'
H13073DO='Cuban'
H13073D ='Cuban'
H13073EO='Other Spanish, Hispanic, or Latino'
H13073E ='Other Spanish, Hispanic, or Latino'
SRRACEAO='Race: White'
SRRACEA ='Race: White'
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asian'
SRRACED ='Race: Asian'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'
H13074  ='Currently Covered Medicare'
H13074_O='Currently Covered Medicare'
H13075  ='Currently Covered Medicare Part A'
H13075_O='Currently Covered Medicare Part A'
H13076  ='Currently Covered Medicare Part B'
H13076_O='Currently Covered Medicare Part B'
H13077  ='Enrolled Medicare Advantage'
H13077_O='Enrolled Medicare Advantage'
H13078  ='Currently Covered Medicare Supplemental'
H13078_O='Currently Covered Medicare Supplemental'
```

```
H13079  ='Enrolled Medicare Part D'
H13079_O='Enrolled Medicare Part D'


S13C09_O='Lst yr: Did you need special medical equipment'
S13C09  ='Lst yr: Did you need special medical equipment'
S13C10_O='Lst yr: How much of a problem was it to get special medical equipment'
S13C10  ='Lst yr: How much of a problem was it to get special medical equipment'
S13C11_O='Lst yr: Did you need special therapy'
S13C11  ='Lst yr: Did you need special therapy'
S13C12_O='Lst yr: How much of a problem was it to get special therapy'
S13C12  ='Lst yr: How much of a problem was it to get special therapy'
S13C13_O='Lst yr: Did you need home health care or assistance'
S13C13  ='Lst yr: Did you need home health care or assistance'
S13C14_O='Lst yr: How much of a problem was it to get home health care'
S13C14  ='Lst yr: How much of a problem was it to get home health care'


S13Q08_O='Are you under age 50'
S13Q08  ='Are you under age 50'
S13Q01_O='Have you ever had a blood stool test using a home kit'
S13Q01  ='Have you ever had a blood stool test using a home kit'
S13Q02_O='How long since last blood stool test using a home kit'
S13Q02  ='How long since last blood stool test using a home kit'
S13Q03_O='Have you ever had a sigmoidoscopy or colonoscopy'
S13Q03  ='Have you ever had a sigmoidoscopy or colonoscopy'
S13Q04_O='How long since last sigmoidoscopy'
S13Q04  ='How long since last sigmoidoscopy'
S13Q05_O='How long since last colonoscopy'
S13Q05  ='How long since last colonoscopy'


S13009_O='Same prsnl doctor/nurse before this hlth plan'
S13009  ='Same prsnl doctor/nurse before this hlth plan'
S13010_O='Prblm getting prsnl doctor/nurse you are happy with'
S13010  ='Prblm getting prsnl doctor/nurse you are happy with'


S13B01_O='Self rate of overall mental/emotional health'
S13B01  ='Self rate of overall mental/emotional health'
S13B02_O='Lst yr: needed treatmnt/cnslng-prsnl prob'
S13B02  ='Lst yr: needed treatmnt/cnslng-prsnl prob'
S13B03_O='Lst yr: prblm gttng needed treatmnt/cnslng'
S13B03  ='Lst yr: prblm gttng needed treatmnt/cnslng'
S13B04_O='Lst yr: rate of treatmnt/cnslng received'
S13B04  ='Lst yr: rate of treatmnt/cnslng received'


S13B23_O='Past month: nightmares/thoughts you did not want'
S13B23  ='Past month: nightmares/thoughts you did not want'
S13B24_O='Past month: tried not to think about or be reminded'
S13B24  ='Past month: tried not to think about or be reminded'
S13B25_O='Past month: constantly on guard, watchful, or startled'
S13B25  ='Past month: constantly on guard, watchful, or startled'
S13B26_O='Past month: felt numb or detached from others'
S13B26  ='Past month: felt numb or detached from others'


S13011  ='Agree/disagree: able to see provider when needed'
S13011_O='Agree/disagree: able to see provider when needed'
S13014  ='How satisfied with health care during last visit'
S13014_O='How satisfied with health care during last visit'


N1   = "Coding Scheme Note 1"
N2   = "Coding Scheme Note 2"
N3   = "Coding Scheme Note 3"
N4   = "Coding Scheme Note 4"
N5   = "Coding Scheme Note 5"
N5A1 = "Coding Scheme Note 5A1"
N5A2 = "Coding Scheme Note 5A2"
N5A3 = "Coding Scheme Note 5A3"
N6   = "Coding Scheme Note 6"
N7   = "Coding Scheme Note 7"
N8   = "Coding Scheme Note 8"
N8_01 = "Coding Scheme Note 8_01"
N9   = "Coding Scheme Note 9"
N10  = "Coding Scheme Note 10"
N10_B1= "Coding Scheme Note 10_B1"
```

```
N11   = "Coding Scheme Note 11"
N12   = "Coding Scheme Note 12"
N13   = "Coding Scheme Note 13"
N14   = "Coding Scheme Note 14"
N15   = "Coding Scheme Note 15"
N16   = "Coding Scheme Note 16"
N17   = "Coding Scheme Note 17"
N17_Q0= "Coding Scheme Note 17_Q0"
N17_Q1= "Coding Scheme Note 17_Q1"
N17_Q2= "Coding Scheme Note 17_Q2"
N18   = "Coding Scheme Note 18"
N19A  = "Coding Scheme Note 19A"
N19B  = "Coding Scheme Note 19B"
N20   = "Coding Scheme Note 20"
N21   = "Coding Scheme Note 21"
N22   = "Coding Scheme Note 22"
N23   = "Coding Scheme Note 23"
N24   = "Coding Scheme Note 24"
N25   = "Coding Scheme Note 25"



MISS_1 = "Count of: violates skip pattern"
/*MISS_3 = "Count of: do not use other tobacco products response"*/
MISS_4 = "Count of: incomplete grid error"
MISS_5 = "Count of: scalable reponse of don't know"
MISS_6 = "Count of: not applicable - valid skip"
MISS_7 = "Count of: out-of-range error"
MISS_9 = "Count of: no response - invalid skip"
MISS_TOT = "Total number of missing responses"
XSEXA = "Male or Female  - R"
;
```

```
****************************************************************************
*
* PROGRAM:  SELECTQ.SAS
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6244-300)
* PURPOSE:  ASSIGN FINAL STATUS FOR RECORD SELECTION PURPOSES.
* WRITTEN:  12/14/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 03/21/2002 BY KEITH RATHBUN, Updated for the 2002 survey.
*              Added FLAG_FIN = 23,24 for FNSTATUS = 20.
*           2) 03/22/2004 BY KEITH RATHBUN, Updated for the 2004 survey.
*           3) 09/23/2004 BY KEITH RATHBUN, Added code to assign flag_fin
*              for ineligibles (determined by STI) at time of address update
*              prior to fielding using the adult_deceased.sd2 file.
*           4) 04/15/2005 BY JACQUELINE AGUFA, Updated for the 2005 survey.
*           5) 03/16/2006 BY JACQUELINE AGUFA, Updated for the 2006 survey.
*           6) 12/15/2006 BY JACQUELINE AGUFA, Updated for the 2007 survey.
*           7) 01/10/2008 BY JACQUELINE AGUFA, Updated for the 2008 survey.
*           8) 12/17/2008 BY JACQUELINE AGUFA, Updated for the 2009 survey.
*           9) 12/15/2009 BY JACQUELINE AGUFA, Updated for the 2010 survey.
*          10) 12/01/2010 BY MIKE RUDACILLE,   Updated for the 2011 survey.
*          11) 12/09/2011 BY MIKE RUDACILLE,   Updated for the 2012 survey.
*          12) 07/16/2012 BY AMANDA KUDIS, updated to handle overlap cases.
*          13) 12/15/2012 BY MIKE RUDACILLE,   Updated for the 2013 survey.
*
* INPUTS:   1) CSCHM13Q.sas7bdat - 2013 Quarterly DOD Health Survey Data
*
* OUTPUTS:  1) SELECTQ.sas7bdat - 2013 Quarterly DOD Health Survey Data w/FNSTATUS
*
****************************************************************************
*;
LIBNAME IN          "..\..\DATA\AFINAL";
LIBNAME OUT         "..\..\DATA\AFINAL";
LIBNAME LIBRARY     "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

%LET OVERLAPCASE=N;

PROC SORT DATA=IN.CSCHM13Q OUT=TEMPA1; BY MPRID; RUN;

DATA TEMPA2 OUT.DUPSA OVERLAP;
   SET TEMPA1;
   BY MPRID;
   /***********************************************************************/
   /** KEY VARIABLES (Total=20)                                         **/
   /***********************************************************************/
   ARRAY KEYVAR H13003 H13005 H13006 H13009 H13013 H13018 H13019 H13027
               H13028 H13031 H13033 H13040 H13043 H13048 H13051 H13052
               H13065 H13073 SREDA
                ;

   ARRAY RACE(5) SRRACEA SRRACEB SRRACEC SRRACED SRRACEE;

   FLAGRACE = 0; DROP FLAGRACE;
   DO I = 1 TO DIM(RACE);
      IF RACE(I) IN (1) THEN FLAGRACE = 1;
   END;

   KEYCOUNT = 0;
   DO I = 1 TO DIM(KEYVAR); DROP I;
      IF KEYVAR(I) NOT IN (.,.A,.O,.I,.B) THEN KEYCOUNT = KEYCOUNT + 1;
   END;
   KEYCOUNT = KEYCOUNT + FLAGRACE;

   /***********************************************************************/
   /** SET FLAG FOR DUPLICATES                                          **/
   /***********************************************************************/
   LENGTH DUPFLAG $3;
   DUPFLAG = 'NO';
```

```
      IF NOT (FIRST.MPRID AND LAST.MPRID) THEN DUPFLAG = 'YES';

   /************************************************************************/
   /** DETERMINE FNSTATUS                                               **/
   /************************************************************************/
   FNSTATUS = 0;
   IF FLAG_FIN = 1 THEN DO;
      ********************************************************
      **** APPLY THE COMPLETE QUESTIONNAIRE RULE (50% OF KEY   ****
      **** VARIABLES).                                         ****
      ********************************************************;
      IF KEYCOUNT GT 9 THEN FNSTATUS = 11;
      ELSE FNSTATUS = 12;
   END;
   ELSE IF FLAG_FIN IN(3,6,8,10,11,14,16,21,23,24) THEN DO;
      FNSTATUS = 20;
   END;
   ELSE IF FLAG_FIN IN(2,4,5,7,12,13,15) THEN DO;
      FNSTATUS = 31;
   END;
   ELSE IF FLAG_FIN IN (25,26) THEN DO;
      FNSTATUS = 32;
   END;
   ELSE IF FLAG_FIN IN(9,17,18,19,20,22) THEN DO;
      IF FLAG_FIN IN (18,19,20) THEN DO;
         FNSTATUS = 42;
      END;
      ELSE DO;
         FNSTATUS = 41;
      END;
   END;
   ELSE IF FLAG_FIN IN(99) THEN DO;
      CALL SYMPUT("OVERLAPCASE","Y");
      OUTPUT OVERLAP; **cases that overlap with another survey;
   END;


   IF DUPFLAG = 'YES' THEN OUTPUT OUT.DUPSA ;
   ELSE IF FLAG_FIN NE 99 THEN OUTPUT TEMPA2;

RUN;


*************************************************************************
* Select the "most complete" questionaire from duplicates and
* SET it back into the non-duplicates file. For now assume the lowest
* FNSTATUS Value is the "most complete".
*************************************************************************
;
PROC SORT DATA=OUT.DUPSA ;
BY MPRID FNSTATUS;
RUN;

DATA DEDUPED;
   SET OUT.DUPSA ;
   BY MPRID FNSTATUS;
   IF FIRST.MPRID; *KEEP only the first - most complete questionaire;
RUN;

*************************************************************************
* Assign FNSTATUS for the overlap cases if they are some this quarter
*************************************************************************;

%MACRO OVERLAP;
   %IF "&OVERLAPCASE"="Y" %THEN %DO;
      %INCLUDE "overlap_fnstatus.inc"/SOURCE2;
   %END;

   DATA OUT.SELECTQ;
      SET TEMPA2 DEDUPED
         %IF "&OVERLAPCASE"="Y" %THEN %DO;
            overlap_fnstatus
         %END;
```

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```
             ;
       LABEL FNSTATUS = "Final Status"
             DUPFLAG  = "Multiple Response Indicator"
             STRATUM  = "Sampling STRATUM"
             KEYCOUNT = "# Key Questions Answered"
             ;
    RUN;
%MEND;

%OVERLAP;

TITLE1 "Quarterly DOD Health Survey FNSTATUS assignment (6663-500)";
TITLE2 "Program Name: SELECTQ.SAS By Keith Rathbun";
TITLE3 "Program Output: SELECTQ.sas7bdat";

PROC CONTENTS DATA=OUT.SELECTQ ; RUN;

PROC FREQ DATA=OUT.SELECTQ ;
TABLES FNSTATUS KEYCOUNT FLAG_FIN
       FNSTATUS*KEYCOUNT*FLAG_FIN
   /MISSING LIST;
RUN;
```

F.4.A Q3FY2013\PROGRAMS\CONSTRUCT\CONVARQ.SAS - Construct Variables for Analysis - Run Quarterly.

```
*******************************************************************************
* PROGRAM:   CONVARQ.SAS
* WRITTEN:   2/3/99 BY KELLY WHITE
* UPDATED:   2/29/2000 BY NATALIE JUSTH
* UPDATED:   11/16/2000 BY JOAN JAMES
* UPDATED FOR QUARTERLY 2001:  1/22/2001 BY NATALIE JUSTH
* UPDATED FOR QUARTER 2 2001:  6/5/2001 BY NATALIE JUSTH
*                              UPDATES NOTED WITH NJ_Q2
* UPDATED FOR QUARTER 3 2001:  8/20/2001 BY NATALIE JUSTH
* UPDATED FOR QUARTER 4 2001: 12/11/2001 BY NATALIE JUSTH, REMOVED KENRINTN
*          AND CHANGE DAGEQY TO FIELDAGE.
* UPDATED FOR QUARTER 1 2002:  4/01/2002 BY JACLYN WONG, REMOVED KMEDIGAP, KCOST_2
* UPDATED FOR QUARTER 2 2002:  6/19/2002 BY JACLYN WONG, REMOVED KPRSCPTN
* UPDATED FOR QUARTER 3 2002:  9/25/2002 BY JACLYN WONG
* UPDATED FOR QUARTER 1 2003:  BEGUN 3/13/2003 BY NATALIE JUSTH
* UPDATED FOR QUARTER 3 2003:  BEGUN 8/29/2003 BY NATALIE JUSTH
* UPDATED FOR QUARTER 4 2003:  12/18/2003 BY NATALIE JUSTH
* UPDATED FOR QUARTER 1 2004:  1/29/2004 BY LUCY LU
* UPDATED FOR QUARTER 2 2004:  6/10/2004 BY LUCY LU
* UPDATED FOR QUARTER 3 2004:  9/13/2004 BY LUCY LU
* Added Code to include Consvar0.sas: 9/28/2004 BY JACQUELINE AGUFA
* Added Code to calculate XBMI: 10/18/2004 BY JACQUELINE AGUFA
* UPDATED FOR QUARTER 4 2004:  2/1/2005 BY LUCY LU
* ADDED code to get updated CACSMPL from REPWT.sd2: 2/17/2005 BY JACQUELINE AGUFA
* UPDATED FOR QUATER 1 2005:   5/6/2005 BY LUCY LU. ADD VARIABLE HP_NORM
* UPDATED FOR QUATER 3 2005:   11/3/2005 BY JACQUELINE AGUFA. ADD VARIABLE HP_OBESE
* UPDATED FOR QUARTER 2 FY 2006:  3/29/2006 BY LUCY LU
* UPDATED FOR QUARTER 3 FY 2006:  7/7/2006 BY LUCY LU. ADD XOCONUS VARIABLE
* UPDATED FOR QUARTER 1 FY 2007:  1/12/2007 BY J AGUFA.
* UPDATED FOR QUARTER 2 FY 2007:  3/26/2007 BY J AGUFA. Modified XENRLLMT, XENR_PCM, XENR_RSV, &
XBNFGRP
*                              with TRICARE Reserve Select(Enbgsmpl=11)
* UPDATED FOR QUARTER 1 FY 2008:  1/22/2008 BY J AGUFA. Deleted code that was recoding LEGDDSCD
* UPDATED FOR QUARTER 2 FY 2009:  4/13/2009 BY M RUDACILLE. Changed lower age limit from 17 to 18
*                              for constructed variable checks
* UPDATED FOR QUARTER 1 FY 2010:  12/16/2009 BY MRUDACILLE.
* UPDATED FOR QUARTER 1 FY 2011:  12/01/2010 BY MRUDACILLE.
* UPDATED FOR QUARTER 1 FY 2012:  12/09/2011 BY MRUDACILLE.
* UPDATED FOR QUARTER 1 FY 2013:  12/15/2012 BY MRUDACILLE.
* Changed HP_CESH2 to HP_CESH3 to reflect
* change in definition of smoking cessation variable 1/19/2011 BY MIKE RUDACILLE
* Changed HP_SMKH2 to HP_SMKH3 to reflect change in definition
* of smoking variable 3/30/2011 BY MIKE RUDACILLE
*
* PURPOSE:   TO CREATE INDEPENDENT VARIABLES: XENRLLMT, XENR_PCM, XINS_COV,
*            XBNFGRP, XBENCAT, XINS_RSV, XENR_RSV
*            TO CREATE DEPENDENT VARIABLES: KDISENRL, KBGPRB1,
*            KBGPRB2, KMILOFFC, KCIVOFFC, KMILOPQY, KCIVOPQY, HP_PRNTL, HP_MAMOG,
*            HP_MAM50, HP_PAP, HP_BP, HP_FLU, HP_PROS, KCIVINS, KPRSCPTN, HP_GP,
*            HP_CHOL, HP_BRST, HP_SMOKE, HP_SMOKH, HP_CESS, HP_OBESE,
*
*            TO CREATE OUTCATCH
* INPUT:     ..\..\DATA\AFINAL\SELECTQ.sas7bdat
* OUTPUT:    ..\..\DATA\AFINAL\CONVARQ.sas7bdat
*
* INCLUDES: 1) CONSVAR0.SAS - Construct XREGION, XTNEXREG and USA based on CACSMPL.
*           2) Construct_cacsmpl.SAS
*******************************************************************************;

LIBNAME IN          '..\..\DATA\AFINAL';
LIBNAME LIBRARY     '..\..\DATA\AFINAL\FMTLIB';


OPTIONS PS=78 LS=256 ERRORS=2 NOCENTER ;

***Create cacsmpl;

TITLE1 'FY 2013 Quarter 3 Health Care Survey of DoD Beneficiaries Study - Adult Form A';
TITLE2 'CREATE CONSTRUCTED & OUTCOME MEASURE VARIABLES';
```

```
PROC SORT DATA=IN.SELECTQ OUT=SELECTQ; BY MPRID; RUN;
%INCLUDE "Construct_cacsmpl.SAS"/SOURCE2; /* Move construct_cacsmpl here to use selectq sort */

/* Reset titles after construct_cacsmpl is finished */
TITLE1 'FY 2013 Quarter 3 Health Care Survey of DoD Beneficiaries Study - Adult Form A';
TITLE2 'CREATE CONSTRUCTED & OUTCOME MEASURE VARIABLES';

PROC SORT DATA=IN.CONSTRUCT_CACSMPL OUT=CACSMPL; BY MPRID; RUN;

DATA IN.CONVARQ(KEEP=XENRLLMT XENR_PCM XINS_COV
                     XREGION XTNEXREG USA
                     ENBGSMPL XBNFGRP XOCONUS SERVAREA
                     /*KMILOFFC KCIVOFFC KBGPRB1 KBGPRB2 */
                     KMILOPQY KCIVOPQY HP_PRNTL HP_MAMOG HP_MAM50 HP_PAP HP_BP HP_FLU
                     MPRID KCIVINS HP_SMOKE
                     OUTCATCH HP_SMKH3 HP_CESH3 HP_OBESE
                     XBMI XBMICAT CACSMPL XBENCAT XENR_RSV XINS_RSV
                     RDAGEQY RFLDAGE JSFLAG)
        CONVARQ;
   MERGE SELECTQ(IN=in1)
         CACSMPL(IN=in2 RENAME=(CACSMPL=XCACSMPL));       *JMA 1/4/07;

   BY MPRID;

   IF IN1;


   *****************************************************************************
   * Construct XREGION, XTNEXREG and USA.
   ****************************************************************************;

/*CHANGE CACSMPL TO BE NUMERIC*/
   CACSMPL = INPUT(XCACSMPL,8.);                *LLU 2/9/05;
   DROP XCACSMPL;

   %INCLUDE "CONSVAR0.SAS"/SOURCE2;             *LLU 2/9/05;

   LENGTH JSFLAG   3.
          XREGION  3.
          XTNEXREG 3.
          USA      3.
          XBMI     8.
          XBMICAT  3.
          XOCONUS  3.
          XBENCAT  3.
          XINS_RSV 3.
          XENR_RSV 3.
          RDAGEQY  3.
          RFLDAGE  3.
               ;



LABEL
   JSFLAG      =  "Joint Service Flag"
   XENRLLMT    =  "Enrollment in TRICARE Prime"
   XENR_PCM    =  "Enrollment by PCM type"
   XINS_COV    =  "Insurance Coverage"
   XBNFGRP     =  "Constructed Beneficiary Group"
   KMILOPQY    =  "Outpat. visits-use Military fclty most"
   KCIVOPQY    =  "Outpat. visits-use Civilian fclty most"
   HP_PRNTL    =  "Prgnt in lst yr, receivd cre 1st trimstr"
   HP_MAMOG    =  "Women 40>=, mammography in pst 2 yrs"
   HP_MAM50    =  "Women 50>=, mammography in pst 2 yrs"
   HP_PAP      =  "All women, Pap smear in last 3 yrs"
   HP_BP       =  "Bld prsre chck in last 2 yrs,know rslts"
   HP_FLU      =  "65 and older, flu shot in last 12 mnths"
   HP_SMOKE    =  "Advised to quit smoking in last 12 mnths"
   KCIVINS     =  "Beneficiary coverd by civilian insurance"
   OUTCATCH    =  "Out of catchment area indicator"
   HP_SMKH3    =  "Smoker under HEDIS definition (modified)"
   HP_CESH3    =  "Had smoking cessation counseling - HEDIS (modified)"
```

```
    XREGION     = "XREGION - Region"
    XTNEXREG    = "TNEX Region - Based on Location of Health Services"
    USA         = "USA - USA/OCONUS Indicator"
    XBMI        = "Body Mass Index"
    XBMICAT     = "Body Mass Index Category"
    HP_OBESE    = "Obese/Morbidly obese"
    XOCONUS     = "Overseas Europe/Pacific/Latin Indicator"
    XBENCAT     = "Beneficiary Category"
    XINS_RSV    = "Insurance Coverage - Reservist"
    XENR_RSV    = "Enrollment by PCM type - Reservist"
    CACSMPL     = "Catchment Area"
    SERVAREA    = "Service Area"
    RDAGEQY     = "Age at sampling-Capped(18 and below, 86 and above)"
    RFLDAGE     = "Age at fielding-Capped(18 and below, 86 and above)"
    ;


FORMAT
    JSFLAG          JSFLAG.
    XENRLLMT        ENROLL.
    XENR_PCM        PCM.
    XINS_COV        INSURE.
    XBNFGRP         XBGC_S.
    KMILOPQY        HAGRID.
    KCIVOPQY        HAGRID.
    HP_PRNTL        PRNTL.
    HP_MAMOG        HAYNN.
    HP_MAM50        HAYNN.
    HP_OBESE        HAYNN.
    HP_PAP          HAYNN.
    HP_BP           HAYNN2_.
    HP_FLU          HAYNN.
    HP_SMOKE        HAYNN.
    KCIVINS         HAYNN2_.
    OUTCATCH        OCATCH.
    HP_SMKH3        SMOKE.
    HP_CESH3        SMOKE.
    ENBGSMPL        $ENBGS.
    XREGION         CREG.
    XTNEXREG        TNEX.
    USA             USAMHS.
    XBMICAT         XBMICAT.
    XOCONUS         XOCONUS.
    XBENCAT         XBENCAT.
    XINS_RSV        XINSRSV.
    XENR_RSV        XENRRSV.
    CACSMPL         CAC.
    SERVAREA        $SRVAREA.
    RDAGEQY         AGE_r.
    RFLDAGE         AGE_r.
    ;


/* MER 01/10/13 - Added code for creating Joint Service flag */
    IF PUT(CACSMPL, JOINTSRV.)='1' THEN JSFLAG=1;
    ELSE JSFLAG=0;


/* CREATE INDEPENDENT VARIABLES */

/* XENRLLMT--ENROLLMENT STATUS */
IF ENBGSMPL ^= "b" THEN DO;
IF 17 <= INPUT(FIELDAGE,8.) < 65 THEN DO;
    IF INPUT(ENBGSMPL,8.) = 1 THEN XENRLLMT = 1;                    /*  Active duty (<65) */
    ELSE IF INPUT(ENBGSMPL,8.) IN (2, 3, 5, 6) THEN XENRLLMT = 2;   /*  Non-active duty enrolled
(<65)*/
    ELSE IF INPUT(ENBGSMPL,8.) IN (4, 7,11) THEN XENRLLMT = 3;      /*  Not Enrolled (<65)*/
END;
ELSE IF INPUT(FIELDAGE,8.)  > = 65 THEN DO;
    IF INPUT(ENBGSMPL,8.) = 10 THEN XENRLLMT = 4;                   /*  Not Enrolled (65+)*/
    ELSE IF INPUT(ENBGSMPL,8.) IN (8,9) THEN XENRLLMT = 5;          /*  Enrolled (65+)    */
END;
```

```
/* XENR_PCM--ENROLLMENT BY PCM TYPE */
IF 17 <= INPUT(FIELDAGE,8.) < 65 THEN DO;
    IF INPUT(ENBGSMPL,8.) = 1 THEN XENR_PCM = 1;                /*   Active duty (<65)        */
    ELSE IF INPUT(ENBGSMPL,8.) IN (3, 6) THEN XENR_PCM = 2;     /*   Enrolled (<65) - mil PCM */
    ELSE IF INPUT(ENBGSMPL,8.) IN (2, 5) THEN XENR_PCM = 3;     /*   Enrolled (<65) - civ PCM */
    ELSE IF INPUT(ENBGSMPL,8.) IN (4, 7,11) THEN XENR_PCM = 4;  /*   Not Enrolled (<65)       */
END;
 ELSE IF INPUT(FIELDAGE,8.) > = 65 THEN DO;
    IF INPUT(ENBGSMPL,8.) = 10 THEN XENR_PCM = 5;              /*  Not Enrolled (65+)       */
    IF INPUT(ENBGSMPL,8.) = 9 THEN XENR_PCM = 6;               /*  Enrolled (65+)-mil PCM   */
    IF INPUT(ENBGSMPL,8.) = 8 THEN XENR_PCM = 7;               /*  Enrolled (65+)-civ PCM   */
/*NJ_Q2*/
 END;
END;

/* XINS_COV--INSURANCE COVERAGE */
IF XENRLLMT = 1 THEN XINS_COV =1;                                        /* Prime <65-Active Duty */
  ELSE IF 17 <= INPUT(FIELDAGE,8.)  < 65 AND H13003 IN (1) THEN XINS_COV = 2; /* Prime <65-Non-
active Duty */
  ELSE IF H13003 = 3 THEN XINS_COV = 3;                                  /* Standard/Extra */
  ELSE IF H13003 = 11 THEN XINS_COV = 7;                                 /* Plus and Medicare */
  ELSE IF H13003 = 4 THEN XINS_COV = 4;                                  /* Medicare*/
  ELSE IF H13003 IN (5,6, 7, 8, 9, 13) THEN XINS_COV = 5;                /* Other civilian health
insurance*/
  ELSE IF H13003 = 10 THEN XINS_COV = 8;                                 /* Veterans Administration
(VA) */
  ELSE IF H13003 = 12 THEN XINS_COV = 9;                                 /* TRICARE Reserve Select */
  ELSE IF H13003 = 14 THEN XINS_COV = 10;                                /* TRICARE Retired Reserve -
MER 06/21/11 */
  ELSE IF 21 <= INPUT(FIELDAGE,8.) <= 26
     AND H13003 = 15 THEN XINS_COV = 11;                                 /* TRICARE Young Adult - MER
06/21/11 */
  ELSE IF H13003 = 16 THEN XINS_COV = 12;                                /* CHCBP - MER 06/21/11 */
  ELSE IF (INPUT(FIELDAGE,8.)>= 65 AND XENRLLMT = 5 and H13003 = 1) THEN XINS_COV = 6;   /*
Prime, >= 65 */
  ELSE IF H13075=1 AND H13076=1 AND H13003 NE .N THEN XINS_COV = 4;              /* NEW Q2
Medicare/Medicaid */


/* XBNFGRP-Beneficiary Group that excludes those 65 and over-Active Duty
           and Family Members of Active Duty */
IF ENBGSMPL ^="b" THEN DO;
IF INPUT(FIELDAGE,8.)  >= 65 AND INPUT(ENBGSMPL,8.) IN (1, 2, 3, 4) THEN XBNFGRP = .;
  ELSE IF INPUT(ENBGSMPL,8.) = 1 THEN XBNFGRP = 1;                              /* Active
Duty <65 */
  ELSE IF INPUT(ENBGSMPL,8.) IN (2, 3, 4) THEN XBNFGRP = 2;                     /* Family
of Active <65 */
  ELSE IF INPUT(ENBGSMPL,8.) IN (5, 6, 7) THEN XBNFGRP = 3;                     /*
Ret/Surv/Fam <65 */
  ELSE IF INPUT(ENBGSMPL,8.) IN (8, 9, 10) THEN XBNFGRP = 4;                    /*
Ret/Surv/Fam 65+ */
  ELSE IF INPUT(ENBGSMPL,8.) IN (11)      THEN XBNFGRP = .;
END;

/* CREATE DEPENDENT VARIABLES */


/* KMILOPQY--OUTPATIENT VISITS TO MILITARY FACILITY
    KCIVOPQY--OUTPATIENT VISITS TO CIVILIAN FACILITY */
IF H13005 = 1 THEN DO;
   KMILOPQY=H13013;
   KCIVOPQY=1;
END;
ELSE IF H13005 IN  (2, 3, 4) THEN DO;
   KCIVOPQY=H13013;
   KMILOPQY=1;
END;
ELSE IF H13005 = 5 THEN DO;
   KMILOPQY=1;
   KCIVOPQY=1;
END;
```

```
/* HP_PRNTL--IF PREGNANT LAST YEAR, RECEIVED PRENATAL CARE IN 1ST TRIMESTER */
IF H13062 IN (1,2) THEN DO;                                /*   Pregnant in last 12 months
*/
   IF H13064 = 4 THEN HP_PRNTL = 1;                        /*   Yes   */
      ELSE IF (H13063 = 1 AND H13064 = 1) THEN HP_PRNTL = .;   /* <3 months pregnant now */
      ELSE IF H13064 IN (1,2,3) THEN HP_PRNTL = 2;         /*   No */
END;
/* MER 12/19/2011 - added HP_PRNTL recode to N/A for males */
ELSE IF H13062 IN (.C,.N) THEN HP_PRNTL = .N; /* Male */

/* HP_MAMOG--FOR WOMEN AGE 40 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS */
IF XSEXA = 2 AND INPUT(FIELDAGE,8.)  >= 40 THEN DO;
   IF H13061 IN (5, 4) THEN HP_MAMOG = 1;         /* Yes */
   ELSE IF H13061 IN (1, 2, 3) THEN HP_MAMOG = 2;    /* No */
END;

/* HP_MAM50--FOR WOMEN AGE 50 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS */
IF XSEXA = 2 AND INPUT(FIELDAGE,8.)  >= 50 THEN DO;
   IF H13061 IN (5, 4) THEN HP_MAM50 = 1;         /* Yes */
   ELSE IF H13061 IN (1, 2, 3) THEN HP_MAM50 = 2;    /* No */
END;

/* HP_PAP--FOR ALL WOMEN, HAD PAP SMEAR IN LAST 3 YEARS */
IF XSEXA = 2 THEN DO;
   IF H13059B IN (4, 5, 6) THEN HP_PAP = 1;           /* Yes */
   ELSE IF H13059B IN (1, 2, 3) THEN HP_PAP = 2;      /* No  */
END;

/* HP_BP--HAD BLOOD PRESSURE SCREENING IN LAST 2 YEARS AND KNOW RESULT */
IF H13049 IN (2,3) AND H13050 IN (1,2) THEN HP_BP = 1;   /* Yes     */
   ELSE IF H13049 = 1 THEN HP_BP = 2;                   /* No      */
   ELSE IF H13049 < 0 OR H13050 < 0 THEN HP_BP = .;     /* Unknown */
   ELSE HP_BP = 2;                                      /* No      */

/* HP_FLU--FOR PERSON AGE 65 OR OVER, HAD FLU SHOT IN LAST 12 MONTHS */
IF INPUT(FIELDAGE,8.) >= 65 THEN DO;
   IF H13051 = 4 THEN HP_FLU = 1;                  /*   Yes */
   ELSE IF H13051 IN (1, 2, 3) THEN HP_FLU = 2;    /*   No  */
END;

/* HP_SMOKE--ADVISED TO QUIT SMOKING IN PAST 12 MONTHS */
IF H13054 IN (2, 3, 4) THEN HP_SMOKE = 1;          /*   Yes   */
   ELSE IF H13054 = 1 THEN HP_SMOKE = 2;           /*   No    */

/* KCIVINS--IS BENEFICIARY COVERED BY PRIVATE CIVILIAN INSURANCE */
IF H13002G=1 OR H13002I=1 OR H13002J=1 THEN KCIVINS=1;        /* YES */  /*NJ_Q2*/
   ELSE KCIVINS=2;                                           /* NO  */

/* Add code for smoking and smoking cessation counseling according to the HEDIS */
/* definition.  Smoking variable is HP_SMOKH and smoking cessation counseling   */
/* is HP_CESS.                                                                   */
/* 1/16/09 Changed HP_SMOKH to HP_SMKH2 and HP_CESH to HP_CESH2 to account for   */
/* HYY054 variable not appearing in V4 questionnaire.                            */
/* 1/19/11 Changed HP_CESH2 to HP_CESH3 to account for change in definition      */
/* 3/30/11 Changed HP_SMKH2 to HP_SMKH3 to account for change in definition      */
/*       HP_SMKH3 defines smokers as people who have smoked at least 100         */
/*       cigarettes in their life, who smoke cigarettes or use tobacco some      */
/*       days or every day, and who smoke cigarettes on the days they smoke      */
/*       or use tobacco.                                                         */
/* 4/1/11  Changed HP_CESH3 definition to consider not just smokers but all      */
/*       tobacco users.                                                          */
IF H13052 IN (1,2) THEN DO;
   IF H13052=1 AND (H13053=3 OR H13053=4) AND H13057A=1 THEN HP_SMKH3=1; /* Yes */
   ELSE IF H13052=2 OR H13053=2 OR H13057A NE 1 THEN HP_SMKH3=2;         /* No  */
END;

IF (H13053=3 OR H13053=4) AND H13054>0 THEN DO;
   IF H13054>1 THEN HP_CESH3=1;  /* Yes */
   ELSE HP_CESH3=2;              /* No */
END;

/* OUTCATCH -- OUT OF CATCHMENT AREA */
IF 9900 < CACSMPL < 9999 THEN OUTCATCH=1;      /* Out of catchment area */
```

```
    ELSE IF CACSMPL = 9999 THEN OUTCATCH=.;
    ELSE OUTCATCH=0;                          /* Catchment area         */

*********************************************************************************************
* Calculate XBMI- Body Mass Index and XBMICAT- Body Mass Index Category
* BMI=Weight(in pounds)*703 divide by Height(in inch)*Height(in inch)
*********************************************************************************************;


 IF H13071F IN (.A,.O,.I,.B) THEN TSRHGTF=.; ELSE TSRHGTF=H13071F;
 IF H13071I IN (.A,.O,.I,.B) THEN TSRHGTI=.; ELSE TSRHGTI=H13071I;
 IF H13072  IN (.A,.O,.I,.B) THEN TSRWGT =.; ELSE TSRWGT =H13072;

 IF TSRHGTF IN (.) OR
    TSRWGT  IN (.) THEN XBMI=.;
 ELSE DO;
    XBMI = ROUND((TSRWGT*703)/
               (SUM(TSRHGTF*12,TSRHGTI)*SUM(TSRHGTF*12,TSRHGTI)), .1);
 END;

IF XBMI >= 100 THEN XBMI=.;


* FORMAT XBMI 5.1;

 DROP TSRHGTF TSRHGTI TSRWGT;

/* JMA Dec 28 2006 changed to have same category as Healthy People 2010 where
   there is no sex distinction */
    IF XBMI = .         THEN XBMICAT=.;
    ELSE IF XBMI < 18.5 THEN XBMICAT=1;  *Underweight;
    ELSE IF XBMI < 25   THEN XBMICAT=2;  *Normal Weight;
    ELSE IF XBMI < 30   THEN XBMICAT=3;  *Overweight;
    ELSE IF XBMI < 40   THEN XBMICAT=4;  *Obese;
    ELSE                     XBMICAT=5;  *Morbidly Obese;

/*ADD HP_OBESE VARIABLE. JMA 11/3/2005*/

IF XBMICAT=. THEN HP_OBESE=.;
ELSE IF XBMICAT IN (4,5) THEN HP_OBESE=1;    *OBESE ;
ELSE HP_OBESE=2;                             *NOT OBESE;



/*ADD XBENCAT JMA 1/22/2007 */
/*
Tricare Reserve Select and the increasing presence of inactive reservists and their dependents in
our data.
In order to accomodate them, we will need to create additional variables.
*/

IF DBENCAT='ACT' THEN XBENCAT=1;      *Active duty;
ELSE IF DBENCAT='DA'  THEN XBENCAT=2; *Active Duty family member;
ELSE IF DBENCAT='GRD' THEN XBENCAT=3; *Active reservist;
ELSE IF DBENCAT='DGR' THEN XBENCAT=4; *Dependent of Reservist;
ELSE IF DBENCAT='IGR' THEN XBENCAT=5; *Inactive Reservist";
ELSE IF DBENCAT='IDG' THEN XBENCAT=6; *Dependent of Inactive Guard";
ELSE IF DBENCAT IN ('RET','DR','DS') THEN DO;
    IF 17 <= INPUT(FIELDAGE,8.) < 65 THEN XBENCAT=7;   *Retired or Dependent of Retiree <65;
    ELSE IF INPUT(FIELDAGE,8.)  > = 65 THEN XBENCAT=8; *Retired or Dependent of Retiree >=65;
END;

/*ADD XINS_RSV, XENR_RSV. JMA 1/22/2007 */
/*

We also need to redefine xins_cov, call it xins_rsv,
which is the same as xins_cov but where
reservists are separated from other active duty - xins_cov will =1 if active duty,
but not active reservist or inactive reservist.

Similarly we need xenr_rsv which is xenr_pcm but reservists will not be treated as active duty
ie xenr_pcm=1 if active duty but not reservist.  We also need to define another category
for xins_rsv, xins_rsv=9 for tricare reserve select -we also need to account for the value
```

covered by insurance of another country - that should be classified as civilian insurance.
Use H13003 for this.

These new variables will be used in the beneficiary reports -
we will not start reporting on tricare reserve select separately until later in the year -
for now we will include it in std/extra
*/

```
/* XINS_RSV--INSURANCE COVERAGE DISTINGUISHING RESERVISTS FROM ACTIVE DUTY*/
  IF XENRLLMT = 1 THEN DO;
     IF XBENCAT IN (1) THEN XINS_RSV =1;                          /* Prime <65-Active Duty
(Non reservists) */
     ELSE IF XBENCAT IN (3,5) THEN XINS_RSV=10;                   /* Prime <65-Active Duty
(Reservists) */
  END;
  ELSE IF 17 <= INPUT(FIELDAGE,8.)  < 65 AND H13003 IN (1) THEN XINS_RSV = 2; /* Prime <65-Non-
active Duty */
  ELSE IF H13003 =3 THEN XINS_RSV = 3;                           /* Standard/Extra */
  ELSE IF H13003 = 11 THEN XINS_RSV = 7;                         /* Plus and Medicare */
  ELSE IF H13003 = 4 THEN XINS_RSV = 4;                          /* Medicare*/
  ELSE IF H13003 IN (5,6, 7, 8, 9, 13) THEN XINS_RSV = 5;        /* Other civilian health
insurance*/
  ELSE IF H13003 = 10 THEN XINS_RSV = 8;                         /* Veterans Administration
(VA) */
  ELSE IF H13003 = 12 THEN XINS_RSV = 9;                         /* TRICARE Reserve Select */
  ELSE IF H13003 = 14 THEN XINS_RSV = 11;                        /* TRICARE Retired Reserve -
MER 06/21/11 */
  ELSE IF 21 <= INPUT(FIELDAGE,8.) <= 26
     AND H13003 = 15 THEN XINS_RSV = 12;                         /* TRICARE Young Adult - MER
06/21/11 */
  ELSE IF H13003 = 16 THEN XINS_RSV = 13;                        /* CHCBP - MER 06/21/11 */
  ELSE IF (INPUT(FIELDAGE,8.)>= 65 AND XENRLLMT = 5 and H13003 = 1) THEN XINS_RSV = 6;    /*
Prime, >= 65 */
  ELSE IF H13075=1 AND H13076=1 AND H13003 NE .N THEN XINS_RSV = 4;                       /*
Medicare/Medicaid */

/* XENR_RSV--ENROLLMENT DISTINGUISHING RESERVISTS FROM ACTIVE DUTY */
IF 17 <= INPUT(FIELDAGE,8.) < 65 THEN DO;
   IF INPUT(ENBGSMPL,8.) = 1 THEN DO;
      IF XBENCAT IN (1) THEN XENR_RSV = 1;                       /*   Active duty (<65) Non
reservists */
      ELSE IF XBENCAT IN (3,5) THEN XENR_RSV = 8;                /*   Active duty (<65) Reservists
*/
   END;
   ELSE IF INPUT(ENBGSMPL,8.) IN (3, 6) THEN XENR_RSV = 2;       /*   Enrolled (<65) - mil PCM */
   ELSE IF INPUT(ENBGSMPL,8.) IN (2, 5) THEN XENR_RSV = 3;       /*   Enrolled (<65) - civ PCM */
   ELSE IF INPUT(ENBGSMPL,8.) IN (4, 7,11) THEN XENR_RSV = 4;    /*   Not Enrolled (<65)       */
END;
ELSE IF INPUT(FIELDAGE,8.) > = 65 THEN DO;
    IF INPUT(ENBGSMPL,8.) = 10 THEN XENR_RSV = 5;                /*  Not Enrolled (65+)       */
    IF INPUT(ENBGSMPL,8.) = 9 THEN XENR_RSV = 6;                 /*  Enrolled (65+)-mil PCM   */
    IF INPUT(ENBGSMPL,8.) = 8 THEN XENR_RSV = 7;                 /*  Enrolled (65+)-civ PCM   */
END;

   /*JMA Feb 5, 2010 Capping/Recode dageqy and fieldage by combining 18 and below and 86 and
above. */

   IF INPUT(DAGEQY,8.)=.          THEN RDAGEQY=.;
   ELSE IF INPUT(DAGEQY,8.) LT 18  THEN RDAGEQY=18;
   ELSE IF INPUT(DAGEQY,8.) GT 86  THEN RDAGEQY=86;
   ELSE RDAGEQY=INPUT(DAGEQY,8.);

   IF INPUT(FIELDAGE,8.)=.         THEN RFLDAGE=.;
   ELSE IF INPUT(FIELDAGE,8.) LT 18 THEN RFLDAGE=18;
   ELSE IF INPUT(FIELDAGE,8.) GT 86 THEN RFLDAGE=86;
   ELSE RFLDAGE=INPUT(FIELDAGE,8.);


RUN;

PROC FREQ DATA=CONVARQ;
   TABLES JSFLAG*CACSMPL/LIST MISSING;
   TITLE3 'Comparison of Joint Service flag vs. CACSMPL';
```

```
RUN;

DATA CONVARQ2;
   SET CONVARQ;
   WHERE FNSTATUS=11;
RUN;


/* CHECK RECONSTRUCTED 2013 VARIABLES */
PROC FREQ DATA=CONVARQ2;
 TABLES XENRLLMT XENR_PCM XINS_COV XBENCAT XENR_RSV XINS_RSV XREGION XTNEXREG
        XBMICAT ENBGSMPL XBNFGRP
        KMILOPQY KCIVOPQY HP_PRNTL HP_MAMOG HP_MAM50 HP_PAP HP_BP HP_FLU
        HP_SMOKE KCIVINS OUTCATCH
        HP_SMKH3 HP_CESH3 XBMI HP_OBESE XOCONUS SERVAREA
        / MISSING LIST;
 TITLE3 'ONE WAY FREQUENCIES ON 2013 RECONSTRUCTED VARIABLES';
 RUN;

/* CROSSTABS TO CHECK RECONSTRUCTION OF 2013 VARIABLES */
/* COLLAPSE AGE FOR CROSSTABS */
   PROC FORMAT;
     VALUE $AGE
             "017" -< "065" = "LESS THAN 65"
             "065" -< "120" = "65 OR OLDER"
             "O"      = "Out of range err"
             " "      = "Missing/unknown" ;
   RUN;



   PROC FREQ DATA=CONVARQ2;
    TABLES
           FIELDAGE*ENBGSMPL*XENRLLMT
           FIELDAGE*ENBGSMPL*XENR_PCM
           FIELDAGE*XENRLLMT*H13003*H13075*H13076*XINS_COV
           DBENCAT*XBENCAT
           FIELDAGE*ENBGSMPL*XENR_RSV*XENR_PCM
           FIELDAGE*XENRLLMT*H13003*H13075*H13076*XINS_COV*XINS_RSV
           XTNEXREG*XREGION*CACSMPL
           XREGION*USA
           FIELDAGE*ENBGSMPL*XBNFGRP
           H13005*H13013*KMILOPQY
           H13005*H13013*KCIVOPQY
           H13062*H13063*H13064*HP_PRNTL
           XSEXA*H13059B*HP_PAP
           H13049*H13050*HP_BP
           FIELDAGE*H13051*HP_FLU
           H13054*HP_SMOKE
           H13002I*H13002J*H13002G*KCIVINS
           OUTCATCH*CACSMPL
           H13052*H13053*HP_SMKH3
           HP_SMKH3*H13054*HP_CESH3
           H13071F*H13071I*H13072*XBMI
           XBMICAT*HP_OBESE
           XREGION*XOCONUS*USA

           / MISSING LIST;
           FORMAT XSEXA HASEX. FIELDAGE $AGE.
                  XBMICAT XBMICAT.
                      ;
      TITLE3 'CROSSTABS ON NEW VARIABLES';
           RUN;

   PROC FREQ DATA=CONVARQ2;
      tables XTNEXREG*XREGION*CACSMPL
             XTNEXREG*XREGION*CACSMPL*D_HEALTH*DCATCH
             ENBGSMPL*CACSMPL*SERVAREA

             RDAGEQY*DAGEQY
             RFLDAGE*FIELDAGE

           / MISSING LIST;
```

```
    run;

/* COLLAPSE FOR MAMMOGRAPHY, BREAST CANCER, AND PROSTATE XTABS*/
    PROC FORMAT;
      VALUE $AGE2_
              "017" - "049" = "LESS THAN 50"
              "050" -< "120" = "50 OR OLDER"
              "O"       = "Out of range err"
              " "       = "Missing/unknown" ;

      VALUE $AGE3_
              "017" - "039" = "LESS THAN 40"
              "040" -< "120" = "40 OR OLDER"
              "O"       = "Out of range err"
              " "       = "Missing/unknown" ;
              RUN ;


         PROC FREQ DATA=CONVARQ2;
             TABLES XSEXA*FIELDAGE*H13061*HP_MAM50
                    /MISSING LIST;
                    FORMAT FIELDAGE $AGE2_. XSEXA HASEX.;
         RUN;

         PROC FREQ DATA=CONVARQ2;
             TABLES XSEXA*FIELDAGE*H13061*HP_MAMOG
                    /MISSING LIST;
                    FORMAT FIELDAGE $AGE3_. XSEXA HASEX.;
         RUN;

    PROC FORMAT;
      VALUE $AGE4_
              "017" - "020" = "LESS THAN 21"
              "021" - "026" = "21 TO 26"
              "027" -< "120" = "27 OR OLDER"
              "O"       = "Out of range err"
              " "       = "Missing/unknown" ;
              RUN ;


         PROC FREQ DATA=CONVARQ2;
             TABLES FIELDAGE*H13003*XINS_COV*XINS_RSV
                    /MISSING LIST;
                    FORMAT FIELDAGE $AGE4_.;
         RUN;

    PROC FREQ DATA=CONVARQ2(WHERE=(XINS_COV=10));
       TABLES DBENCAT DBENCAT*FIELDAGE/list missing;
       TITLE "DBENCAT frequencies for TRICARE Retired Reserve";
    RUN;

    PROC CONTENTS DATA=OUT.CONVARQ;
    RUN;
```

F.4.B Q3FY2013\PROGRAMS\CONSTRUCT\CONSTRUCT_CACSMPL.SAS - Include file for Convarq.sas.

```
****************************************************************************
*** Project: Health Care Survey of DoD Beneficiaries - Adult
*** Purpose: Create cacsmpl for the reporting purpose for adult survey
***
*** Program: construct_cacsmpl.sas
***
*** Inputs:  extract.sas7bdat: Extracted DoD data set
***          TMA.sas7bdat:     DMIS information
***          frame_cacsmpl.inc:  Include file
***
*** Outputs: construct_cacsmpl.sas7bdat - the adult frame with cacsmpl in
***
*** Note: 01/03/2007 by Haixia Xu
***       This program is copied from q4fy2006 sampling,
***       and modified for Q2FY2007 to create the cacampl to be used for reporting, not for
sampling purpose
***
****************************************************************************;

*** Set up options. ***;
options ls=132 ps=79 compress=yes nocenter;* mprint mlogic symbolgen;

*** Set up the input and output paths. ***;
libname ext      "K:\Q3FY2013\"; /* extract.sas7bdat */
libname inTMA    "..\..\Data\AFinal"; /* TMA.sas7bdat */
libname out      "..\..\Data\AFinal"; /* construct_cacsmpl.sas7bdat */

*** Set up the titles. ***;
title1 'Program: Construct_cacsmpl.SAS';
title2 'Construct cacsmpl for reporting';

data frame;
set ext.extract;
run;

title4 'Freq of PRRECFLG in the frame';
proc freq data=frame;
tables PRRECFLG/ missing list;
run;

/* MER 06/22/09 Added the following blocks to */
/* facilitate merge of selectq with the frame.*/
/* Resulting dataset renamed sample instead of*/
/* frame. */
proc sort data=frame;
   by mprid;
run;

data sample;
   merge frame(in=a) selectq(in=b keep = mprid);
   by mprid;
   if b=1;
run;

********************************************************************************
* Added q2 2003, Don and Keith created a template to be used each quarter;
* The code below and the include file construct cacsmpl
* and collapse historically small catchment areas;
********************************************************************************;
data TMA (keep = geocell d_par d_fac d_instal d_health d_dmis servaff);
   set inTMA.TMA;
   ***Extract the facility service code variable(servaff) starting with the November 2004TMA
spreadsheet in Q1,2005;
   rename facility_Type_Code=d_fac
          installation_Name=d_instal
          dmis_facility_Name=d_dmis
          facility_Service_Code=servaff ;
   length d_par $4.;
   d_par = DMIS_PARENT_ID;
```

```
   length geocell $4.;
   geocell = DMIS_ID;
   length d_health $2.;
   d_health = HEALTH_Service_region;
run;


title4 "Freq of servaff, d_fac in TMA spreadsheet";
proc freq data=TMA;
tables servaff d_fac/missing list;
run;


%include "construct_cacsmpl.inc" ;

data out.construct_cacsmpl;
  set t_sample(keep=mprid cacsmpl); /* MER 06/22/09 renamed from t_framea */
run;


title4 'Freq of cacsmpl';
proc freq data=out.construct_cacsmpl;
tables cacsmpl/missing list;
run;


title4 'Information for the Sample';
proc contents data = out.construct_cacsmpl;
run;


*************** The End ******************;
```

F.4.C Q3FY2013\PROGRAMS\CONSTRUCT\CONSTRUCT_CACSMPL.INC - Include file for Construct_Cacsmpl.SAS.

```
***************************************************************************************************
*****
*** Project:        Health Care Survey of DoD Beneficiaries - Quarterly/Annual Adult Dataset
*** Program:        Construct_cacsmpl.inc -- include file used in construct_cacsmpl.sas
***
*** Note: 01/04/2007 by Haixia Xu
***        This program is copied from q4fy2006 sampling,
***        and modified for q1fy2007 to create the cacampl to be used for reporting, not for
sampling purpose
***
***************************************************************************************************
********;

DATA SAMPLE; /* MER 06/22/09 renamed from FRAME to SAMPLE */
   SET SAMPLE;
   if pcm='MTF' then do;

      /* Use the list produced by sampling program for the current quarter */

      %include "..\sampling\assigngeocell.inc" /source2;

      /* all the old assignments from frame.inc for q2, 2005 */

      else if ('1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or
         ('6991' <= enrid <= '6994')   or ('6501' <=enrid <='6512') or
         ('7166' <= enrid <= '7195') or ( '6700' <= enrid <= '6881' ) or enrid='0000'
         then geocell=dcatch; *administrative assignment 1976-1980 added q4 2002, 6700-6881 added
q1 2004,
                               0000 added q1,2005;
        else if ('8001' <= enrid <= '8036') or ('6901' <= enrid <= '6919')
         then geocell = dcatch; *Managed care contractor assignment, added in q1 2005; *8001-8036
added q2 2005;
      else if ('3031' <= enrid <= '3057')
         then geocell = dcatch; ***On board ship***;
      else if enrid in ('0002', '0041', '0044', '0082', '0111', '0213', '0235', '0585', '5208',
'0250',
                        '0449', '0626', '0012')
         then geocell = dcatch; ***Inactive***;  *0626 added q2 2003, 0012 added q4 2003,
                                                  0041, 0044, 0082, 0111, 0213, 0235, 0585 added
q2 2005;
      else if enrid = ' ' then geocell = dcatch; ***enrolled, but missing ENRID, added q2
2005***;
      ****************************************************************;
      else if ('0190' <= enrid <='0199') then geocell = dcatch;**BYDON;
      ****************************************************************;

      else geocell = enrid;
   end;
   else geocell=dcatch;

RUN;

title4 "Check the correctness of the assignments of geocell";
proc freq data=sample;
tables enrid*geocell*dcatch/missing list;
where pcm='MTF';
run;

proc sort nodupkey data=TMA;
   by geocell;
run;

proc sort data=sample;
   by geocell;
run;

data sample2 sa_only fy_only; /* MER 06/22/09 renamed from frame2 and fr_only */
   merge sample (in=insa) TMA (in=infy);
   by geocell;
```

```
if insa=1 and infy=1 then output sample2;
else if insa=1 and infy=0 then output sa_only;
else if insa=0 and infy=1 then output fy_only;
run;

title4 "The records in the sample but not in TMA spreadsheet";
proc print data=sa_only;
run;

/*AMK 7/10/13 - OUTPUT RECORDS IN SA_ONLY*/
DATA OUT.sa_only;
SET sa_only;
RUN;


title4 "Freq of PCM*d_fac in the sample";
proc freq data=sample2;
tables pcm*d_fac/missing list;
run;


data t_sample; /* MER 06/22/09 renamed from t_framea */
   set sample2;
   ***************************;
   com_geo=geocell;
   ***************************;

   if pcm='MTF' then do;

      /* Use the list produced by the sampling program for the current quarter */

      %include "..\Sampling\assigncom_geo.inc" / source2;

      /* all the old assignments from frame.inc for q2, 2005 */

      else if ('1976' <= enrid <= '1980') or ('6301' <= enrid <= '6323') or
         ('6991' <= enrid <= '6994') or ('6501' <= enrid <= '6512') or
         ('7166' <= enrid <= '7195') or ('6700' <= enrid <= '6881') or enrid='0000'
         then com_geo = geocell; *Administrative assignment--1976-1980 added q4 2002. 0000 added
q1,2005;
         else if ('8001' <= enrid <= '8036') or ('6901' <= enrid <= '6919')
         then com_geo = geocell; *Managed care contractor assignment, added in q1, 2005;*8001-
8036 added q2 2005;
      else if ('3031' <= enrid <= '3057')
         then com_geo = geocell; ***On board ship***;
      else if enrid in ('0002', '0041', '0044', '0082', '0111', '0213', '0235', '0585', '5208',
'0250',
                        '0449', '0626', '0012')
      then com_geo = geocell; ***Inactive***;  *'0626' added q2 2003, 0012 added q4 2003,
                                                 0041, 0044, 0082, 0111, 0213, 0235, 0585 added q2
2005;


      else com_geo = d_par;
   end;
   else if patcat='ACTDTY' then com_geo=d_par;

   ********************************************************************;
   ***Made the following 9 Navy sites stand alone in q1,2005:      ***;
   ***'0026','0068','0231','0378','0387','0405','0407','0508','6215'***;
   ********************************************************************;

   if geocell in ('0026','0068','0231','0378','0387','0405','0407','0508','6215') then
com_geo=geocell;

   ***************************************************;
   *** Collapsing small areas with nearest facility ***;
   ***************************************************;

   ********************************************************************;
   *** Collapsed the following 9 Air force sites to achieve the sample ***;
   *** size of 50000 due to making 9 Navy sites stand alone in q1,2005:***;
   *** '0013','0036','0059','0090','0287','0326','0638','0805','7139'. ***;
```

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```
   ***********************************************************************;
   if      com_geo in ('0074','0416')        then com_geo='0001';
   else if com_geo in ('0203','0130','0417',
                       '7044','7047')         then com_geo='0005';
   else if com_geo in ('0418','0419','7083',
                       '0015','0287')         then com_geo='0014'; *0287 added in q1,2005 by
Haixia;
   else if com_geo in ('0018','0248')         then com_geo='0019';
   else if com_geo in ('7046')                then com_geo='0029'; *By emf added q4 2003;
   else if com_geo in ('0420')                then com_geo='0037';
   else if com_geo in ('0422')                then com_geo='0038';
   else if com_geo in ('0421','7048','0050')  then com_geo='0039';
   else if com_geo in ('7139')                then com_geo='0043'; /*changed from 0045 to 0043 in
q1fy2007 reporting due to different xregion*/
   else if com_geo in ('7043')                then com_geo='0052';
   else if com_geo in ('0427')                then com_geo='0056'; *By emf added q3 2003;
   else if com_geo in ('0076')                then com_geo='0058';
   else if com_geo in ('0423')                then com_geo='0064';
   else if com_geo in ('0413','0428','0326',
                       '0036')                then com_geo='0066'; *Taken out 0068, added 0036,
0326 in q1,2005 by Haixia;
   else if com_geo in ('0424')                then com_geo='0067';
   else if com_geo in ('0306')                then com_geo='0069';
   else if com_geo in ('0059')        then com_geo='0078'; *changed in q1,2005;
   else if com_geo in ('0085')                then com_geo='0083';
   else if com_geo in ('0081','5196')         then com_geo='0086'; *By emf added q1 2003;
   else if com_geo in ('0430','0335','7143')  then com_geo='0089';
   else if com_geo in ('0013')                then com_geo='0096'; *0013 added in q1,2005 by
Haixia;
   else if com_geo in ('0338', '0097')            then com_geo='0098'; /*moved 0338 from 0078
to here due to different xregion*/
   else if com_geo in ('0356')                then com_geo='0103';
   else if com_geo in ('0084')                then com_geo='0108';
   else if com_geo in ('0363','7082','1587')  then com_geo='0109';
   else if com_geo in ('0364')                then com_geo='0112';
   else if com_geo in ('0114')                then com_geo='0117';
   else if com_geo in ('0077')                then com_geo='0119';
   else if com_geo in ('0432','0433','0090')  then com_geo='0120'; *Added 0090 in q1,2005 by
Haixia;
  *else if com_geo in ('0122')                then com_geo='0121'; *Uncollapse 0122(KENNER AHC-FT.
LEE)
                                                            to make it a seperate cacsmpl
in q1,2005 by Haixia;
   else if com_geo in ('0431','0434','0395',
                       '1646')                then com_geo='0125';
   else if com_geo in ('0435')                then com_geo='0126';
   else if com_geo in ('7045')                then com_geo='0128';
   else if com_geo in ('0106','7200','0093',
                       '0094')                then com_geo='0129'; *Changed in q1,2005 by Haixia;
  *Collapse 0093,0094 with an Air Force site in the west TNEX region, 0129, instead of the south
TNEX region, 0096;
   else if com_geo in ('0310','0425','0426')  then com_geo='0321';
   else if com_geo in ('0808')                then com_geo='0609';
   else if com_geo in ('0618','0623','0629',
                       '0624','0635','0825')  then com_geo='0617';
/* comment it out in q1fy2007 for reporting
   else if com_geo in ('0802', '0616','0615',
                       '7042','5197')         then com_geo='0620'; *0616 added in q3,2004 by
Haixia;
*/
   else if com_geo in ('0802')        then com_geo='0620'; /*xregion=14*/
   else if com_geo in ('0616','7042','5197')  then com_geo='0615'; /*xregion=15*/
   else if com_geo in ('8931')                then com_geo='0633';
   else if com_geo in ('0610','0639','0637',
                       '0638')                then com_geo='0640'; *changed in q1,2005;
   else if com_geo in ('0805','8982')         then com_geo='0806'; *0805 added in q1,2005 by
Haixia;
   else if com_geo in ('0034','0035','0100')  then com_geo='6223'; *changed emf q1 2004;

   *** added on 01/27/2004 by Haixia Xu to collapse small cells
       for the facility type of TGRO into out of catchment area;
```

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```
    if d_fac='NONCAT' or d_fac='TGRO' or d_fac="TPR" then do;
        if d_health in ('01','02','05','17') then com_geo='9901';
            else if d_health in ('03','04','06','18') then com_geo='9902';
            else if d_health in ('07','08','09','10','11','12','19') then com_geo='9903';
            else if d_health in ('00','13','14','15') then com_geo='9904';
      end;
    *********************************************************************************;
    ***d_fac="TPR" and d_health = '17', '18', '19' were added above for Q4, 2004,  ***;
    ***since we got the new regions 17(North T_NEX),18(South T_NEX),19(West T_NEX).***;
    *********************************************************************************;

    if com_geo in ('9900', '0999', '0998',' ') then com_geo='9904';

    rename com_geo = cacsmpl;

RUN;

************** The end **************;
```

F.4.D   Q3FY2013\PROGRAMS\CONSTRUCT\CONSVAR0.SAS - Include file for Convarq.sas.

```
*****************************************************************************
*  PROGRAM:  CONSVAR0.SAS
*  TASK:     1999 DOD HEALTH CARE SURVEY ANALYSIS (8676-100)
*  PURPOSE:  Create XREGION and CONUS
*
*  WRITTEN:  February 11, 2000
*  MODIFIED: 1) February 23, 2000 By Keith Rathbun.  Converted into an include
*               file.  Updated code accordingly.
*            2) February 26, 2001 By Keith Rathbun.  Added recode for CACSMPL
*               weighting purposes.
*            3) September 13, 2004 By Keith Rathbun. Added 6223 to XREGION=1.
*            4) September 15, 2004 By Keith Rathbun. Recoded XREGION=0 to missing.
*            5) September 28, 2004 By Jacqueline Agufa-Maloba. Created XTNEXREG.
*            6) February 9, 2005 by Lucy Lu. Fix catchment and xreg.
*            7) March 16,2005 by Jacqueline Agufa-Maloba.  Update XREGION for
*               cases where CACSMPL=9901,9902,9903,9904. XREGION had a value of
*               17,18 or 19 and will be changed to values from the dataset
*               region_map01.sas7bdat
*            8) May 22, 2005 By Jacqueline Agufa.  Added 0405 to XREGION=3 and
*               0231, 0407,  6215 to XREGION=9.
*            9) July 6, 2006 by Lucy Lu. Add XOCONUS (region 13,14,15) for Q3 FY2006
*            10) February 6, 2007 by Jacqueline Agufa. Moved the code to create SERVAREA from
*                MERGESYN.sas to here.
*            11) January 16, 2009 by Mike Rudacille. Changed CONUS variable name to USA
*
*    NOTES:  1) This file needs to be included in the CONVARQ.SAS program.
*
*****************************************************************************
* Assign XREGION using CACSMPL
*****************************************************************************;
IF      CACSMPL IN (0035, 0036, 0037, 0066, 0067,
                    0068, 0069, 0081, 0086, 0100,
                    0123, 0306, 0310, 0321, 0326,
                    0330, 0385, 0413, 6201, 6223) THEN XREGION= 1;
ELSE IF CACSMPL IN (0089, 0090, 0091, 0092, 0120,
                    0121, 0122, 0124, 0335, 0378, 0387, 0432,
                    0433, 0508, 7143, 7286, 7294) THEN XREGION= 2;
ELSE IF CACSMPL IN (0039, 0041, 0045, 0046, 0047,
                    0048, 0049, 0050, 0051, 0101,
                    0103, 0104, 0105, 0337, 0356,
                    0405, 0422, 0511, 5191  ) THEN XREGION= 3;
ELSE IF CACSMPL IN (0001, 0002, 0003, 0004, 0038,
                    0042, 0043, 0073, 0074, 0107,
                    0297, 7139          ) THEN XREGION= 4;
ELSE IF CACSMPL IN (0055, 0056, 0060, 0061, 0095,
                    5195, 9905          ) THEN XREGION= 5;
ELSE IF CACSMPL IN (0013, 0062, 0064, 0096, 0097,
                    0098, 0109, 0110, 0112, 0113,
                    0114, 0117, 0118, 0338, 0363,
                    0364, 0365, 0366, 1350, 1587, 1592, 7236, 9906        ) THEN XREGION= 6;
ELSE IF CACSMPL IN (0008, 0009, 0010, 0079, 0083,
                    0084, 0085, 0108, 9907      ) THEN XREGION= 7;
ELSE IF CACSMPL IN (0031, 0032, 0033, 0053, 0057,
                    0058, 0059, 0075, 0076, 0077,
                    0078, 0093, 0094, 0106, 0119,
                    0129, 0252, 7200, 7293, 9908            ) THEN XREGION= 8;
ELSE IF CACSMPL IN (0018, 0019, 0024, 0026, 0029, 0030,
                    0131, 0213, 0231, 0248, 0407, 5205,
                    6215, 9909  ) THEN XREGION= 9;
ELSE IF CACSMPL IN (0014, 0015, 0028, 0235, 0250,
                    9910                        ) THEN XREGION=10;
ELSE IF CACSMPL IN (0125, 0126, 0127, 0128, 0395, 1646,
                    9911                        ) THEN XREGION=11;
ELSE IF CACSMPL IN (0052, 0280, 0287, 0534, 7043, 9912 ) THEN XREGION=12;
ELSE IF CACSMPL IN (0606, 0607, 0609, 0617, 0618,
                    0623, 0624, 0629, 0633, 0635,
                    0653, 0805, 0806, 0808, 0814,
                    8931, 8982, 9913            ) THEN XREGION=13;
ELSE IF CACSMPL IN (0610, 0612, 0620, 0621, 0622,
                    0637, 0638, 0639, 0640, 0802,
```

```
                         0804, 0853, 0862, 9914         ) THEN XREGION=14;
ELSE IF CACSMPL IN (0449, 0613, 0615, 0616, 9915 ) THEN XREGION=15;
ELSE IF CACSMPL IN (0005, 0006, 0203, 9916       ) THEN XREGION=16;
ELSE IF CACSMPL = 9999                             THEN XREGION= .;

*IF CACSMPL IN (9901,9902,9903,9904) THEN XREGION=D_HEALTH+0;  *JMA 2/17/2005;


/* JMA 5/18/2005 These values were gotten from UpdateXregion.lst
   We needed to update the missing XREGION for cases where CACSMPL IN
   9901,9902,9903,9904
   -per Eric Schone
   -FOR Q1 2005
*/

IF CACSMPL IN (9901,9902,9903,9904) THEN DO;
   IF D_HEALTH NOT IN ('00','17','18','19') THEN DO;
      XREGION=INPUT(D_HEALTH,8.)+0;
   END;
   ELSE DO;
      IF  DCATCH IN ('0037', '0067', '0123', '0781', '0907',
                     '0908', '0920', '0921', '0922', '0930',
                     '0931', '0933', '0939', '0940', '0946',
                     '0995')
      THEN XREGION=1;
      ELSE IF DCATCH IN ('0124', '0934', '0996')
           THEN XREGION=2;
      ELSE IF DCATCH IN ('0039', '0048', '0105', '0911', '0941',
                         '0987')
           THEN XREGION=3;
      ELSE IF DCATCH IN ('0003', '0787', '0901', '0925', '0943',
                         '0988', '0989')
           THEN XREGION=4;
      ELSE IF DCATCH IN ('0055', '0056', '0061', '0782', '0783',
                         '0789', '0914', '0915', '0918', '0923',
                         '0936', '0950')
           THEN XREGION=5;
      ELSE IF DCATCH IN ('0113', '0904', '0937', '0990', '0993')
           THEN XREGION=6;
      ELSE IF DCATCH IN ('0785', '0929', '0932')
           THEN XREGION=7;
      ELSE IF DCATCH IN ('0078', '0784', '0788', '0906', '0917',
                         '0924', '0927', '0928', '0935', '0942',
                         '0945', '0951', '0974')
           THEN XREGION=8;
      ELSE IF DCATCH IN ('0029', '0786', '0986')
           THEN XREGION=9;
      ELSE IF DCATCH IN ('0014', '0985')
           THEN XREGION=10;
      ELSE IF DCATCH IN ('0125', '0938', '0948', '0973')
           THEN XREGION=11;
      ELSE IF DCATCH IN ('0912')
           THEN XREGION=12;
      ELSE IF DCATCH IN ('0957', '0958', '0960', '0964', '0966',
                         '0967', '0976', '0977', '0979',
                         '0982')
           THEN XREGION=13;
      ELSE IF DCATCH IN ('0006', '0052', '0640', '0961', '0963',
                         '0965', '0978', '0983')
           THEN XREGION=14;
      ELSE IF DCATCH IN ('0075', '0120', '0615', '0622','0953',
                         '0970', '0971', '0972', '0975')
           THEN XREGION=15;
      ELSE IF DCATCH IN ('0902')
           THEN XREGION=16;
/*    ELSE IF DCATCH IN ('0999') AND DHSRGN IN ('13','14','15')
           THEN XREGION=DHSRGN+0;
*/
   END;
END;


IF D_PAR = '0902' THEN XREGION=16;
IF XREGION = 0 THEN XREGION = .;
```

```
*****************************************************************************
* Assign indicator of CONUS based on XREGION.  CONUS stands for
* Continental United States it but includes both Alaska and Hawaii.
* 1/16/09 - Changed CONUS variable to USA.
*****************************************************************************;
IF      XREGION IN (1,2,3,4,5,6,7,8,9,10,11,12,16) THEN USA=1;
ELSE IF XREGION IN (13,14,15)                       THEN USA=0;
ELSE IF XREGION = .                                 THEN USA=.;


*****************************************************************************
* Assign XTNEXREG using XREGION
*****************************************************************************;
IF XREGION IN (1,2,5) THEN XTNEXREG=1;
ELSE IF XREGION IN (3,4,6) THEN XTNEXREG=2;
ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG=3;
ELSE IF XREGION IN (13,14,15) THEN XTNEXREG=4;
ELSE IF XREGION = . THEN DO; /* MER 03/23/10 - If XREGION is missing, set XTNEXREG = TNEXREG */
   IF TNEXREG = 'N' THEN XTNEXREG=1;
   ELSE IF TNEXREG = 'S' THEN XTNEXREG=2;
   ELSE IF TNEXREG = 'W' THEN XTNEXREG=3;
   ELSE IF TNEXREG = 'O' THEN XTNEXREG=4;
   ELSE XTNEXREG=.;
END;


*****************************************************************************
* CREATE XOCONUS FOR  europe, pacific, latin america
* Lucy Lu 7/6/06
*****************************************************************************;

IF      XREGION=13 THEN XOCONUS=1;
ELSE IF XREGION=14 THEN XOCONUS=2;
ELSE IF XREGION=15 THEN XOCONUS=3;

   *****************************************************************************
   * Construct SERVAREA.
   *****************************************************************************;
   IF ENBGSMPL IN ('04','07','10') THEN DO;
      SELECT(CACSMPL);
         WHEN (0024,0029)             SERVAREA='01';
         WHEN (0032,0033)             SERVAREA='02';
         WHEN (0037,0066,0067,0123)   SERVAREA='03';
         WHEN (0038,0042)             SERVAREA='04';
         WHEN (0049,0103,0104)        SERVAREA='05';
         WHEN (0091,0092)             SERVAREA='06';
         WHEN (0098,0113)             SERVAREA='07';
         WHEN (0101,0105)             SERVAREA='08';
         WHEN (0109,0117)             SERVAREA='09';
         WHEN (0120,0121,0124)        SERVAREA='10';
         WHEN (0125,0126,0127)        SERVAREA='11';
         OTHERWISE SERVAREA=' ';
      END;
   END;
```

F.5.A   Q3FY2013\PROGRAMS\CONSTRUCT\MERGEQ.SAS - Merge Constructed Variables onto Data File.

```
******************************************************************************
* PROGRAM:   MERGEQ.SAS
* WRITTEN:   1/28/00 BY KELLY WHITE
* MODIFIED:  3/1/00 BY NATALIE JUSTH
* MODIFIED:  11/16/00 BY JOAN JAMES
* MODIFIED:  1/30/01 BY NATALIE JUSTH
* MODIFIED:  6/6/01 BY NATALIE JUSTH FOR Q2 UPDATES
* MODIFIED:  8/20/01 BY NATALIE JUSTH FOR Q3 UPDATES
* MODIFIED: 12/13/01 BY NATALIE JUSTH FOR Q4 UPDATES
* MODIFIED: 2/11/02 By Daniele Beahm to delete H00077 variable and reassign format for
*           S00S01 variable
* MODIFIED: 4/11/02 By JACLYN WONG FOR Q1 UPDATES
* MODIFIED: 6/21/02 by JACLYN WONG FOR Q2 UPDATES
* MODIFIED: 7/1/2002 By Daniele Beahm to delete SF8 variables not used for Q2 2002
* MODIFIED: 10/16/2002 By Daniele Beahm to delete Q2 2002 Supplemental vars that were on the
*           Q3 2002 data file from NRC.
* MODIFIED: 01/02/2003 By Keith Rathbun: Added ONTIME variable to support the annual
*           version of the database (trickle indicator).  This ONTIME variable is
*           only applicable to the annual file and thus should be deleted for the
*           quarterly version of this program.
* MODIFIED: 3/24/02 by JACLYN WONG FOR Q1 2003 UPDATES.  Added HP_SMOKH, HP_CESS, and KPRSCPTN
* MODIFIED: 8/29/03 by NATALIE JUSTH FOR Q3 2003 UPDATES
* MODIFIED: 12/19/03 by NATALIE JUSTH FOR Q4 2003 UPDATES
* MODIFIED: 3/29/04 BY LUCY LU FOR Q1 2004 UPDATES
* MODIFIED: 6/10/04 BY LUCY LU FOR Q2 2004 UPDATES
* MODIFIED: 9/13/04 BY LUCY LU FOR Q3 2004 UPDATES
* MODIFIED: 11/10/04 BY LUC LU, DROP VARIABLE STIELIG.
* MODIFIED: 2/1/05 BY LUCY LU FOR Q4 2004 UPDATES
* MODIFIED: 2/17/2005 BY JACQUELINE AGUFA. Added code to get updated CACSMPL from
*           REPWT.sd2
* MODIFIED: 5/3/05 BY LUCY LU FOR Q1 2005 UPDATES.
* MODIFIED: 10/24/05 BY LUCY LU FOR Q3 2005 UPDATES.
* MODIFIED: 11/1/05 BY J AGUFA. Dropped E1-E19
* MODIFIED: 12/21/05 BY LUCY LU FOR Q4 2005
* MODIFIED: 03/29/06 BY LUCY LU FOR Q2 FY 2006
* MODIFIED: 07/07/06 BY LUCY LU FOR q3 FY 2006
* MODIFIED: 10/07/06 BY LUCY LU FOR q4 FY 2006
* MODIFIED: 1/2/07 BY J AGUFA FOR q1 FY 2007
* MODIFIED: 3/29/07 BY J AGUFA FOR q2 FY 2007
* MODIFIED: 7/05/07 BY J AGUFA FOR q3 FY 2007
* MODIFIED: 1/22/08 BY J AGUFA FOR q1 FY 2007
* MODIFIED: 10/1/08 BY M RUDACILLE FOR q4 FY 2008
* MODIFIED: 12/1/10 BY M RUDACILLE FOR q1 FY 2011
* MODIFIED: 1/19/11 BY M RUDACILLE - Changed HP_CESH2 to HP_CESH3
* MODIFIED: 3/30/11 BY M RUDACILLE - Changed HP_SMKH2 to HP_SMKH3
* MODIFIED: 12/9/11 BY M RUDACILLE FOR q1 FY 2012
* MODIFIED: 12/15/12 BY M RUDACILLE FOR q1 FY 2013
*
* PURPOSE:   TO MERGE FINAL FILES TOGETHER AND REORDER BY VARIABLE TYPE
*            To reorder variables within the record use a
*             LENGTH statement before the SET statement.
*             Make sure that MPRID is the first variable in the
*              record followed by:
*                           1)  other sampling variables
*                           2)  DEERS variables
*                           3)  Post-stratification vars
*                           4)  questionnaire responses
*                           5)  DRC variables
*                           6)  recoded questionnaire responses
*                           3)  coding scheme flags
*                           8)  constructed variables
*                           9)  weights  (NOT AVAILABLE FOR PRELIMINARY DATA)
* INPUT:     ..\..\DATA\AFINAL\SELECTQ.sas7bdat
* INPUT:     ..\..\DATA\AFINAL\CONVARQ.sas7bdat
* OUTPUT:    ..\..\DATA\AFINAL\MERGEQ.sas7bdat
* INCLUDE:   SERVAFF.SAS
*            TO MERGE ON VARIABLE SERVAFF
******************************************************************************
*;
```

```
LIBNAME IN1            '..\..\DATA\AFINAL';
LIBNAME OUT            '..\..\DATA\AFINAL';
LIBNAME LIBRARY        '..\..\DATA\AFINAL\FMTLIB';

OPTIONS PS=78 LS=124 ERRORS=2 COMPRESS=YES VARLENCHK=NOWARN; *MPRINT;

%INCLUDE SERVAFF/SOURCE2;         *LLU 2/9/05;

PROC SORT DATA=IN1.SELECTQ OUT=SELECTQ;
   BY MPRID;
RUN;


PROC SORT DATA=IN1.CONVARQ OUT=CONVARQ;
   BY MPRID;
RUN;


PROC SORT DATA=IN1.SERVAFF OUT=SERVAFF;
   BY MPRID;
RUN;

PROC FREQ DATA=SERVAFF;
   TABLES SERVAFF;
RUN;

DATA MERGEQ (DROP =
H13001_O
H13002AO
H13002CO
H13002NO
H13002OO
H13002PO
H13002QO
H13002SO
H13002TO
H13002UO
H13002FO
H13002GO
H13002HO
H13002IO
H13002JO
H13002KO
H13002MO
H13002RO
H13002LO
H13003_O
H13004_O
H13005_O
H13006_O
H13007_O
H13008_O
H13009_O
H13010_O
H13011_O
H13012_O
H13013_O
H13014_O
H13015_O
H13016_O
H13017_O
H13018_O
S13C09_O
S13C10_O
S13C11_O
S13C12_O
S13C13_O
S13C14_O
H13019_O
H13020_O
H13021_O
H13022_O
H13023_O
```

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```
H13024_O
H13025_O
H13026_O
H13027_O
S13009_O
S13010_O
H13028_O
H13029_O
H13030_O
H13031_O
S13B01_O
S13B02_O
S13B03_O
S13B04_O
H13032_O
H13033_O
H13034_O
H13035_O
H13036_O
H13037_O
H13038_O
H13039_O
H13040_O
H13041_O
H13042_O
H13043_O
H13044_O
H13045_O
H13046_O
H13047_O
H13048_O
H13049_O
H13050_O
S13Q08_O
S13Q01_O
S13Q02_O
S13Q03_O
S13Q04_O
S13Q05_O
H13051_O
H13052_O
H13053_O
H13054_O
H13055_O
H13056_O
H13057AO
H13057BO
H13057CO
H13057DO
H13058_O
H13059BO
H13060_O
H13061_O
H13062_O
H13063_O
H13064_O
H13065_O
H13066_O
H13067_O
H13068_O
H13069_O
H13070_O
S13B23_O
S13B24_O
S13B25_O
S13B26_O
H13071FO
H13071IO
H13072_O
SREDA_O
H13073AO
H13073BO
H13073CO
```

```
   H13073DO
   H13073EO
   SRRACEAO
   SRRACEBO
   SRRACECO
   SRRACEDO
   SRRACEEO
   SRAGE_O
   H13074_O
   H13075_O
   H13076_O
   H13077_O
   H13078_O
   H13079_O
   S13011_O
   S13014_O
   PRRECFLG

   D_DMIS
   DMIS
   R_MTF
   GROUP
   GRP_GEO
   DELGIND
   ELAPSED_SEC
   SAMPLE_FLAG
   );


   MERGE SELECTQ(in=hcsdb rename=(flag_fin=dummy)
                 DROP=PCM SERVAFF)            /*** JMA 2/9/11 ***/ /*AMK 7/10/13 DROP
SERVAFF*/
        CONVARQ
        /*** SERVAFF(DROP=PCM DCATCH);        JMA 2/9/11 ***/
        SERVAFF(DROP=DCATCH ENRID); /*AMK 7/10/13 DROP ENRID*/

   BY MPRID;
   if hcsdb;

/*MAKE FLAG_FIN IN Q4 CHARACTER*/
   FLAG_FIN=PUT(DUMMY,5.);                 /*LLU 2/9/05*/
   DROP DUMMY;


FORMAT
   SERVAFF  $SERVAFF.
   ENBGSMPL $ENBGS.
   CACSMPL  CAC.
   DBENCAT  $BENCAT.
   DMEDELG  $MEDELG.
   DSPONSVC $SPONSVC.
   FLAG_FIN $FINAL.
   FNSTATUS FNSTATS.
   MBRRELCD $MBRREL.
   MEDTYPE  $MEDTYP.
   MRTLSTAT $MSTATUS.
   PATCAT   $AGGBCAT.
   MISS_1   HAMISS.
   MISS_4   HAMISS.
   MISS_5   HAMISS.
   MISS_6   HAMISS.
   MISS_7   HAMISS.
   MISS_9   HAMISS.
   MISS_TOT HAMISS.
   PCM      $PCM.
   PNLCATCD $PNLCAT.
   PNSEXCD  $SEXCD.
   RACEETHN $RACECD.
   SEXSMPL  SEX.
   SVCSMPL  SVCSMPL.
   XSEXA    HASEX.
   SERVAREA $SRVAREA.
   MPCSMPL  MPCSMPL.
```

```
        D_HEALTH $DHEALTH.
        TNEXREG  $TNEXREG.
        D_FAC    $DFAC.
        MSM      $MSM.
        XBMICAT  XBMICAT.
        ENRID    $ENRID.
        WEB      WEB.
        XOCONUS  XOCONUS.
        ACV      $ACV2_.

        XSERVAFF XSERVAFF.

        PNTYPCD  $PNTYPCD.

        MPRID    $8.          /*Remove extra format space ($43) provided by NRC*/
;

    LABEL
        ENBGSMPL = "Enrollment by beneficiary category"
        SERVAFF  = "Service Affiliation"
        MPCSMPL  = "MPCSMPL - Military Personnel Category"
        FLAG_FIN = "Final Disposition"
        CACSMPL  = "Catchment Area"
        WEB      = "Web survey indicator"
        D_PAR    = "DMIS Parent ID"
        D_Health = "Health Service Region"
        TNEXREG  = "TNEX Region - Based on Address"
        MSM      = 'Multiple Service Market Areas'
        MIQCNTL  = 'Synovate ID'
        XSERVAFF = "Service Affiliation"
        SERVAREA = 'Service Area'
        COM_GEO  = "Catchment Area"
        ;

    RUN;

    PROC CONTENTS DATA=MERGEQ;
    RUN;


    DATA OUT.MERGEQ;

        LENGTH

            MPRID      $ 8          /* ID                */
            SVCSMPL      8          /* sampling variable */
            SEXSMPL      8          /* sampling variable */
            STRATUM    $ 7          /* sampling variable */
            CACSMPL      8          /* sampling variable */
            JSFLAG       3          /* MER 01/09/13 - Added here because it is derived from CACSMPL */
            ENBGSMPL   $ 2          /* sampling variable */
            MPCSMPL      8          /* sampling variable */
            NHFF         8          /* sampling variable */
            SERVAREA   $ 2          /* sampling variable */
            QUARTER    $ 8          /* sampling variable */
            PRN          8          /* sampling variable */
            DCATCH     $ 4          /* sampling variable */
            ENRID      $ 4          /* sampling variable */
            DMIS_ID    $ 9          /* sampling variable */
            MSM        $ 2          /* sampling variable */
            D_FAC      $ 9          /* sampling variable */
            D_PAR      $ 4          /* sampling variable */
            D_HEALTH   $ 2          /* sampling variable */
            TNEXREG    $ 1          /* sampling variable */
            SERVAFF    $ 1          /* sampling variable */
            BWT          8          /* sampling variable */
            COM_GEO    $ 4          /* sampling variable */ /* MER 7/20/10 - Added to sampling vars so
it won't be */
                                                            /* at the end of the proc contents by
default anymore. */
                                                            /* This variable gets dropped in
ADDWGTSA.sas.        */
```

```
MRTLSTAT   $ 1              /* DEERS variable      */
RACEETHN   $ 1              /* DEERS variable      */
PNSEXCD    $ 1              /* DEERS variable      */
DAGEQY     $ 3              /* DEERS variable      */
RDAGEQY      3              /* DEERS variable      */
FIELDAGE   $ 3              /* DEERS variable      */
RFLDAGE      3              /* DEERS variable      */
PCM        $ 3              /* DEERS variable      */
ACV        $ 1              /* DEERS variable      */
DBENCAT    $ 3              /* DEERS variable      */
DMEDELG    $ 1              /* DEERS variable      */
DSPONSVC   $ 1              /* DEERS variable      */
MBRRELCD   $ 1              /* DEERS variable      */
MEDTYPE    $ 1              /* DEERS variable      */
PATCAT     $ 7              /* DEERS variable      */
PNTYPCD    $ 1              /* DEERS variable      */
PNLCATCD   $ 1              /* DEERS variable      */


H13001       4              /* questionnaire       */
H13002A      4              /* questionnaire       */
H13002C      4              /* questionnaire       */
H13002N      4              /* questionnaire       */
H13002O      4              /* questionnaire       */
H13002P      4              /* questionnaire       */
H13002Q      4              /* questionnaire       */
H13002S      4              /* questionnaire       */
H13002T      4              /* questionnaire       */
H13002U      4              /* questionnaire       */
H13002F      4              /* questionnaire       */
H13002G      4              /* questionnaire       */
H13002H      4              /* questionnaire       */
H13002I      4              /* questionnaire       */
H13002J      4              /* questionnaire       */
H13002K      4              /* questionnaire       */
H13002M      4              /* questionnaire       */
H13002R      4              /* questionnaire       */
H13002L      4              /* questionnaire       */
H13003       4              /* questionnaire       */
H13004       4              /* questionnaire       */
H13005       4              /* questionnaire       */
H13006       4              /* questionnaire       */
H13007       4              /* questionnaire       */
H13008       4              /* questionnaire       */
H13009       4              /* questionnaire       */
H13010       4              /* questionnaire       */
H13011       4              /* questionnaire       */
H13012       4              /* questionnaire       */
H13013       4              /* questionnaire       */
H13014       4              /* questionnaire       */
H13015       4              /* questionnaire       */
H13016       4              /* questionnaire       */
H13017       4              /* questionnaire       */
H13018       4              /* questionnaire       */
H13019       4              /* questionnaire       */
H13020       4              /* questionnaire       */
H13021       4              /* questionnaire       */
H13022       4              /* questionnaire       */
H13023       4              /* questionnaire       */
H13024       4              /* questionnaire       */
H13025       4              /* questionnaire       */
H13026       4              /* questionnaire       */
H13027       4              /* questionnaire       */
H13028       4              /* questionnaire       */
H13029       4              /* questionnaire       */
H13030       4              /* questionnaire       */
H13031       4              /* questionnaire       */
H13032       4              /* questionnaire       */
H13033       4              /* questionnaire       */
H13034       4              /* questionnaire       */
H13035       4              /* questionnaire       */
H13036       4              /* questionnaire       */
```

```
H13037          4               /* questionnaire    */
H13038          4               /* questionnaire    */
H13039          4               /* questionnaire    */
H13040          4               /* questionnaire    */
H13041          4               /* questionnaire    */
H13042          4               /* questionnaire    */
H13043          4               /* questionnaire    */
H13044          4               /* questionnaire    */
H13045          4               /* questionnaire    */
H13046          4               /* questionnaire    */
H13047          4               /* questionnaire    */
H13048          4               /* questionnaire    */
H13049          4               /* questionnaire    */
H13050          4               /* questionnaire    */
H13051          4               /* questionnaire    */
H13052          4               /* questionnaire    */
H13053          4               /* questionnaire    */
H13054          4               /* questionnaire    */
H13055          4               /* questionnaire    */
H13056          4               /* questionnaire    */
H13057A         4               /* questionnaire    */
H13057B         4               /* questionnaire    */
H13057C         4               /* questionnaire    */
H13057D         4               /* questionnaire    */
H13058          4               /* questionnaire    */
H13059B         4               /* questionnaire    */
H13060          4               /* questionnaire    */
H13061          4               /* questionnaire    */
H13062          4               /* questionnaire    */
H13063          4               /* questionnaire    */
H13064          4               /* questionnaire    */
H13065          4               /* questionnaire    */
H13066          4               /* questionnaire    */
H13067          4               /* questionnaire    */
H13068          4               /* questionnaire    */
H13069          4               /* questionnaire    */
H13070          4               /* questionnaire    */
H13071F         4               /* questionnaire    */
H13071I         4               /* questionnaire    */
H13072          4               /* questionnaire    */
SREDA           4               /* questionnaire    */
H13073          4               /* questionnaire    */
H13073A         4               /* questionnaire    */
H13073B         4               /* questionnaire    */
H13073C         4               /* questionnaire    */
H13073D         4               /* questionnaire    */
H13073E         4               /* questionnaire    */
SRRACEA         4               /* questionnaire    */
SRRACEB         4               /* questionnaire    */
SRRACEC         4               /* questionnaire    */
SRRACED         4               /* questionnaire    */
SRRACEE         4               /* questionnaire    */
SRAGE           4               /* questionnaire    */
H13074          4               /* questionnaire    */
H13075          4               /* questionnaire    */
H13076          4               /* questionnaire    */
H13077          4               /* questionnaire    */
H13078          4               /* questionnaire    */
H13079          4               /* questionnaire    */

S13C09          4               /* supplemental     */
S13C10          4               /* supplemental     */
S13C11          4               /* supplemental     */
S13C12          4               /* supplemental     */
S13C13          4               /* supplemental     */
S13C14          4               /* supplemental     */
S13Q08          4               /* supplemental     */
S13Q01          4               /* supplemental     */
S13Q02          4               /* supplemental     */
S13Q03          4               /* supplemental     */
S13Q04          4               /* supplemental     */
S13Q05          4               /* supplemental     */
S13009          4               /* supplemental     */
```

```
S13010          4           /* supplemental        */
S13B01          4           /* supplemental        */
S13B02          4           /* supplemental        */
S13B03          4           /* supplemental        */
S13B04          4           /* supplemental        */
S13B23          4           /* supplemental        */
S13B24          4           /* supplemental        */
S13B25          4           /* supplemental        */
S13B26          4           /* supplemental        */
S13011          4           /* supplemental        */
S13014          4           /* supplemental        */

ONTIME       $ 3            /* Survey fielding variable */
FLAG_FIN     $ 5            /* Survey fielding variable */
DUPFLAG      $ 3            /* Survey fielding variable */
FNSTATUS       8            /* Survey fielding variable */
KEYCOUNT       8            /* Survey fielding variable */
WEB            8            /* Survey fielding variable */
MIQCNTL      $ 12           /* Survey fielding variable */

N1             8            /* CS flag variable     */
N2             8            /* CS flag variable     */
N3             8            /* CS flag variable     */
N4             8            /* CS flag variable     */
N5             8            /* CS flag variable     */
N5A1           8            /* CS flag variable     */
N5A2           8            /* CS flag variable     */
N5A3           8            /* CS flag variable     */
N6             8            /* CS flag variable     */
N7             8            /* CS flag variable     */
N8             8            /* CS flag variable     */
N8_01          8            /* CS flag variable     */
N9             8            /* CS flag variable     */
N10            8            /* CS flag variable     */
N10_B1         8            /* CS flag variable     */
N11            8            /* CS flag variable     */
N12            8            /* CS flag variable     */
N13            8            /* CS flag variable     */
N14            8            /* CS flag variable     */
N15            8            /* CS flag variable     */
N16            8            /* CS flag variable     */
N17            8            /* CS flag variable     */
N17_Q0         8            /* CS flag variable     */
N17_Q1         8            /* CS flag variable     */
N17_Q2         8            /* CS flag variable     */
N18            8            /* CS flag variable     */
N19A           8            /* CS flag variable     */
N19B           8            /* CS flag variable     */
N20            8            /* CS flag variable     */
N21            8            /* CS flag variable     */
N22            8            /* CS flag variable     */
N23            8            /* CS flag variable     */
N24            8            /* CS flag variable     */
N25            8            /* CS flag variable     */

MISS_1         8            /* CS Count             */
MISS_4         8            /* CS Count             */
MISS_5         8            /* CS Count             */
MISS_6         8            /* CS Count             */
MISS_7         8            /* CS Count             */
MISS_9         8            /* CS Count             */
MISS_TOT       8            /* CS Count             */

XENRLLMT       8            /* constructed          */
XENR_PCM       8            /* constructed          */
XINS_COV       8            /* constructed          */
XBENCAT        8            /* constructed          */
XENR_RSV       8            /* constructed          */
XINS_RSV       8            /* constructed          */
XREGION        3            /* constructed          */
XTNEXREG       3            /* constructed          */
USA            3            /* constructed          */
XOCONUS        3            /* constructed          */
```

```
    OUTCATCH       8              /* constructed       */
    XSEXA          8              /* constructed       */
    XBMI           8              /* constructed       */
    XBMICAT        3              /* constructed       */
    XBNFGRP        8              /* constructed       */
    XSERVAFF       3              /* constructed       */
    KMILOPQY       8              /* constructed       */
    KCIVOPQY       8              /* constructed       */
    KCIVINS        8              /* constructed       */
    HP_PRNTL       8              /* constructed       */
    HP_MAMOG       8              /* constructed       */
    HP_MAM50       8              /* constructed       */
    HP_PAP         8              /* constructed       */
    HP_BP          8              /* constructed       */
    HP_FLU         8              /* constructed       */
    HP_OBESE       8              /* constructed       */
    HP_SMOKE       8              /* constructed       */
    HP_SMKH3       8              /* constructed       */
    HP_CESH3       8              /* constructed       */
    ;

    SET MERGEQ;

    RUN;

PROC CONTENTS DATA=OUT.MERGEQ POSITION;
    title  "HCSDB for Q3 FY 2013, ordered by variable type";
    RUN;

PROC FREQ DATA=OUT.MERGEQ;
TABLE PCM ACV CACSMPL /MISSPRINT;
RUN;
```

F.5.B   Q3FY2013\PROGRAMS\CONSTRUCT\SERVAFF.SAS - Merge SERVAFF variable to quarterly Data File.

```
/***************************************************************************/
/* PROJECT: 8687-100 (DOD QUARTERLY 2001)                                  */
/* AUTHOR:  NATALIE JUSTH                                                   */
/* DATE:    APRIL 24, 2001                                                  */
/* UPDATED: JUNE 5, 2001 FOR QUARTER 2                                      */
/* UPDATED: AUGUST 20, 2001 FOR QUARTER 3                                   */
/* UPDATED: DECEMBER 13, 2001 FOR QUARTER 4                                 */
/* UPDATED: JANUARY 23, 2002 FOR MOVE TO DOD COMPUTER                       */
/* UPDATED: FEBUARY 1, 2005 FOR Q4, 2004                                    */
/*                                                                          */
/* PURPOSE: MERGE VARIABLE SERVAFF TO QUARTERLY DATASET                     */
/* INPUT:   ...\DATA\AFINAL\S200204.sas7bdat                               */
/*          ...\DATA\AFINAL\SAMPLA02.sas7bdat                              */
/* OUTPUT:  ...\DATA\AFINAL\SERVAFF.sas7bdat                               */
/***************************************************************************/

LIBNAME  INr  "K:\Q3FY2013\"; /*Restricted folder*/
LIBNAME TMA   '..\..\DATA\AFINAL';
LIBNAME serv  '..\..\DATA\AFINAL';


/* Create new DMIS merge variable              */
/* First use ENRID, then ULOCDMIS, then DCATCH */

DATA SAMPLA02(KEEP=DMIS_ID ENRID MSM MPRID PCM DCATCH);
   SET INr.SAMPLA02;
   LENGTH DMIS_ID $9;
   DMIS_ID=ENRID;
   IF DMIS_ID=' ' THEN DO;
      IF ULOCDMIS NE ' ' THEN DMIS_ID=ULOCDMIS;
      ELSE DMIS_ID=DCATCH;
   END;


   *************************************************************************
   * Construct MSM.
   *************************************************************************;


   IF PCM = 'MTF' THEN DO;
      SELECT(DMIS_ID);
         WHEN ('0037', '0066', '0067', '0068', '0069',
               '0123', '0256', '0306', '0309', '0385', '0413') MSM='01';
         WHEN ('0120', '0121', '0124')                         MSM='02';
         WHEN ('0089', '0335')                                 MSM='03';
         WHEN ('0103', '0356')                                 MSM='04';
         WHEN ('0101', '0105')                                 MSM='05';
         WHEN ('0297', '0316', '0436', '0654', '1990', '0073') MSM='06';
         WHEN ('0109', '0117', '0363', '0366')                 MSM='07';
         WHEN ('0032', '0033', '0252', '7200')                 MSM='08';
         WHEN ('0024', '0029')                                 MSM='09';
         WHEN ('0125', '0126', '0127', '0395', '7138')         MSM='10';
         WHEN ('0052', '0280', '0287')                         MSM='11';
         WHEN ('0204', '0006')                                 MSM='12';
         WHEN ('0005', '0203')                                 MSM='13';
         OTHERWISE MSM='  ';
      END;
   END;
   ELSE DO;
      SELECT(DCATCH);
         WHEN ('0037', '0066', '0067', '0068', '0069',
               '0123', '0256', '0306', '0309', '0385', '0413') MSM='01';
         WHEN ('0120', '0121', '0124')                         MSM='02';
         WHEN ('0089', '0335')                                 MSM='03';
         WHEN ('0103', '0356')                                 MSM='04';
         WHEN ('0101', '0105')                                 MSM='05';
         WHEN ('0297', '0316', '0436', '0654', '1990', '0073') MSM='06';
         WHEN ('0109', '0117', '0363', '0366')                 MSM='07';
         WHEN ('0032', '0033', '0252', '7200')                 MSM='08';
```

```
            WHEN ('0024', '0029')                                  MSM='09';
            WHEN ('0125', '0126', '0127', '0395', '7138')          MSM='10';
            WHEN ('0052', '0280', '0287')                          MSM='11';
            WHEN ('0204', '0006')                                  MSM='12';
            WHEN ('0005', '0203')                                  MSM='13';
            OTHERWISE MSM='  ';
        END;
    END;

RUN;

PROC PRINT DATA=SAMPLA02(OBS=50);
RUN;

PROC SORT DATA=SAMPLA02;
    BY DMIS_ID;
RUN;

PROC SORT DATA=TMA.TMA(KEEP=DMIS_ID FACILITY_SERVICE_CODE) OUT=TMA;    /*LLU 5/11/05*/
    BY DMIS_ID;
RUN;

DATA SERV.SERVAFF;
    MERGE SAMPLA02(IN=IN1)
          TMA(RENAME=(FACILITY_SERVICE_CODE=SERVAFF));
    BY DMIS_ID;

    /* JMA 5/22/2006 Created numeric version of servaff */

    LENGTH  XSERVAFF 3;

    IF SERVAFF='A' THEN XSERVAFF=1; *Army;
    IF SERVAFF='F' THEN XSERVAFF=2; *Air Force;
    IF SERVAFF='N' THEN XSERVAFF=3; *Navy;

    /***Coast Guard, Administrative, Support Contractor, USTF, Noncatchment,
     Other, Not available, Missing/unknown
     *** will collapsed to other per Eric Shone ***/

    IF SERVAFF IN ('C' 'J' 'M' 'T' 'S' 'O' 'X' ' ') THEN XSERVAFF=4; *Other;

    IF IN1;
RUN;

PROC PRINT DATA=SERV.SERVAFF(OBS=200);
RUN;

PROC CONTENTS DATA=SERV.SERVAFF; RUN;
```

F.5.C Q1FY2013\PROGRAMS\CONSTRUCT\MERGEQ.SAS - Merge Constructed Variables onto Data File.

```
*****************************************************************************
* PROGRAM:   MERGEQ.SAS
* WRITTEN:   1/28/00 BY KELLY WHITE
* MODIFIED:  3/1/00 BY NATALIE JUSTH
* MODIFIED:  11/16/00 BY JOAN JAMES
* MODIFIED:  1/30/01 BY NATALIE JUSTH
* MODIFIED:  6/6/01 BY NATALIE JUSTH FOR Q2 UPDATES
* MODIFIED:  8/20/01 BY NATALIE JUSTH FOR Q3 UPDATES
* MODIFIED: 12/13/01 BY NATALIE JUSTH FOR Q4 UPDATES
* MODIFIED: 2/11/02 By Daniele Beahm to delete H00077 variable and reassign format for
*           S00S01 variable
* MODIFIED: 4/11/02 By JACLYN WONG FOR Q1 UPDATES
* MODIFIED: 6/21/02 by JACLYN WONG FOR Q2 UPDATES
* MODIFIED: 7/1/2002 By Daniele Beahm to delete SF8 variables not used for Q2 2002
* MODIFIED: 10/16/2002 By Daniele Beahm to delete Q2 2002 Supplemental vars that were on the
*           Q3 2002 data file from NRC.
* MODIFIED: 01/02/2003 By Keith Rathbun: Added ONTIME variable to support the annual
*           version of the database (trickle indicator).  This ONTIME variable is
*           only applicable to the annual file and thus should be deleted for the
*           quarterly version of this program.
* MODIFIED: 3/24/02 by JACLYN WONG FOR Q1 2003 UPDATES.  Added HP_SMOKH, HP_CESS, and KPRSCPTN
* MODIFIED: 8/29/03 by NATALIE JUSTH FOR Q3 2003 UPDATES
* MODIFIED: 12/19/03 by NATALIE JUSTH FOR Q4 2003 UPDATES
* MODIFIED: 3/29/04 BY LUCY LU FOR Q1 2004 UPDATES
* MODIFIED: 6/10/04 BY LUCY LU FOR Q2 2004 UPDATES
* MODIFIED: 9/13/04 BY LUCY LU FOR Q3 2004 UPDATES
* MODIFIED: 11/10/04 BY LUC LU, DROP VARIABLE STIELIG.
* MODIFIED: 2/1/05 BY LUCY LU FOR Q4 2004 UPDATES
* MODIFIED: 2/17/2005 BY JACQUELINE AGUFA. Added code to get updated CACSMPL from
*           REPWT.sd2
* MODIFIED: 5/3/05 BY LUCY LU FOR Q1 2005 UPDATES.
* MODIFIED: 10/24/05 BY LUCY LU FOR Q3 2005 UPDATES.
* MODIFIED: 11/1/05 BY J AGUFA. Dropped E1-E19
* MODIFIED: 12/21/05 BY LUCY LU FOR Q4 2005
* MODIFIED: 03/29/06 BY LUCY LU FOR Q2 FY 2006
* MODIFIED: 07/07/06 BY LUCY LU FOR q3 FY 2006
* MODIFIED: 10/07/06 BY LUCY LU FOR q4 FY 2006
* MODIFIED: 1/2/07 BY J AGUFA FOR q1 FY 2007
* MODIFIED: 3/29/07 BY J AGUFA FOR q2 FY 2007
* MODIFIED: 7/05/07 BY J AGUFA FOR q3 FY 2007
* MODIFIED: 1/22/08 BY J AGUFA FOR q1 FY 2007
* MODIFIED: 10/1/08 BY M RUDACILLE FOR q4 FY 2008
* MODIFIED: 12/1/10 BY M RUDACILLE FOR q1 FY 2011
* MODIFIED: 1/19/11 BY M RUDACILLE - Changed HP_CESH2 to HP_CESH3
* MODIFIED: 3/30/11 BY M RUDACILLE - Changed HP_SMKH2 to HP_SMKH3
* MODIFIED: 12/9/11 BY M RUDACILLE FOR q1 FY 2012
* MODIFIED: 12/15/12 BY M RUDACILLE FOR q1 FY 2013
*
* PURPOSE:   TO MERGE FINAL FILES TOGETHER AND REORDER BY VARIABLE TYPE
*            To reorder variables within the record use a
*             LENGTH statement before the SET statement.
*            Make sure that MPRID is the first variable in the
*             record followed by:
*                          1)  other sampling variables
*                          2)  DEERS variables
*                          3)  Post-stratification vars
*                          4)  questionnaire responses
*                          5)  DRC variables
*                          6)  recoded questionnaire responses
*                          3)  coding scheme flags
*                          8)  constructed variables
*                          9)  weights  (NOT AVAILABLE FOR PRELIMINARY DATA)
* INPUT:     ..\..\DATA\AFINAL\SELECTQ.sas7bdat
* INPUT:     ..\..\DATA\AFINAL\CONVARQ.sas7bdat
* OUTPUT:    ..\..\DATA\AFINAL\MERGEQ.sas7bdat
* INCLUDE:   SERVAFF.SAS
*            TO MERGE ON VARIABLE SERVAFF
*****************************************************************************
*;
```

```
LIBNAME IN1            '..\..\DATA\AFINAL';
LIBNAME OUT            '..\..\DATA\AFINAL';
LIBNAME LIBRARY        '..\..\DATA\AFINAL\FMTLIB';

OPTIONS PS=78 LS=124 ERRORS=2 COMPRESS=YES ; *MPRINT;

%INCLUDE SERVAFF/SOURCE2;          *LLU 2/9/05;

PROC SORT DATA=IN1.SELECTQ OUT=SELECTQ;
   BY MPRID;
RUN;


PROC SORT DATA=IN1.CONVARQ OUT=CONVARQ;
   BY MPRID;
RUN;


PROC SORT DATA=IN1.SERVAFF OUT=SERVAFF;
   BY MPRID;
RUN;

PROC FREQ DATA=SERVAFF;
   TABLES SERVAFF;
RUN;

DATA MERGEQ (DROP =
H13001_O
H13002AO
H13002CO
H13002NO
H13002OO
H13002PO
H13002QO
H13002SO
H13002TO
H13002UO
H13002FO
H13002GO
H13002HO
H13002IO
H13002JO
H13002KO
H13002MO
H13002RO
H13002LO
H13003_O
H13004_O
S13AA01_O
S13AA02AO
S13AA02BO
S13AA02CO
S13AA02DO
S13AA02EO
S13AA02FO
S13AA02GO
S13AA02HO
S13AA02IO
S13AA02JO
S13AA02KO
S13AA02LO
S13AA02VO
S13AA02MO
S13AA02NO
S13AA02OO
S13AA02PO
S13AA02QO
S13AA02RO
S13AA02SO
S13AA02TO
S13AA02UO
S13AA02WO
S13AA03_O
```

```
S13AA04AO
S13AA04BO
S13AA04CO
S13AA04DO
S13AA04EO
S13AA05_O
H13005_O
H13006_O
H13007_O
H13008_O
H13009_O
H13010_O
H13011_O
H13012_O
H13013_O
H13014_O
H13015_O
H13016_O
H13017_O
H13018_O
H13019_O
H13020_O
H13021_O
H13022_O
H13023_O
H13024_O
H13025_O
H13026_O
H13027_O
S13009_O
S13010_O
H13028_O
H13029_O
H13030_O
H13031_O
S13B01_O
S13B02_O
S13B03_O
S13B04_O
H13032_O
H13033_O
H13034_O
H13035_O
H13036_O
H13037_O
H13038_O
H13039_O
H13040_O
H13041_O
H13042_O
H13043_O
H13044_O
H13045_O
H13046_O
H13047_O
H13048_O
H13049_O
H13050_O
S13015_O
H13051_O
H13052_O
H13053_O
H13054_O
H13055_O
H13056_O
H13057AO
H13057BO
H13057CO
H13057DO
H13058_O
H13059BO
H13060_O
H13061_O
```

```
H13062_O
H13063_O
H13064_O
H13065_O
H13066_O
H13067_O
H13068_O
H13069_O
H13070_O
S13B23_O
S13B24_O
S13B25_O
S13B26_O
H13071FO
H13071IO
H13072_O
SREDA_O
H13073AO
H13073BO
H13073CO
H13073DO
H13073EO
SRRACEAO
SRRACEBO
SRRACECO
SRRACEDO
SRRACEEO
SRAGE_O
H13074_O
H13075_O
H13076_O
H13077_O
H13078_O
H13079_O
S13011_O
S13014_O
S13N11_O
S13N12AO
S13N12BO
S13N12CO
S13N12DO
S13N12EO
S13N12FO
S13N12GO
S13N12HO
S13N12IO
S13N12JO
S13N12KO
S13N12LO
S13N12MO
PRRECFLG

D_DMIS
DMIS
R_MTF
GROUP
GRP_GEO
DELGIND
ELAPSED_SEC
/*SAMPLE_FLAG*/
);


   MERGE SELECTQ(in=hcsdb rename=(flag_fin=dummy)
                 DROP=PCM)                /*** JMA 2/9/11 ***/
          CONVARQ
          /*** SERVAFF(DROP=PCM DCATCH);      JMA 2/9/11 ***/
          SERVAFF(DROP=DCATCH);

   BY MPRID;
   if hcsdb;

/*MAKE FLAG_FIN IN Q4 CHARACTER*/
```

```
    FLAG_FIN=PUT(DUMMY,5.);                  /*LLU 2/9/05*/
    DROP DUMMY;


FORMAT
    SERVAFF  $SERVAFF.
    ENBGSMPL $ENBGS.
    CACSMPL  CAC.
    DBENCAT  $BENCAT.
    DMEDELG  $MEDELG.
    DSPONSVC $SPONSVC.
    FLAG_FIN $FINAL.
    FNSTATUS FNSTATS.
    MBRRELCD $MBRREL.
    MEDTYPE  $MEDTYP.
    MRTLSTAT $MSTATUS.
    PATCAT   $AGGBCAT.
    MISS_1   HAMISS.
    MISS_4   HAMISS.
    MISS_5   HAMISS.
    MISS_6   HAMISS.
    MISS_7   HAMISS.
    MISS_9   HAMISS.
    MISS_TOT HAMISS.
    PCM      $PCM.
    PNLCATCD $PNLCAT.
    PNSEXCD  $SEXCD.
    RACEETHN $RACECD.
    SEXSMPL  SEX.
    SVCSMPL  SVCSMPL.
    XSEXA    HASEX.
    SERVAREA $SRVAREA.
    MPCSMPL  MPCSMPL.
    D_HEALTH $DHEALTH.
    TNEXREG  $TNEXREG.
    D_FAC    $DFAC.
    MSM      $MSM.
    XBMICAT  XBMICAT.
    ENRID    $ENRID.
    WEB       WEB.
    XOCONUS  XOCONUS.
    ACV      $ACV2_.

    XSERVAFF XSERVAFF.

    PNTYPCD  $PNTYPCD.

    MPRID    $8.        /*Remove extra format space ($43) provided by NRC*/
;

LABEL
    ENBGSMPL = "Enrollment by beneficiary category"
    SERVAFF  = "Service Affiliation"
    MPCSMPL  = "MPCSMPL - Military Personnel Category"
    FLAG_FIN = "Final Disposition"
    CACSMPL  = "Catchment Area"
    WEB      = "Web survey indicator"
    D_PAR    = "DMIS Parent ID"
    D_Health = "Health Service Region"
    TNEXREG  = "TNEX Region - Based on Address"
    MSM      = 'Multiple Service Market Areas'
    MIQCNTL  = 'Synovate ID'
    XSERVAFF = "Service Affiliation"
    SERVAREA = 'Service Area'
    COM_GEO  = "Catchment Area"
    ;

RUN;

PROC CONTENTS DATA=MERGEQ;
RUN;
```

```
DATA OUT.MERGEQ;

    LENGTH

        MPRID        $ 8           /* ID                    */
        SVCSMPL        8           /* sampling variable */
        SEXSMPL        8           /* sampling variable */
        STRATUM      $ 7           /* sampling variable */
        CACSMPL        8           /* sampling variable */
        JSFLAG         3           /* MER 01/09/13 - Added here because it is derived from CACSMPL */
        ENBGSMPL     $ 2           /* sampling variable */
        MPCSMPL        8           /* sampling variable */
        NHFF           8           /* sampling variable */
        SERVAREA     $ 2           /* sampling variable */
        QUARTER      $ 8           /* sampling variable */
        PRN            8           /* sampling variable */
        DCATCH       $ 4           /* sampling variable */
        ENRID        $ 4           /* sampling variable */
        DMIS_ID      $ 9           /* sampling variable */
        MSM          $ 2           /* sampling variable */
        D_FAC        $ 9           /* sampling variable */
        D_PAR        $ 4           /* sampling variable */
        D_HEALTH     $ 2           /* sampling variable */
        TNEXREG      $ 1           /* sampling variable */
        SERVAFF      $ 1           /* sampling variable */
        BWT            8           /* sampling variable */
        COM_GEO      $ 4           /* sampling variable */ /* MER 7/20/10 - Added to sampling vars so
it won't be */
                                                /* at the end of the proc contents by
default anymore. */
                                                /* This variable gets dropped in
ADDWGTSA.sas.          */


        MRTLSTAT     $ 1           /* DEERS variable    */
        RACEETHN     $ 1           /* DEERS variable    */
        PNSEXCD      $ 1           /* DEERS variable    */
        DAGEQY       $ 3           /* DEERS variable    */
        RDAGEQY        3           /* DEERS variable    */
        FIELDAGE     $ 3           /* DEERS variable    */
        RFLDAGE        3           /* DEERS variable    */
        PCM          $ 3           /* DEERS variable    */
        ACV          $ 1           /* DEERS variable    */
        DBENCAT      $ 3           /* DEERS variable    */
        DMEDELG      $ 1           /* DEERS variable    */
        DSPONSVC     $ 1           /* DEERS variable    */
        MBRRELCD     $ 1           /* DEERS variable    */
        MEDTYPE      $ 1           /* DEERS variable    */
        PATCAT       $ 7           /* DEERS variable    */
        PNTYPCD      $ 1           /* DEERS variable    */
        PNLCATCD     $ 1           /* DEERS variable    */


        H13001         4           /* questionnaire     */
        H13002A        4           /* questionnaire     */
        H13002C        4           /* questionnaire     */
        H13002N        4           /* questionnaire     */
        H13002O        4           /* questionnaire     */
        H13002P        4           /* questionnaire     */
        H13002Q        4           /* questionnaire     */
        H13002S        4           /* questionnaire     */
        H13002T        4           /* questionnaire     */
        H13002U        4           /* questionnaire     */
        H13002F        4           /* questionnaire     */
        H13002G        4           /* questionnaire     */
        H13002H        4           /* questionnaire     */
        H13002I        4           /* questionnaire     */
        H13002J        4           /* questionnaire     */
        H13002K        4           /* questionnaire     */
        H13002M        4           /* questionnaire     */
        H13002R        4           /* questionnaire     */
        H13002L        4           /* questionnaire     */
        H13003         4           /* questionnaire     */
```

```
H13004        4            /* questionnaire    */
H13005        4            /* questionnaire    */
H13006        4            /* questionnaire    */
H13007        4            /* questionnaire    */
H13008        4            /* questionnaire    */
H13009        4            /* questionnaire    */
H13010        4            /* questionnaire    */
H13011        4            /* questionnaire    */
H13012        4            /* questionnaire    */
H13013        4            /* questionnaire    */
H13014        4            /* questionnaire    */
H13015        4            /* questionnaire    */
H13016        4            /* questionnaire    */
H13017        4            /* questionnaire    */
H13018        4            /* questionnaire    */
H13019        4            /* questionnaire    */
H13020        4            /* questionnaire    */
H13021        4            /* questionnaire    */
H13022        4            /* questionnaire    */
H13023        4            /* questionnaire    */
H13024        4            /* questionnaire    */
H13025        4            /* questionnaire    */
H13026        4            /* questionnaire    */
H13027        4            /* questionnaire    */
H13028        4            /* questionnaire    */
H13029        4            /* questionnaire    */
H13030        4            /* questionnaire    */
H13031        4            /* questionnaire    */
H13032        4            /* questionnaire    */
H13033        4            /* questionnaire    */
H13034        4            /* questionnaire    */
H13035        4            /* questionnaire    */
H13036        4            /* questionnaire    */
H13037        4            /* questionnaire    */
H13038        4            /* questionnaire    */
H13039        4            /* questionnaire    */
H13040        4            /* questionnaire    */
H13041        4            /* questionnaire    */
H13042        4            /* questionnaire    */
H13043        4            /* questionnaire    */
H13044        4            /* questionnaire    */
H13045        4            /* questionnaire    */
H13046        4            /* questionnaire    */
H13047        4            /* questionnaire    */
H13048        4            /* questionnaire    */
H13049        4            /* questionnaire    */
H13050        4            /* questionnaire    */
H13051        4            /* questionnaire    */
H13052        4            /* questionnaire    */
H13053        4            /* questionnaire    */
H13054        4            /* questionnaire    */
H13055        4            /* questionnaire    */
H13056        4            /* questionnaire    */
H13057A       4            /* questionnaire    */
H13057B       4            /* questionnaire    */
H13057C       4            /* questionnaire    */
H13057D       4            /* questionnaire    */
H13058        4            /* questionnaire    */
H13059B       4            /* questionnaire    */
H13060        4            /* questionnaire    */
H13061        4            /* questionnaire    */
H13062        4            /* questionnaire    */
H13063        4            /* questionnaire    */
H13064        4            /* questionnaire    */
H13065        4            /* questionnaire    */
H13066        4            /* questionnaire    */
H13067        4            /* questionnaire    */
H13068        4            /* questionnaire    */
H13069        4            /* questionnaire    */
H13070        4            /* questionnaire    */
H13071F       4            /* questionnaire    */
H13071I       4            /* questionnaire    */
H13072        4            /* questionnaire    */
```

```
SREDA          4          /* questionnaire    */
H13073         4          /* questionnaire    */
H13073A        4          /* questionnaire    */
H13073B        4          /* questionnaire    */
H13073C        4          /* questionnaire    */
H13073D        4          /* questionnaire    */
H13073E        4          /* questionnaire    */
SRRACEA        4          /* questionnaire    */
SRRACEB        4          /* questionnaire    */
SRRACEC        4          /* questionnaire    */
SRRACED        4          /* questionnaire    */
SRRACEE        4          /* questionnaire    */
SRAGE          4          /* questionnaire    */
H13074         4          /* questionnaire    */
H13075         4          /* questionnaire    */
H13076         4          /* questionnaire    */
H13077         4          /* questionnaire    */
H13078         4          /* questionnaire    */
H13079         4          /* questionnaire    */

S13AA01        4          /* supplemental     */
S13AA02A       4          /* supplemental     */
S13AA02B       4          /* supplemental     */
S13AA02C       4          /* supplemental     */
S13AA02D       4          /* supplemental     */
S13AA02E       4          /* supplemental     */
S13AA02F       4          /* supplemental     */
S13AA02G       4          /* supplemental     */
S13AA02H       4          /* supplemental     */
S13AA02I       4          /* supplemental     */
S13AA02J       4          /* supplemental     */
S13AA02K       4          /* supplemental     */
S13AA02L       4          /* supplemental     */
S13AA02V       4          /* supplemental     */
S13AA02M       4          /* supplemental     */
S13AA02N       4          /* supplemental     */
S13AA02O       4          /* supplemental     */
S13AA02P       4          /* supplemental     */
S13AA02Q       4          /* supplemental     */
S13AA02R       4          /* supplemental     */
S13AA02S       4          /* supplemental     */
S13AA02T       4          /* supplemental     */
S13AA02U       4          /* supplemental     */
S13AA02W       4          /* supplemental     */
S13AA03        4          /* supplemental     */
S13AA04A       4          /* supplemental     */
S13AA04B       4          /* supplemental     */
S13AA04C       4          /* supplemental     */
S13AA04D       4          /* supplemental     */
S13AA04E       4          /* supplemental     */
S13AA05        4          /* supplemental     */
S13009         4          /* supplemental     */
S13010         4          /* supplemental     */
S13B01         4          /* supplemental     */
S13B02         4          /* supplemental     */
S13B03         4          /* supplemental     */
S13B04         4          /* supplemental     */
S13B23         4          /* supplemental     */
S13B24         4          /* supplemental     */
S13B25         4          /* supplemental     */
S13B26         4          /* supplemental     */
S13011         4          /* supplemental     */
S13014         4          /* supplemental     */
S13015         4          /* supplemental    */
S13N11         4          /* supplemental     */
S13N12A        4          /* supplemental     */
S13N12B        4          /* supplemental     */
S13N12C        4          /* supplemental     */
S13N12D        4          /* supplemental     */
S13N12E        4          /* supplemental     */
S13N12F        4          /* supplemental     */
S13N12G        4          /* supplemental     */
S13N12H        4          /* supplemental     */
```

```
S13N12I          4             /* supplemental      */
S13N12J          4             /* supplemental      */
S13N12K          4             /* supplemental      */
S13N12L          4             /* supplemental      */
S13N12M          4             /* supplemental      */


ONTIME        $ 3              /* Survey fielding variable */
FLAG_FIN      $ 5              /* Survey fielding variable */
DUPFLAG       $ 3              /* Survey fielding variable */
FNSTATUS        8              /* Survey fielding variable */
KEYCOUNT        8              /* Survey fielding variable */
WEB             8              /* Survey fielding variable */
MIQCNTL       $ 12             /* Survey fielding variable */

N1_Q1           8              /* CS flag variable    */
N1_AA1          8              /* CS flag variable    */
N2              8              /* CS flag variable    */
N3              8              /* CS flag variable    */
N4              8              /* CS flag variable    */
N5              8              /* CS flag variable    */
N6              8              /* CS flag variable    */
N7              8              /* CS flag variable    */
N8              8              /* CS flag variable    */
N8_01           8              /* CS flag variable    */
N9              8              /* CS flag variable    */
N10             8              /* CS flag variable    */
N10_B1          8              /* CS flag variable    */
N11             8              /* CS flag variable    */
N12             8              /* CS flag variable    */
N13             8              /* CS flag variable    */
N14             8              /* CS flag variable    */
N15             8              /* CS flag variable    */
N16             8              /* CS flag variable    */
N17             8              /* CS flag variable    */
N18             8              /* CS flag variable    */
N19A            8              /* CS flag variable    */
N19B            8              /* CS flag variable    */
N20             8              /* CS flag variable    */
N21             8              /* CS flag variable    */
N22             8              /* CS flag variable    */
N23             8              /* CS flag variable    */
N24             8              /* CS flag variable    */
N25             8              /* CS flag variable    */

MISS_1          8              /* CS Count            */
MISS_4          8              /* CS Count            */
MISS_5          8              /* CS Count            */
MISS_6          8              /* CS Count            */
MISS_7          8              /* CS Count            */
MISS_9          8              /* CS Count            */
MISS_TOT        8              /* CS Count            */

XENRLLMT        8              /* constructed      */
XENR_PCM        8              /* constructed      */
XINS_COV        8              /* constructed      */
XBENCAT         8              /* constructed      */
XENR_RSV        8              /* constructed      */
XINS_RSV        8              /* constructed      */
XREGION         3              /* constructed      */
XTNEXREG        3              /* constructed      */
USA             3              /* constructed      */
XOCONUS         3              /* constructed      */
OUTCATCH        8              /* constructed      */
XSEXA           8              /* constructed      */
XBMI            8              /* constructed      */
XBMICAT         3              /* constructed      */
XBNFGRP         8              /* constructed      */
XSERVAFF        3              /* constructed      */
KMILOPQY        8              /* constructed      */
KCIVOPQY        8              /* constructed      */
KCIVINS         8              /* constructed      */
HP_PRNTL        8              /* constructed      */
```

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```
      HP_MAMOG        8              /* constructed       */
      HP_MAM50        8              /* constructed       */
      HP_PAP          8              /* constructed       */
      HP_BP           8              /* constructed       */
      HP_FLU          8              /* constructed       */
      HP_OBESE        8              /* constructed       */
      HP_SMOKE        8              /* constructed       */
      HP_SMKH3        8              /* constructed       */
      HP_CESH3        8              /* constructed       */
     ;

    SET MERGEQ;

    RUN;

PROC CONTENTS DATA=OUT.MERGEQ POSITION;
   title  "HCSDB for Q1 FY 2013, ordered by variable type";
   RUN;

PROC FREQ DATA=OUT.MERGEQ;
TABLE PCM ACV CACSMPL /MISSPRINT;
RUN;
```

F.6   Q3FY2013\Programs\Weighting\NewWeights\smplA1A2.SAS - Construct the categorical variables to be used in the AnswerTree and the modeling - Run Quarterly.

```
**********************************************************************************************
*** Program: smplA1A2.sas
*** Task   : (06663.200)
*** Purpose: Define the data sets and construct the variables to be used in the propensity model
***
*** Written: Haixia Xu 12/18/2006 for q1fy2007 weighting
***
*** Inputs:  extract.sas7bdat  : Extract file
***          selectq.sas7bdat  : Survey file with CAHPS4.0 questionnaires
***          sampla03_2.sas7bat, deers001-004.sas7bat
***
*** Outputs: smplA1A2.sas7bdat
***          smplA1.sas7bdat: Dataset to be used to calculate the unknown eligibility factor A1
***          smplA2.sas7bdat: Dataset to be used to calculate the nonresponse adjustment A2
***          conusA1.sas7bdat, oconusA1.sas7bdat, conusA2.sas7bdat, oconusA2.sas7bdat
***
*** Note:    1)Modified for Q1FY2007 weighting:
***            a) Two more variables are added in CHAID tree analysis to capture the new
***               sample design in q1fy2007
***            b) Uncollapse PCM to differentiate CIV and MTF.
***          2)Modified for Q1FY2009 weighting:
***            a) Email notification sent to all Active duty whose email address is available
***               Looks like the variable name in Answer Tree has to be no longer than 8.
***            b) Define patc_grp based on patcat & Has_email, it has 4 categories instead of 3.
***          3)Q1fy2012 had 42 overlap with TSS 2011. We droped 42 cases from sample.
***            For weigthing purpose, we need to make there status as Non-Respondense.
***          4)Q2FY2012 We do not create data 'sampla03_2' and  'Has-Email' variable any more.
**********************************************************************************************;

options ls=132 ps=79 nocenter formdlim='~' obs=max WORKTERM mprint;

%let quarter=Q3FY2013;

libname inr "K:\&quarter.";               * extract.sas7bdat, deers001-004.sas7bdat;
libname in  "L:\&quarter.\Data\afinal";   * selectq.sas7bdat;
libname out "L:\&quarter.\Data\afinal";   * smpla1a1, smpla1, smpla2, conusa1, conusa2, oconusa1,
oconusa2;

libname library v9 "L:\&quarter.\DATA\AFINAL\FMTLIB";

*Location for Answer Tree Files;
%let outpath =L:\&quarter.\Programs\Weighting\NewWeights\AnswerTree;


title1 "Program: smplA1A2.SAS (&quarter.)";
title2 "Purpose: Define the data sets and construct the variables";


********************************************************************************
Put the data together;
*******************************************************************************;
data selectq;
   set in.selectq(keep=BWT COM_GEO D_HEALTH D_FAC dageqy ENBGSMPL FNSTATUS MPCSMPL MPRID
                  PATCAT PCM PNLCATCD PNSEXCD SERVAFF SEXSMPL STRATUM SVCSMPL WEB TNEXREG
                  GROUP);
run;


********************************************************************************
Get the variables PGCD, PTNT_ID from extract data
*******************************************************************************;
proc sort data=selectq; by mprid;
run;

proc sort data=inr.extract(keep=mprid pgcd ptnt_id PAYPLNCD) out=extract;
by mprid;
run;

data selectq;
```

```
   merge selectq(in=a)   extract(in=b);
   by mprid;
   if a and b;
run;


*********************************************************************************
Merge the selectq with DEERS to get the address variable c_addr1
*********************************************************************************;
%macro dodeers(part=);
data deers00&part.;
set inr.deers00&part.(keep=ptnt_id c_addr1);
if c_addr1=' ' then CHCSAddr=0;
if c_addr1~=' ' then CHCSAddr=1;
run;

proc sort data=selectq; by ptnt_id; run;
proc sort data=deers00&part.; by ptnt_id; run;

data selectq;
merge selectq (in=A) deers00&part.;
by ptnt_id;
if A=1;
run;
%mend dodeers;

%dodeers(part=1);
%dodeers(part=2);
%dodeers(part=3);
%dodeers(part=4);


*********************************************************************************
Construct the new variables
*********************************************************************************;
data smpl;
set selectq;

***age***;
age=input(dageqy, 3.);

*Define the age group with 5 categories, which will be used in CHAID;
length AGE_grp5 $1;
if age <= 24 then AGE_grp5 = '1';
else if 24 < age <= 34 then AGE_grp5 = '2';
else if 34 < age <= 44 then AGE_grp5 = '3';
else if 44 < age <= 64 then AGE_grp5 = '4';
else if age > 64 then AGE_grp5 = '5';
if age=. then AGE_grp5='5';

***PATCAT***;
***Define PATCAT this way so it won't be associated with the age ***;
length PATC_grp $15;
if PATCAT ='UNKNOWN' then do;
  if ENBGSMPL in ('01') then PATC_grp='ACTDTY';
  else if ENBGSMPL in ('02', '03', '04') then PATC_grp='DEPACT';
  else if ENBGSMPL in ('05', '06', '07', '10') then PATC_grp='NADD';
end;
else if PATCAT in ('NADD<65','NADD65+') then PATC_grp = 'NADD';
else PATC_grp = PATCAT;

***PCM***;
length PCM_grp $3;
if PCM =' ' then PCM_grp='NON';
else if PCM in ('CIV', 'MTF') then PCM_grp = PCM;

***PNLCATCD***;
length PNLC_grp $8;
if PNLCATCD in ('N','V') then PNLC_grp='Grd/Resv';
else PNLC_grp= 'Other';

***RANKPAY***;
length RankPay $3;
```

```
if MPCSMPL=1 then do;
  if PGCD in (' ', '00', '99','WW','NS') then RankPay = 'E01';
  else  RankPay = 'E'||PGCD;
  end;
else if MPCSMPL=2 then do;
  if PGCD in (' ', '00', '99' ) then RankPay = 'O01';
  else  RankPay = 'O'||PGCD;
  end;
else if MPCSMPL=3 then do;
  if PGCD in (' ', '00', '99') then RankPay = 'W01';
  else  RankPay = 'W'||PGCD;
  end;

length RANK_grp $15;
if RankPay in ('E01', 'E02', 'E03', 'E04') then RANK_grp = 'E1234';
else if RankPay in ('E05', 'E06', 'E07', 'E08', 'E09', 'E10', 'E11','E12','E13','E14','E15') then
RANK_grp = 'E56789101112';
else if Rankpay in ('W01', 'W02', 'W03', 'O01', 'O02', 'O03') then RANK_grp = 'W123O123';
else if RankPay in ('W04', 'W05', 'O04', 'O05', 'O06', 'O07', 'O08', 'O09', 'O10') then RANK_grp
= 'W45O45678910';

***sex***;
*Put the missing sex with male;
length SEX_grp $1;
if SEXSMPL in (1, 3) then SEX_grp ='1';
else if SEXSMPL=2 then SEX_grp='2';

***service***;
length SVC_grp $16;
if SVCSMPL = 1 then SVC_grp='Army';
else if SVCSMPL in (2,3,5,6) then SVC_grp='N/M/C/O/U';
else if SVCSMPL = 4 then SVC_grp='Air Force';

***facility TNEX region***;
length TNEX_grp $1;
if d_health in ('00', '13', '14', '15') then TNEX_grp='O';
else if d_health in ('17', '01','05') then TNEX_grp='N';
else if d_health in ('18','04') then TNEX_grp='S';
else if d_health in ('19','08','11') then TNEX_grp='W';
*Correct the TNEX regions for com_geo 0047, 9001, 9002, 9003, 9004:
All the cases in the same com_geo should be in the same TNEX region, which is the region of the
com_geo;
if COM_GEO = '0047' then TNEX_grp='S';
else if COM_GEO = '9001' then TNEX_grp='N';
else if COM_GEO = '9002' then TNEX_grp='S';
else if COM_GEO = '9003' then TNEX_grp='W';
else if COM_GEO = '9004' then TNEX_grp='O';

***CONUS region***;
length conus $1;
if TNEX_grp ='O' then conus='0';
else if TNEX_grp in ('N', 'S', 'W') then conus='1';

***Catchment areaindicator***;
length in_catch $1;
if d_fac='NONCAT' or d_fac='TGRO' or d_fac="TPR"  then in_catch='0';
else in_catch ='1';

if group='0' then TRS=1;
else TRS=2;

label in_catch='In-catchment area indicator'
        TRS='TRICARE Reserve Select indicator';
run;


title3 'Checking the Coding after Constructing New Variables';
proc freq data=smpl;
tables CHCSAddr  AGE_grp5  AGE_grp5*AGE*dageqy
       PATC_grp PATC_grp*PATCAT*ENBGSMPL
       PCM_grp  PCM_grp*PCM
       PNLC_grp PNLC_grp*PNLCATCD
       RANKPAY*MPCSMPL*PGCD
```

```
        RANK_grp RANK_grp*RANKPAY
        SEX_grp  SEX_grp*SEXSMPL*PNSEXCD
           SVC_grp  SVC_grp*SVCSMPL
        TNEX_grp TNEX_grp*d_health
        CONUS CONUS*TNEX_grp
        in_catch in_catch*d_fac
        TRS*group
           com_geo*TNEX_grp
/missing list;
run;


******************************************************************************
Output the data sets
******************************************************************************;
data OUT.smplA1A2 OUT.smplA1 OUT.smplA2 OUT.conusA1 OUT.oconusA1 OUT.conusA2 OUT.oconusA2;
set smpl(drop=DAGEQY PNSEXCD MPCSMPL PGCD PTNT_ID);
*Rename has_email=HasEmail;
if fnstatus in (11, 12, 20, 31, 32, 41, 42) then output OUT.smplA1A2;

if fnstatus in (11, 12, 20, 31, 41, 42) then do;
  if fnstatus in (11, 12, 20, 31) then eligkwn=1; else eligkwn=0;
  label eligkwn = 'Eligibility known indicator';
  output OUT.smplA1;

  if conus='1' then output OUT.conusA1;
  else if conus='0' then output OUT.oconusA1;
end;

if fnstatus in (11, 12, 20) then do;
  if fnstatus = 11 then complete = 1; else complete =0;
  label complete = 'Eligible respondent/complete indicator';
  output OUT.smplA2;

  if conus='1' then output OUT.conusA2;
  else if conus='0' then output OUT.oconusA2;
end;
run;

options compress=no;
title3 'Freq of conus*fnstatus for 51,000 beneficiaries';
proc freq data=OUT.smplA1A2;
tables conus*fnstatus / missing list;
run;

title3 'Freq of fnstatus*eligkwn for 51,000 benes except fnstatus=32';
proc freq data=OUT.smplA1;
tables conus*fnstatus*eligkwn/ missing list;
run;

title3 'Freq of fnstatus*complete for fnstatus=11,12,20';
proc freq data=OUT.smplA2;
tables conus*fnstatus*complete/ missing list;
run;


/**********************************************************************/
/*  Proc Export to convert SAS dataset to SPSS file for the Answer Tree*/
/**********************************************************************/

%MACRO SAStoSAV(FNAME);
  PROC EXPORT DATA=OUT.&FNAME.
       OUTFILE= "&outpath.\&FNAME..sav" REPLACE;
  RUN;
%MEND SAStoSAV;

%SAStoSAV(conusA1);
%SAStoSAV(oconusA1);
%SAStoSAV(conusA2);
%SAStoSAV(oconusA2);

***************** The End ********************;
```

F.7   Q3FY2013\Programs\Weighting\NewWeights\logmdA1.SAS - Do the 1st stage unknown eligibility adjustment modeling - Interactions in the model are determined based on the trees0 - Run Quarterly.

```
*******************************************************************************************
**
*** Program: logmdA1.sas (06663.200)
*** Purpose: Use the SUDAAN model to predict the response propensity
***          score for the unknown eligibility adjustment step
*** Inputs:  conusA1.sas7bdat, oconusA1.sas7bdat, smplA1A2.sas7bdat
*** Outputs: logmdA1.sas7bdat
***
*** Written: Haixia Xu 12/27/2006 Q4fy2007 weighting
*** Note   : 1) We have 2 Warnings in Log. ZERO CELL Warning is a Sudaan Bug. There is NO true
ZERO CELL.
***              We have only ONE catagory for (AgeGp=5 and Patc),which gives us Singularity
Warning.
***            That one strara is: (Age_Grp5='5' and patc_grp=NADD)
***            (L:\Q4FY2010\Programs\Weighting\NewWeights\SUDAAN Warning_Proc RLOGIST.msg)
***                2) A. Borgen for Q3FY2011 and beyond:
***              a) Active duty with email and without email has been collapsed, since these cases
are
***                 involved in so many zero cell.
***              b) has_email is no longer used in the model since most of the time it is not
included
***                 in the final model.
***                 (see note L:\Q3FY2011\Programs\Weighting\NewWeights\ImportantNote_PleaseCheck)
*******************************************************************************************
**;

options ls=132 ps=79 compress=yes nocenter formdlim='~';

%let quarter=Q3FY2013;

%include "L:\&quarter.\Programs\Weighting\NewWeights\Zero_One_Cells.sas";

libname in   "L:\&quarter.\Data\afinal"; /* conusA1.sas7bdat, oconusA1.sas7bdat, smplA1A2.sas7bat
*/
libname out  "L:\&quarter.\Data\afinal"; /* logmdA1.sas7bdat */

proc format;
value FMT_TNEX 1 = '1-North'
               2 = '2-South'
               3 = '3-West'
               4 = '4-Other';
value FMT_AGE  1 = '<=24'
               2 = '(24,34]'
               3 = '(34,44]'
               4 = '(44,64]'
               5 = ' >=65';
value FMT_PAT  1 = '1-ACTDTY'
               2 = '2-DEPACT'
               3 = '3-NADD';
value FMT_PCM  1 = '1-Nonenrollee'
               2 = '2-CIV Enrollee'
               3 = '3-MTF Enrollee';
value FMT_PNLC 1 = '1-Other'
               2 = '2-Grd/Resv';
value FMT_RANK 1 = '1-E1234'
               2 = '2-E56789101112'
               3 = '3-W123O123'
               4 = '4-W45O45678910';
value FMT_RK   1 = '1-E1_12'
               2 = '2-W1_5O1_10';
value FMT_SEX  1 = '1-Male'
               2 = '2-Female';
value FMT_SVC  1 = '1-Army'
               2 = '2-Air Force'
               3 = '3-N/M/C/O/U';
value FMT_INCT 1 = '1-Not in Catch'
               2 = '2-In catch';
value FMT_PLUS 1 = '1- TRICARE PLUS'
               2 = '2- Not TRICARE PLUS';
```

```
value FMT_TRS  1 = '1- TRICARE Reserve Select'
               2 = '2- Not TRICARE Reserve Select';
value FMT_addr 0 = '0- CHCS mailling address unavailable'
               1 = '1- CHCS mailling address available';
value FMT_chcs 1 = '1- CHCS mailling address unavailable'
               2 = '2- CHCS mailling address available';
value FMT_emai 1 = 'AD with Email Address available'
               2 = 'AD with Email Address unavailable'
               3 = 'Non Active Duty(AD)';
run;



title1 "Program: logmdA1.sas (&quarter.)";
title2 "Purpose: Predict the Response Probability for the unknown Eligibility Adjustment";


*=================================================================================================
==
Create the dummy variables to be used in the SUDAAN model
=================================================================================================
=;
/*
title3 'Check to see what kind of values mprid and stratum have';
proc freq data=in.smplA1(obs=20);
tables MPRID stratum/missing list;
run;
*/

data logmdA1;
set in.conusA1 in.oconusA1;

*Convert MPRID and stratum into numerical values since SUDAAN takes only numerical values;
length MPRID_c9 $9 stratum1 $8 ;
MPRID_c9='1'||MPRID;
MPRID_nm = input (MPRID_c9, 9.);

stratum1='1'||stratum;
STRAT_nm = input (stratum1, 8.);

****************************
Convert all the categorical variables into numeric variables
****************************;
if TNEX_grp='N' then TNEX_num=1;
else if TNEX_grp='S' then TNEX_num=2;
else if TNEX_grp='W' then TNEX_num=3;
else if TNEX_grp='O' then TNEX_num=4;

AGE_num5=input(AGE_grp5, 1.);

/*Collapse Active Duty with Email/NO-Email, since they are involved in so many zero cell
  If PATC_grp in ('ACTDTY_EMAIL','ACTDTY_NOEMAIL') then PATC_grp= 'ACTDTY'*/
if PATC_grp='ACTDTY'   then PATC_num=1;
else if PATC_grp= 'DEPACT' then PATC_num=2;
else if PATC_grp = 'NADD'   then PATC_num=3;

if PCM_grp='NON' then PCM_num=1;
else if PCM_grp='CIV' then PCM_num=2;
else if PCM_grp='MTF' then PCM_num=3;

if PNLC_grp ='Other' then PNLC_num=1;
else if PNLC_grp= 'Grd/Resv' then PNLC_num=2;

if RANK_grp='E1234' then RANK_num=1;
else if RANK_grp= 'E56789101112' then RANK_num=2 ;
else if RANK_grp = 'W123O123' then RANK_num= 3;
else if RANK_grp = 'W45O45678910' then RANK_num=4;

if SEX_grp='1' then SEX_num=1;
else if SEX_grp= '2' then SEX_num = 2;

if SVC_grp='Army' then SVC_num=1;
else if SVC_grp='Air Force' then SVC_num=2;
```

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```
        else if SVC_grp='N/M/C/O/U' then SVC_num=3;

        if IN_CATCH='0' then INCAT_num=1;
        else if IN_CATCH='1' then INCAT_num=2;

        if CHCSAddr='0' then CHCS_num=1;
        else if CHCSAddr='1' then CHCS_num=2;
        run;


        /*
        title3 'Freq of MPRID_nm*mprid strat_nm*stratum';
        proc freq data=logmdA1(obs=50);
        tables MPRID_nm*mprid strat_nm*stratum/ missing list;
        run;
        */

        title3 'Check the construction of the numeric variables';
        proc freq data=logmdA1;
        tables TNEX_num*TNEX_grp
               AGE_num5*AGE_grp5
               PATC_num*PATC_grp
               PCM_num*PCM_grp
               PNLC_num*PNLC_grp
               RANK_num*RANK_grp
               SEX_num*SEX_grp
               SVC_num*SVC_grp
                   INCAT_num*IN_CATCH
               CHCS_num*CHCSAddr
        /missing list;
        run;

        data conus oconus;
        set logmdA1;
        if conus='1' then output conus;
        else if conus='0' then output oconus;
        run;


        **************************************************
        Check the zero cell before the modeling for CONUS
        **************************************************;

        %let Vars_in_interactions_conus = age_grp5 tnex_grp patc_grp pnlc_grp pcm_grp rank_grp chcsaddr
        in_catch pnlc_grp svc_grp sex_grp;

         /*Interactions from chaid */
        %let Interactions_from_chaid_conus =

        /*Q3FY2013: From ConusA1 tree*/
        age_grp5*patc_grp*rank_grp
        age_grp5*rank_grp*pnlc_grp
        age_grp5*rank_grp*svc_grp
        age_grp5*rank_grp*sex_grp
        age_grp5*svc_grp*patc_grp
        age_grp5*svc_grp*sex_grp

        /*Q3FY2013: Two way interaction from the three ways above*/
        age_grp5*patc_grp
        age_grp5*rank_grp
        age_grp5*svc_grp
        age_grp5*pnlc_grp
        age_grp5*sex_grp

        patc_grp*rank_grp
        rank_grp*pnlc_grp
        rank_grp*svc_grp
        rank_grp*sex_grp
        svc_grp*patc_grp
        svc_grp*sex_grp

        /*Q3FY2013: Additional two way interaction from answer tree*/
        age_grp5*chcsaddr
```

```
;

title3 "Check the zero cells for Conus";
%ZERO_ONE_CELLS(conus, &Vars_in_interactions_conus., eligkwn, &Interactions_from_chaid_conus.);

/*
Q3FY2013

Obs AGE_grp5 PATC_grp PNLC_grp RANK_grp CHCSAddr SVC_grp SEX_grp eligkwn_Mean eligkwn_N
  1 1        NADD              W123O123      .                             0         43
  2 5        ACTDTY            E1234         .                             0          1
  3 5        ACTDTY            W123O123      .                             0          1
  4 5        ACTDTY            W45O45678910  .                             0          1
  5 4                 Grd/Resv E1234         .                             0         18
  6 5        ACTDTY                          . Air Force                   0          1
  7 5        ACTDTY                          . Army                        0          2
  8 5        DEPACT                          . N/M/C/O/U                    0          1
  9 5        ACTDTY                          .                             0          3
                                                                            ========
                                                                                  71
*/

/*Q3FY2013*/
title3 "Check to see how to collapse (Conus)";
proc freq data=conus;
tables
age_grp5*patc_grp*rank_grp*eligkwn
age_grp5*pnlc_grp*rank_grp*eligkwn
age_grp5*patc_grp*svc_grp*eligkwn
age_grp5*patc_grp*eligkwn/missing list SPARSE;
run;




/*Q3FY2013*/
data conus;
set conus;
age_grp5_old=age_grp5;
rank_grp_old=rank_grp;

if age_grp5='1' and patc_grp in ('NADD') and rank_grp='W123O123' then do;
  rank_grp='W45O45678910';
  rank_num=4;
  flag1=1;
end;

else if age_grp5='4' and pnlc_grp in ('Grd/Resv') and rank_grp='E1234' then do;
  rank_grp='E56789101112';
  rank_num=2;
  flag2=1;
end;

/* Q3FY2013: For AgeGrp=5, ACTDTY and DEPACT both have only 3 cases.
             Although DEPACT does not create a zero cell, we collapse
             ACTDTY and DEPACT into AgeGrp = 4 since there are a small
             amount of cases for both. */

else if age_grp5='5' and patc_grp in ('DEPACT','ACTDTY')  then do;
  age_grp5='4';
  age_num5=4;
  flag3=1;
end;
run;


title3 "Again....Checks the zero cells for Conus ";
%ZERO_ONE_CELLS(conus, &Vars_in_interactions_conus., eligkwn, &Interactions_from_chaid_conus.);



*Q3FY2013;
```

```
title3 "Check the zero cell collapsements (Conus)";
proc freq data=conus;
tables age_grp5*patc_grp*rank_grp*rank_grp_old*flag1
       age_grp5*pnlc_grp*rank_grp*rank_grp_old*flag2
       age_grp5*patc_grp*age_grp5_old*flag3
/missing list;
run;


*Q3FY2013: Deletes unnecessary variables:;
data conus;
   set conus(drop=age_grp5_old rank_grp_old flag1-flag3);
run;



**************************
Run the SAS stepwise model
**************************;

%macro modelselect_conus(method= );
title3 "SAS Logistic for CONUS - &method.";
proc logistic data=conus descending;
CLASS
TNEX_grp (ref='N')
AGE_grp5 (ref='1')
PATC_grp (ref='NADD')
PCM_grp  (ref='NON')
PNLC_grp (ref='Other')
RANK_grp (ref='E1234')
SEX_grp  (ref='1')
SVC_grp  (ref='Army')
IN_CATCH (ref='0')
TRS      (ref='2')
CHCSAddr (ref='0')
/*HASEmail(ref='YES')*/
/param=ref descending;
MODEL  eligkwn =
TNEX_grp
AGE_grp5
PATC_grp
PCM_grp
PNLC_grp
RANK_grp
SEX_grp
SVC_grp
IN_CATCH
TRS
CHCSAddr

/*Q3FY2013: From ConusA1 tree*/
age_grp5*patc_grp*rank_grp
age_grp5*rank_grp*pnlc_grp
age_grp5*rank_grp*svc_grp
age_grp5*rank_grp*sex_grp
age_grp5*svc_grp*patc_grp
age_grp5*svc_grp*sex_grp

/*Q3FY2013: Two way interaction from the three ways above*/
age_grp5*patc_grp
age_grp5*rank_grp
age_grp5*svc_grp
age_grp5*pnlc_grp
age_grp5*sex_grp

patc_grp*rank_grp
rank_grp*pnlc_grp
rank_grp*svc_grp
rank_grp*sex_grp
svc_grp*patc_grp
svc_grp*sex_grp

/*Q3FY2013: an additional two way interaction from answer tree*/
```

```
age_grp5*chcsaddr

/Lackfit rsquare details hierarchy=single selection=&method. slentry=0.15 slstay=0.20;
OUTPUT OUT=out_conus PREDICTED=predicted;
run;
%mend modelselect_conus;

%modelselect_conus(method=stepwise);



*********************************************
Check the SUDAAN fit for the the model above
*********************************************;
/*Q3FY2013

                    Summary of Stepwise Selection
```

Step	Entered	Removed	Number DF	Score In Chi-Square	Wald Chi-Square
1	AGE_grp5		4 1	4390.8973 <.0001	
2	PATC_grp		2 2	198.8312 <.0001	
3	RANK_grp		3 3	189.7531 <.0001	
4	SVC_grp		2 4	114.7138	<.0001
5	AGE_grp5*PATC_grp		6 5	120.8644 <.0001	
6	PATC_grp*SVC_grp		4 6	109.4144 <.0001	
7	AGE_grp5*SVC_grp		8 7	68.5130 <.0001	
8	AGE_grp5*RANK_grp		12 8	60.6070 <.0001	
9	PATC_grp*RANK_grp		6 9	50.7766 <.0001	
10	SEX_grp		1 10	26.8563	<.0001
11	AGE_grp5*SEX_grp		4 11	56.9268 <.0001	
12	PCM_grp		2 12	16.3486	0.0003
13	RANK_grp*SEX_grp		3 13	17.9716	0.0004
14	CHCSAddr		1 14	11.5140	0.0007
15	AGE_grp5*CHCSAddr		4 15	17.4753	0.0016
16	AGE_gr*PATC_g*SVC_gr		12 16	27.4395	0.0067
17	PNLC_grp		1 17	6.0069	0.0143
18	in_catch		1 18	5.4212	0.0199
19	PNLC_grp*RANK_grp		3 19	8.3294	0.0397
20	AGE_grp5*PNLC_grp		3 20	9.6521	0.0218
21	AGE_gr*PNLC_g*RANK_g		8 21	15.8805	0.0441
22	AGE_gr*RANK_g*SEX_gr		12 22	20.9526	0.0511
23	TRS		1 23	2.7271	0.0987
24	TNEX_grp		2 24	4.3410	0.1141

```
*/

title3 "  Crosstab between AGE and PATC group (Conus)";
title4 "  We noticed, Sudaan gives error if we don't have full crosstab (AgeGp=5)";
proc freq data=conus;
tables Age_Grp5*PATC_Grp/list missing;
run;



*Proc Sort before Proc Rlogist;
proc sort data=conus;
by STRAT_nm;
run;



%macro sudaan_conus(ttl, vars);
Title3 " The Final Model from SAS Stepwise - CONUS ";
Title4 " &ttl.";
proc rlogist data=conus design=STRWR filetype=SAS;
NEST STRAT_nm/missunit;
weight bwt;
CLASS    AGE_num5     PATC_num      PCM_num      RANK_num     sex_num      PNLC_num
         SVC_num      incat_num     TRS          chcs_num     tnex_num ;
REFLEVEL AGE_num5=1   PATC_num=3    PCM_num=1    RANK_num=1   SEX_num=1  PNLC_num=1
         SVC_num=1    INCAT_num=1   TRS=2         chcs_num=1  tnex_num=1;
MODEL  eligkwn = &vars.;
idvar MPRID_nm;
print beta sebeta t_beta p_beta
```

```
HLCHISQ HLCHIDF HLCHIP HLWALDF HLWALDDF HLWALDP HLSATF HLSATDF HLSATP DF WALDCHI WALDCHP
/betafmt=f7.3 sebetafmt=f7.3 WALDCHIFMT=F8.2 waldchpfmt=f8.6;
output expected observed nest idvar /filename =pred_c filetype=sas replace;
rformat AGE_num5 FMT_AGE.;
rformat PATC_num FMT_PAT.;
rformat PCM_num  FMT_PCM.;
rformat RANK_num FMT_RANK.;
rformat sex_num FMT_SEX.;
rformat PNLC_num FMT_PNLC.;
rformat SVC_num  FMT_SVC.;
rformat INCAT_num FMT_INCT.;
rformat trs FMT_TRS.;
rformat tnex_num FMT_tnex.;
rformat chcs_num FMT_CHCS.;
run;
%mend sudaan_conus;




/***************************/
/* 1st Approach (usual way) */
/***************************/

%sudaan_conus(
%str(Run0: Final Model from SAS stepwise),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
tnex_num
AGE_num5*PATC_num
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
PNLC_num*RANK_num
AGE_num5*PNLC_num
AGE_num5*PATC_num*SVC_num
AGE_num5*PNLC_num*RANK_num
AGE_num5*RANK_num*sex_num
);
*Warnings in log, hl=0.5789;
*Interaction AGE*PATC known to produce singularity warnings.;
*Remove next: All AGE*PATC interactions (Note: AGE*PATC*SVC, p=0.025935);

%sudaan_conus(
%str(Run0a: Remove AGE*PATC interactions),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
tnex_num
/* AGE_num5*PATC_num */
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
```

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```
RANK_num*sex_num
AGE_num5*chcs_num
PNLC_num*RANK_num
AGE_num5*PNLC_num
/* AGE_num5*PATC_num*SVC_num */
AGE_num5*PNLC_num*RANK_num
AGE_num5*RANK_num*sex_num
);
*Still has warnings in log, hl=0.3151;
*At least one insignificant variable;
*Do next: conduct testing on each interaction
 type to find term(s) causing singularity;

%sudaan_conus(
%str(Run0b: Remove all interactions),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
tnex_num
/*
AGE_num5*PATC_num
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
PNLC_num*RANK_num
AGE_num5*PNLC_num
AGE_num5*PATC_num*SVC_num
AGE_num5*PNLC_num*RANK_num
AGE_num5*RANK_num*sex_num
*/
);
*No warnings in log, hl=0.0284;
*At least one insignificant variable;

%sudaan_conus(
%str(Run0c: Add AGE*PATC interactions),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
tnex_num
AGE_num5*PATC_num
/*
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
PNLC_num*RANK_num
AGE_num5*PNLC_num
*/
AGE_num5*PATC_num*SVC_num
/*
AGE_num5*PNLC_num*RANK_num
```

```
AGE_num5*RANK_num*sex_num
*/
);
*Warnings in log, hl=0.0602;
*At least one insignificant variable;

%sudaan_conus(
%str(Run0d: Add other PATC interactions),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
tnex_num
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
PATC_num*SVC_num
/*
AGE_num5*SVC_num
AGE_num5*RANK_num
*/
PATC_num*RANK_num
/*
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
PNLC_num*RANK_num
AGE_num5*PNLC_num
*/
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
/*
AGE_num5*PNLC_num*RANK_num
AGE_num5*RANK_num*sex_num
*/
);
*No warnings in log, hl=0.0845;
*At least one insignificant variable;

%sudaan_conus(
%str(Run0e: Add AGE*PNLC interactions),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
tnex_num
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
/*
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
PNLC_num*RANK_num */
AGE_num5*PNLC_num
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
AGE_num5*PNLC_num*RANK_num
/* AGE_num5*RANK_num*sex_num */
);
*Warnings in log, hl=0.1471;
*At least one insignificant variable;
```

```
%sudaan_conus(
%str(Run0f: Add PNLC*RANK interaction),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
tnex_num
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
/*
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
*/
PNLC_num*RANK_num
/* AGE_num5*PNLC_num */
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
/* AGE_num5*PNLC_num*RANK_num */
/* AGE_num5*RANK_num*sex_num */
);
*No warnings in log, hl=0.0276;
*At least one insignificant variable;

%sudaan_conus(
%str(Run0g: Add other AGE and RANK interactions),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
tnex_num
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
/* PATC_num*SVC_num */
AGE_num5*SVC_num
AGE_num5*RANK_num
/* PATC_num*RANK_num */
AGE_num5*sex_num
/* RANK_num*sex_num */
AGE_num5*chcs_num
/* PNLC_num*RANK_num */
/* AGE_num5*PNLC_num */ /* Removed, causes singularities */
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
/* AGE_num5*PNLC_num*RANK_num */ /* Removed, causes singularities */
AGE_num5*RANK_num*sex_num
);
*No warnings in log, hl=0.4163;
*At least one insignificant variable;

%sudaan_conus(
%str(Run1: Add all interactions not giving warnings),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
```

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```
trs
tnex_num
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
PNLC_num*RANK_num
/* AGE_num5*PNLC_num */ /* Removed, causes singularities */
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
/* AGE_num5*PNLC_num*RANK_num */ /* Removed, causes singularities */
AGE_num5*RANK_num*sex_num
);
*No warnings in log, hl=0.7262;
*remove next: PNLC*RANK, p=0.518632;


%sudaan_conus(
%str(Run2: Remove PNLC*RANK),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
tnex_num
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
/* PNLC_num*RANK_num */ /* 1st */
/* AGE_num5*PNLC_num */ /* Removed, causes singularities */
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
/* AGE_num5*PNLC_num*RANK_num */ /* Removed, causes singularities */
AGE_num5*RANK_num*sex_num
);
*No warnings in log, hl=0.6163;
*remove next: TNEX_NUM, p=0.243066;

%sudaan_conus(
%str(Run2: Remove TNEX),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
trs
/* tnex_num */ /* 2nd */
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
/* PNLC_num*RANK_num */ /* 1st */
/* AGE_num5*PNLC_num */ /* Removed, causes singularities */
```

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```
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
/* AGE_num5*PNLC_num*RANK_num */ /* Removed, causes singularities */
AGE_num5*RANK_num*sex_num
);
*No warnings in log, hl=0.3246;
*remove next: TRS, p=0.122918;


%sudaan_conus(
%str(Run3: Remove TRS),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
PNLC_num
INCAT_num
/* trs */ /* 3rd */
/* tnex_num */ /* 2nd */
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
/* PNLC_num*RANK_num */ /* 1st */
/* AGE_num5*PNLC_num */ /* Removed, causes singularities */
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
/* AGE_num5*PNLC_num*RANK_num */ /* Removed, causes singularities */
AGE_num5*RANK_num*sex_num
);
*No warnings in log, hl=0.4325;
*remove next: PNLC_NUM, p=0.675161;


%sudaan_conus(
%str(Run4: Remove PNLC),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
/* PNLC_num */ /* 4th */
INCAT_num
/* trs */ /* 3rd */
/* tnex_num */ /* 2nd */
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
/* PNLC_num*RANK_num */ /* 1st */
/* AGE_num5*PNLC_num */ /* Removed, causes singularities */
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
/* AGE_num5*PNLC_num*RANK_num */ /* Removed, causes singularities */
AGE_num5*RANK_num*sex_num
);
*No warnings in log, hl=0.3468;
*All variables significant;




*<<<  CONUS FINAL MODEL >>>;

%sudaan_conus(
```

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```
%str(Run5: Final CONUS model),
AGE_num5
PATC_num
RANK_num
SVC_num
sex_num
PCM_num
chcs_num
/* PNLC_num */ /* 4th */
INCAT_num
/* trs */ /* 3rd */
/* tnex_num */ /* 2nd */
/* AGE_num5*PATC_num */ /* Removed, causes singularities */
PATC_num*SVC_num
AGE_num5*SVC_num
AGE_num5*RANK_num
PATC_num*RANK_num
AGE_num5*sex_num
RANK_num*sex_num
AGE_num5*chcs_num
/* PNLC_num*RANK_num */ /* 1st */
/* AGE_num5*PNLC_num */ /* Removed, causes singularities */
/* AGE_num5*PATC_num*SVC_num */ /* Removed, causes singularities */
/* AGE_num5*PNLC_num*RANK_num */ /* Removed, causes singularities */
AGE_num5*RANK_num*sex_num
);
*No warnings in log, hl=0.3468;
*All variables significant;




*=========================================================================================
==
Start the modeling for OCONUS
In the full model, all the variables put in the answer tree are used as main effects, and
the interactions are picked based on the tree for Oconus A1 for the current quarter
=========================================================================================
=;

/*The interactions below are determined based on the oconus A1 tree for the current quarter*/

data oconus;
set oconus;
age_grp5_old=age_grp5;

if age_grp5='5' then do;
age_grp5='4';
age_num5=4;
end;

run;

title3 'Check the collapsements (Oconus)';
proc freq data=oconus;
tables age_grp5*age_grp5_old
       /missing list;
run;

%let Vars_in_interactions_oconus = age_grp5 patc_grp pcm_grp pnlc_grp svc_grp sex_grp rank_grp
in_catch chcsaddr;

%let Interactions_from_chaid_oconus =

/*Q3FY2013: Interactions from Chaid OconusA1 Tree*/
age_grp5*sex_grp*in_catch
age_grp5*sex_grp*svc_grp
age_grp5*svc_grp*patc_grp
age_grp5*svc_grp*rank_grp
age_grp5*patc_grp*rank_grp
```

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```
/*Q3FY2013: Two way interaction from the three ways above*/
age_grp5*sex_grp
age_grp5*svc_grp
age_grp5*patc_grp
age_grp5*rank_grp
age_grp5*in_catch

sex_grp*in_catch
sex_grp*svc_grp
svc_grp*patc_grp
svc_grp*rank_grp
patc_grp*rank_grp

;

title3 "Check the zero cells for Oconus";
%ZERO_ONE_CELLS(oconus, &Vars_in_interactions_oconus., eligkwn,
&Interactions_from_chaid_oconus.);


/* Q3FY2013:


Obs     AGE_grp5      PATC_grp      SVC_grp   SEX_grp     RANK_grp      eligkwn_Mean
        eligkwn_N
1                2    NADD          N/M/C/O/U                                      0      15
2              1                              Army              W45O45678910       0
37
3              1                              N/M/C/O/U         W45O45678910       0
13
4              4                              Air Force         E1234                     0
5
5              4                              N/M/C/O/U         W123O123           0
15
6              1    NADD                                        E1234
0             25
7              3    NADD                                        E1234
0             23
8              3    NADD                                        W123O123                  0
8
9              4    ACTDTY                                      E1234
0              1
10             4    ACTDTY                                      W123O123           0
5
11             4    DEPACT                                      E1234
0              2
12             4    DEPACT                                      W123O123                  0
3
                                                                          ========

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*/

*Q3FY2013;
title3 "Check to see how to collapse : Oconus";
proc freq data=oconus;
tables AGE_grp5*PATC_grp*SVC_grp*eligkwn
AGE_grp5*SVC_grp*RANK_grp*eligkwn
AGE_grp5*PATC_grp*RANK_grp*eligkwn /missing list SPARSE;
run;




/*Collapse the Zero Cells*/
data oconus;
set oconus;
rank_grp_old=rank_grp;
patc_grp_old=patc_grp;

if age_grp5 = '2' and patc_grp in ('NADD') and svc_grp in ('N/M/C/O/U') then do;
  patc_grp='DEPACT';
```

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```
   patc_num=2;
   flag1=1;
end;

else if age_grp5 = '1' and svc_grp='Army' and rank_grp in ('W45O45678910') then do;
   rank_grp='W123O123';
   rank_num=3;
   flag2=1;
end;

else if age_grp5 = '1' and svc_grp='N/M/C/O/U' and rank_grp in ('W45O45678910') then do;
   rank_grp='W123O123';
   rank_num=3;
   flag3=1;
end;

else if age_grp5 = '4' and svc_grp = 'Air Force' and rank_grp in ('E1234') then do;
   rank_grp='E56789101112';
   rank_num=2;
   flag4=1;
end;

else if age_grp5 = '4' and svc_grp = 'N/M/C/O/U' and rank_grp = 'W123O123' then do;
   rank_grp='W45O45678910';
   rank_num=4;
   flag5=1;
end;

else if age_grp5 = '1' and patc_grp = 'NADD' and rank_grp = 'E1234' then do;
   rank_grp='E56789101112';
   rank_num=2;
   flag6=1;
end;

else if age_grp5 = '3' and patc_grp = 'NADD' and rank_grp = 'E1234' then do;
   rank_grp='E56789101112';
   rank_num=2;
   flag7=1;
end;

else if age_grp5 = '3' and patc_grp = 'NADD' and rank_grp = 'W123O123' then do;
   rank_grp='W45O45678910';
   rank_num=4;
   flag8=1;
end;

else if age_grp5 = '4' and patc_grp = 'ACTDTY' and rank_grp = 'E1234' then do;
   rank_grp='E56789101112';
   rank_num=2;
   flag9=1;
end;

else if age_grp5 = '4' and patc_grp = 'ACTDTY' and rank_grp = 'W123O123' then do;
   rank_grp='W45O45678910';
   rank_num=4;
   flag10=1;
end;

else if age_grp5 = '4' and patc_grp = 'DEPACT' and rank_grp = 'E1234' then do;
   rank_grp='E56789101112';
   rank_num=2;
   flag11=1;
end;

else if age_grp5 = '4' and patc_grp = 'DEPACT' and rank_grp = 'W123O123' then do;
   rank_grp='W45O45678910';
   rank_num=4;
   flag12=1;
end;

run;
```

```
*Q3FY2013;
title3 'Checks zero cell collapsements (OCONUS)';
proc freq data=oconus;
tables age_grp5*patc_grp*svc_grp*patc_grp_old*flag1
age_grp5*svc_grp*rank_grp*rank_grp_old*flag2*flag3*flag4*flag5
age_grp5*patc_grp*rank_grp*rank_grp_old*flag6*flag7*flag8*flag9*flag10*flag11*flag12/missing
list;
run;


title3 "Check the zero cells for oconus again";
%ZERO_ONE_CELLS(oconus, &Vars_in_interactions_oconus., eligkwn,
&Interactions_from_chaid_oconus.);


*Q3FY2013;
data oconus;
   set oconus(drop=rank_grp_old patc_grp_old flag1-flag12);
run;




*******************************
/* SAS modeling*/
*******************************;
%macro modelselect_oconus(method= );
title3 "SAS Logistic for OCONUS - &method.";
proc logistic data=oconus descending;
CLASS
AGE_grp5 (ref='1')
PATC_grp (ref='NADD')
PCM_grp  (ref='NON')
PNLC_grp (ref='Other')
RANK_grp (ref='E1234')
SEX_grp  (ref='1')
SVC_grp  (ref='Army')
IN_CATCH (ref='0')
TRS      (ref='2')
CHCSAddr (ref='0')
/*HASEmail(ref='YES')*/
/param=ref descending;
MODEL  eligkwn =
AGE_grp5
PATC_grp
PCM_grp
PNLC_grp
RANK_grp
SEX_grp
SVC_grp
IN_CATCH
TRS
CHCSAddr

/*Q3FY2013: Interactions from Chaid OconusA1 Tree*/
age_grp5*sex_grp*in_catch
age_grp5*sex_grp*svc_grp
age_grp5*svc_grp*patc_grp
age_grp5*svc_grp*rank_grp
age_grp5*patc_grp*rank_grp

/*Q3FY2013: Two way interaction from the three ways above*/
age_grp5*sex_grp
age_grp5*svc_grp
age_grp5*patc_grp
age_grp5*in_catch
age_grp5*rank_grp

sex_grp*in_catch
sex_grp*svc_grp
svc_grp*patc_grp
svc_grp*rank_grp
patc_grp*rank_grp
```

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```
/Lackfit rsquare details hierarchy=single selection=&method. slentry=0.15 slstay=0.20;
OUTPUT OUT=out_oconus PREDICTED=predicted;
run;
%mend modelselect_oconus;

%modelselect_oconus(method=stepwise);



/* Q3FY2013:
                         Summary of Stepwise Selection

                        Effect                    Number        Score         Wald
Step    Entered         Removed      DF      In  Chi-Square   Chi-Square    Pr > ChiSq
   1    AGE_grp5                              3    1   190.4197
<.0001
   2    PATC_grp                              2    2    76.7086
<.0001
   3    SVC_grp                          2        3    38.4775
<.0001
   4    PATC_grp*SVC_grp            4        4    52.9325
<.0001
   5    RANK_grp                              3    5    17.0504
0.0007
   6    RANK_grp*SVC_grp            6        6    18.9742
0.0042
   7    AGE_grp5*RANK_grp           9        7    25.4003
0.0026
   8    TRS                            1        8     4.2758
0.0387
   9    AGE_grp5*PATC_grp           6        9    13.0445
0.0423
  10    PCM_grp                          2       10     4.6471
0.0979
  11    in_catch                         1       11     4.0556
0.0440
  12    AGE_grp5*in_catch        3   12        7.5441                  0.0564

*/

proc sort data=oconus;
by STRAT_nm;
run;

%macro sudaan_oconus(ttl,vars);
title3 "The Final Model from SAS stepwise -OCONUS";
title4 " &ttl.";
proc rlogist data=oconus design=STRWR filetype=SAS;
NEST STRAT_nm  / missunit;
weight bwt;
CLASS    AGE_num5     PATC_num     PCM_num      PNLC_num     RANK_num    sex_num
         SVC_num      TRS       incat_num     /*tnex_num*/         chcs_num;
REFLEVEL AGE_num5=1   PATC_num=3   PCM_num=1   pnlc_num=1  RANK_num=1  SEX_num=1
         SVC_num=1    TRS=2  incat_num=1    /*tnex_num=1*/    chcs_num=1;
MODEL  eligkwn = &vars.;
idvar MPRID_nm;
print beta sebeta t_beta p_beta
HLCHISQ HLCHIDF HLCHIP HLWALDF HLWALDDF HLWALDP HLSATF HLSATDF HLSATP DF WALDCHI WALDCHP
/betafmt=f7.3 sebetafmt=f7.3 WALDCHIFMT=F8.2 waldchpfmt=f8.6;;
output expected observed nest idvar /filename =pred_o filetype=sas replace;
rformat AGE_num5 FMT_AGE.;
rformat PATC_num FMT_PAT.;
rformat PCM_num  FMT_PCM.;
rformat PNLC_num  FMT_PNLC.;
rformat RANK_num FMT_RanK.;
rformat sex_num FMT_sex.;
rformat SVC_num  FMT_SVC.;
rformat INCAT_num FMT_INCT.;
rformat trs FMT_TRS.;
*rformat tnex_num FMT_tnex.;
rformat chcs_num fmt_chcs.;
```

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```
run;
%mend sudaan_oconus;

/***************************/
/* 1st Approach (usual way) */
/***************************/

%sudaan_oconus(
%str(Run0: Final model from SAS stepwise),
AGE_num5
PATC_num
SVC_num
PATC_num*SVC_num
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
AGE_num5*PATC_num
PCM_num
INCAT_num
AGE_num5*INCAT_num
);
*NO warnings in log, hl=0.0012
*Remove next: AGE*PATC p=0.146863;

%sudaan_oconus(
%str(Run1: Drop AGE*PATC),
AGE_num5
PATC_num
SVC_num
PATC_num*SVC_num
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
/* AGE_num5*PATC_num */
PCM_num
INCAT_num
AGE_num5*INCAT_num
);
*NO warnings in log, hl=0.0001;
*Remove next: PATC*SVC p=0.103256;

%sudaan_oconus(
%str(Run2: Drop AGE*PATC, PATC*SVC),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
/* AGE_num5*PATC_num */
PCM_num
INCAT_num
AGE_num5*INCAT_num
);
*No warnings in log, hl=0.0315;
*All variables significant;


/*******************/
/*   2nd APPROACH   */
/*******************/
/*
NOTE (Q2FY2013t):
Run6 has significant p-values for the final variables, but the H-L Satterthwaite
p-value is very low. We will continue to drop (AGE*PATC) and (AGE*PATC*SVC),
which created singularities, from all models.

        Trying a different method below by dropping:
        (1) last variable entered in SAS Stepwise model
```

```
            (2) last two variables entered in SAS Stepwise model
            (3) last three variables entered in SAS Stepwise model
            (4) last four variables entered in SAS Stepwise model

        Last four variables removed from stepwise regression:
        ----------------------------------------------------------------------
                9     AGE_grp5*PATC_grp
                10    PCM_grp
                11    in_catch
                12 AGE_grp5*in_catch
*/
%sudaan_oconus(
%str(Run3: Drop AGE*INCAT),
AGE_num5
PATC_num
SVC_num
PATC_num*SVC_num
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
AGE_num5*PATC_num
PCM_num
INCAT_num
/* AGE_num5*INCAT_num */ /* Last */
);
*No warnings in log, hl=0.0021;
*Insignificant variables: PATC*SVC p=0.093254
AGE*PATC p=0.055090
PCM p=0.487499
INCAT p=0.090020
;


%sudaan_oconus(
%str(Run4: Drop(AGE*INCAT), INCAT),
AGE_num5
PATC_num
SVC_num
PATC_num*SVC_num
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
AGE_num5*PATC_num
PCM_num
/* INCAT_num */ /* 2nd to Last */
/* AGE_num5*INCAT_num */ /* Last */
);
*No warnings in log, hl=0.0006;
*Insignificant variables: PATC*SVC p=0.083016
AGE*PATC p=0.051722
PCM p=0.872100;

%sudaan_oconus(
%str(Run5: Drop(AGE*INCAT), INCAT, PCM),
AGE_num5
PATC_num
SVC_num
PATC_num*SVC_num
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
AGE_num5*PATC_num
/* PCM_num */ /* 3rd to Last */
/* INCAT_num */ /* 2nd to Last */
/* AGE_num5*INCAT_num */ /* Last */
);
*No warnings in log, hl=0.0010;
*Insignificant variables: PATC*SVC p=0.093571
AGE*PATC p=0.057003;

%sudaan_oconus(
```

```
%str(Run6: Drop(AGE*INCAT), INCAT, PCM, AGE*PATC),
AGE_num5
PATC_num
SVC_num
PATC_num*SVC_num
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
/* AGE_num5*PATC_num */ /* 4th to Last */
/* PCM_num */ /* 3rd to Last */
/* INCAT_num */ /* 2nd to Last */
/* AGE_num5*INCAT_num */ /* Last */
);
*No warnings in log, hl=0.0073;
*Insignificant variables: PATC*SVC p=0.106056;




/********************/
/*   3rd APPROACH   */
/********************/

*Starting with Main Effects only from SAS Stepwise final model. Then addding
interactions one by one into model (trial and error method).;

%sudaan_oconus(
%str(Run7: Main Effects Only),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
/* RANK_num*SVC_num */
/* AGE_num5*RANK_num */
trs
/* AGE_num5*PATC_num */
PCM_num
INCAT_num
/* AGE_num5*INCAT_num */
);
*No warnings in log, hl=0.0080;
*Drop PCM p=0.263325;

%sudaan_oconus(
%str(Run8: Drop PCM),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
/* RANK_num*SVC_num */
/* AGE_num5*RANK_num */
trs
/* AGE_num5*PATC_num */
/* PCM_num */
INCAT_num
/* AGE_num5*INCAT_num */
);
*No warnings in log, hl=0.0050;
*Add AGE*INCAT since INCAT_NUM p=0.330745;


%sudaan_oconus(
%str(Run8: Add (AGE*INCAT)),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
/* RANK_num*SVC_num */
/* AGE_num5*RANK_num */
```

```
trs
/* AGE_num5*PATC_num */
/* PCM_num */
INCAT_num
AGE_num5*INCAT_num
);
*No warnings in log, hl=0.0171;
*Add AGE*RANK since RANK_NUM p=0.063093;

%sudaan_oconus(
%str(Run9: Add (AGE*RANK)),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
/* RANK_num*SVC_num */
AGE_num5*RANK_num
trs
/* AGE_num5*PATC_num */
/* PCM_num */
INCAT_num
AGE_num5*INCAT_num
);
*No warnings in log, hl=0.0050;
*Add RANK*SVC to see if increase in significance;

%sudaan_oconus(
%str(Run10: Add (RANK*SVC)),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
/* AGE_num5*PATC_num */
/* PCM_num */
INCAT_num
AGE_num5*INCAT_num
);
*No warnings in log, hl=0.0465;
*Drop AGE*INCAT p=0.071637;

%sudaan_oconus(
%str(Run10: Drop (AGE*INCAT)),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
/* AGE_num5*PATC_num */
/* PCM_num */
INCAT_num
/* AGE_num5*INCAT_num */
);
*No warnings in log, hl=0.1170;
*Drop INCAT p=0.301365;

%sudaan_oconus(
%str(Run10: Drop (INCAT)),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
```

```
/* AGE_num5*PATC_num */
/* PCM_num */
/* INCAT_num */
/* AGE_num5*INCAT_num */
);
*No warnings in log, hl=0.4495;
*All variables significant;

%sudaan_oconus(
%str(Run11: Drop TRS),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
/* trs */
/* AGE_num5*PATC_num */
/* PCM_num */
/* INCAT_num */
/* AGE_num5*INCAT_num */
);
*No warnings in log, hl=0.1799;
*All variables significant;


*<<<<<<  OCONUS FINAL MODEL >>>>>>>;

%sudaan_oconus(
%str(Run12: Final Oconus Model),
AGE_num5
PATC_num
SVC_num
/* PATC_num*SVC_num */
RANK_num
RANK_num*SVC_num
AGE_num5*RANK_num
trs
/* AGE_num5*PATC_num */
/* PCM_num */
/* INCAT_num */
/* AGE_num5*INCAT_num */
);
*No warnings in log, hl=0.4495;
*All variables significant;


*==============================================================================================
==
Compute the unknown eligibility adjustment factor A1
==============================================================================================
=;
data pred;
set pred_c pred_o;
run;

proc sort data=pred;
by mprid_nm;
run;

proc sort data=logmdA1;
by mprid_nm;
run;

data logmdA1 only1 only2 problem;
merge logmdA1(in=A) pred(in=B);
by mprid_nm;
if A and B then output logmdA1;
else if A and NOT B then output only1;
else if B and NOT A then output only2;
else output problem;
run;
```

```
data out.logmdA1;
set logmdA1(rename=(expected=PscoreA1) drop=MPRID_c9 stratum1);
label TNEX_grp="Facility's TNEX region"
      PscoreA1="Propensity score for unknown eligibility adjustment";
run;

Title3 "Proc Print if PscoreA1 is Missing (Problem):";
proc freq data=out.logmdA1;
tables pscoreA1/list missing;
where pscoreA1=.;
run;

title3 "Univariate of expected";
title4;
proc univariate data=out.logmdA1;
var PscoreA1;
run;

title3 "Contents of OUT.logmdA1";
title4;
proc contents data=OUT.logmdA1;
run;

******************** The End ***********************;
```

F.7.A   Q3FY2013\Programs\Weighting\NewWeights\Zero_One_Cells.SAS - Include file for logmdaA1.sas.

```
*****************************************************************************************************
**
*** MACRO
*** Project: Charter School (6043-100)
*** Program: H:\SCRATCH\HXu\CommonProgramsData\Zero_One_Cells.sas
*** Purpose: Check the zero cells
***
*** Inputs:
*** Outputs:
***
*** Note: This macro is originally written by Fan Zhang from NSF
*****************************************************************************************************
**;

%MACRO ZERO_ONE_CELLS(INPUT_DATA, CLASS_VARS, INPUT_VARS, BY_VARS);

PROC TABULATE DATA=&INPUT_DATA OUT=TABLE_TEMP1 (DROP=_TYPE_ _PAGE_ _TABLE_);
   CLASS &CLASS_VARS.;
   VAR &INPUT_VARS.;
   TABLES &BY_VARS.,
          &INPUT_VARS.*(MEAN N);
RUN;

DATA TABLE_TEMP2;
   SET TABLE_TEMP1;
   IF &INPUT_VARS._MEAN IN (0, 1);
RUN;

PROC PRINT DATA=TABLE_TEMP2;
   SUM &INPUT_VARS._N;
RUN;

%MEND ZERO_ONE_CELLS;
```

```
dm 'clear output;clear log';
*****************************************************************************************
**
*** Program: Adjwt1.sas
*** Task   : 06663.200
*** Purpose: - Create the weighting class cells based on the propensity from
***            the unknown eligibility modeling
***          - Calculate the unknown eligibility adjusted weight
***
*** Inputs:  logmdA1.sas7bdat, framea.sas7bat
*** Outputs: adjwt1.sas7bdat
***
*** Note: 1)S.Rahman for Q4FY2010:
**


    -
*        We got really big adjwt1 of over 10.000,and postwt of over 9000.
***        In adjwt1.sas, we need to collapse pcell_a1 1001 with 1002.
***      2)A.Borgen for Q3FY2011:
***        We had a couple of large postwt (over 9000) observations so we collapsed
***        pcell_a1 1001 with 1002 and pcell_a1 1101 with 1102 in adjwt1.sas.
***      3)A.Borgen for Q4FY2011:
***        We have large postwt (over 9000) observations so similar to previous quarter
***        we collapsed pcell_a1 1001 with 1002 and pcell_a1 1101 with 1102 in adjwt1.sas.
*****************************************************************************************
**;


options ls=132 ps=79 compress=yes nocenter FORMCHAR='|-++++++++++' formdlim='~' obs=max;

%let quarter=Q3FY2013;

libname in     "L:\&quarter.\Data\afinal";  /* logmdA1.sas7bdat */
libname in_f   "L:\&quarter.\Data\afinal";  /* framea.sas7bdat */
libname out    "L:\&quarter.\Data\afinal";  /* adjwt1.sas7bdat */

title1 "Program: Adjwt1.sas (&quarter.)";
title2 "Purpose: Calculate the unknown Eligibility Adjusted Weight";


***Calculate the denciles within conus region;
%macro univ_conus(inputdata=, step=, region=, var=, cellvar=, outputdata=);

proc univariate data=&inputdata. noprint;
var &var.;
where conus="&region.";
output out=out pctlpts =10 20 30 40 50 60 70 80 90 pctlpre=cutoff;
run;

title3 "Cutoff points for conus=&region.";
proc print data=out;
var cutoff10 cutoff20 cutoff30 cutoff40 cutoff50
    cutoff60 cutoff70 cutoff80 cutoff90;
run;

data temp;
set &inputdata.;
M=1;
where conus="&region.";
run;

data out;
set out;
M=1;
run;

data &outputdata.;
merge temp out;
by M;
```

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```
run;

data &outputdata.;
set &outputdata.;
length &cellvar. $4;
if &var.<=cutoff10 then &cellvar. = "&step.&region.01";
else if &var.<=cutoff20 then &cellvar.  = "&step.&region.02";
else if &var.<=cutoff30  then &cellvar. = "&step.&region.03";
else if &var.<=cutoff40  then &cellvar. = "&step.&region.04";
else if &var.<=cutoff50  then &cellvar. = "&step.&region.05";
else if &var.<=cutoff60  then &cellvar. = "&step.&region.06";
else if &var.<=cutoff70  then &cellvar. = "&step.&region.07";
else if &var.<=cutoff80  then &cellvar. = "&step.&region.08";
else if &var.<=cutoff90  then &cellvar. = "&step.&region.09";
else if &var. >cutoff90  then &cellvar. = "&step.&region.10";
run;

data &outputdata.;
set &outputdata.;
drop cutoff10 cutoff20 cutoff30 cutoff40 cutoff50
     cutoff60 cutoff70 cutoff80 cutoff90 M;
run;

title3 "Freq of &cellvar.*&var. for conus=&region.";
proc freq data=&outputdata.;
tables &cellvar. &cellvar.*&var. /missing list;
run;

%mend univ_conus;

***Calculate the 20th percentiles within oconus region;
%macro univ_oconus(inputdata=, step=, region=, var=, cellvar=, outputdata=);

proc univariate data=&inputdata. noprint;
var &var.;
where conus="&region.";
output out=out pctlpts =20 40 60 80  pctlpre=cutoff;
run;

title3 "Cutoff points for conus=&region.";
proc print data=out;
var cutoff20 cutoff40 cutoff60 cutoff80 ;
run;

data temp;
set &inputdata.;
M=1;
where conus="&region.";
run;

data out;
set out;
M=1;
run;

data &outputdata.;
merge temp out;
by M;
run;

data &outputdata.;
set &outputdata.;
length &cellvar. $4;
if &var.<=cutoff20 then &cellvar. = "&step.&region.01";
else if &var.<=cutoff40 then &cellvar.  = "&step.&region.02";
else if &var.<=cutoff60  then &cellvar. = "&step.&region.03";
else if &var.<=cutoff80  then &cellvar. = "&step.&region.04";
else if &var. >cutoff80  then &cellvar. = "&step.&region.05";
run;

data &outputdata.;
set &outputdata.;
drop cutoff20 cutoff40 cutoff60 cutoff80 M;
```

```
run;

title3 "Freq of &cellvar.*&var. for conus=&region.";
proc freq data=&outputdata.;
tables &cellvar. &cellvar.*&var. /missing list;
run;

%mend univ_oconus;

********************************************************************************
Compute the dencile of PscoreA1 within conus/oconus region
*******************************************************************************;
%univ_conus(inputdata=in.logmdA1, step=1, region=1,  var=PscoreA1, cellvar=Pcell_A1,
outputdata=A1conus);
%univ_oconus(inputdata=in.logmdA1, step=1, region=0, var=PscoreA1, cellvar=Pcell_A1,
outputdata=A1oconus);


/*
**Reason for Collapse Cell Below:(Q3FY2013):

Obs    Pcell_A1     cntg1     cntg2     cntg3     CELLCNT       SUMG1        SUMG2        SUMG3
SUMBWT          A1
  1    1001           62         4      1546        1612      2806.28       208.90     81449.69
84464.87     28.0132
  2    1002           82         1      1194        1277      3950.31        44.12     56105.68
60100.10     15.0460
  6    1101          124         6      4260        4390     10891.61       320.18    466470.96
477682.75    42.6054
  7    1102          299         6      4029        4334     21936.10       295.28    319824.18
342055.56    15.3862

*/

***combine conus/oconus together;
data merged;
set A1conus A1oconus;
/****************************************************\
 Comment Out the next 2 lines next quarter if not needed:
\****************************************************/
*Q3FY2013 :Collapsing;
if Pcell_A1='1001' then Pcell_A1='1002';
else if Pcell_A1='1101' then Pcell_A1='1102';
run;


********************************************************************************
* Start to calculate the adjusted weight using the weighting class method
*******************************************************************************;

%MACRO PROCESS(DOMAIN1, INPT);

  *** Initial Information. ***;

   title3 "Frame (FRAMEA) Count";
   proc freq data=in_f.framea;
   table enbgsmpl  / list missing;
   run;

   title3 "Weighted Counts Using BWT as the Weight - excluding fnstatus=32";
   proc freq data=&inpt.;
   table enbgsmpl fnstatus / list missing;
   weight bwt;
   run;

   title3 "Sample Counts - excluding fnstatus=32";
   proc freq data=&inpt.;
   table enbgsmpl fnstatus web*fnstatus/ list missing;
   run;

   PROC SORT DATA=&inpt.;
   BY &DOMAIN1.;
   RUN;
```

```
***************************************************************************
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
***************************************************************************;
Data  cellsa1 (keep=sumbwt sumg1-sumg3 A1 cellcnt cntg1-cntg3 &domain1. )
      mpridsa1 (keep=mprid fnstatus bwt &domain1. com_geo enbgsmpl)
    ;
   SET &INPT.;
   BY &DOMAIN1.;

   IF FIRST.&DOMAIN1. THEN DO;
      CELLCNT = 0;
      cntg1   = 0;
      cntg2   = 0;
      cntg3   = 0;
      SUMBWT  = 0.0;
      SUMG1   = 0.0;
      SUMG2   = 0.0;
      SUMG3   = 0.0;
      A1 = 0.0;
   END;
   CELLCNT + 1;

   ****************************************************
   * Accumulate total weight sum
   ****************************************************;

   SUMBWT + BWT;

   ****************************************************
   * Accumulate group 1 weight sum
   ****************************************************;
   IF FNSTATUS IN (11,12) THEN
      do;
         SUMG1 + BWT;
         cntg1 + 1;
      end;

   ****************************************************
   * Accumulate group 2 weight sum
   ****************************************************;
   ELSE IF FNSTATUS in (20,31) THEN
      do;
         SUMG2 + BWT;
         cntg2 + 1;
      end;

   ****************************************************
   * Accumulate group 3 weight sum
   ****************************************************;
   ELSE IF FNSTATUS in (41,42) THEN
      do;
         SUMG3 + BWT;
         cntg3 + 1;
      end;

   RETAIN SUMBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 MPRID;

   IF LAST.&DOMAIN1. THEN DO;
      A1 = SUMBWT/(SUMG1 + SUMG2);
      OUTPUT CELLSA1;
   END;

   OUTPUT MPRIDSA1;

RUN;

title3 "Check for CELLSA1 Data Set";
proc print data=cellsa1;
var &domain1. cntg1-cntg3 cellcnt sumg1-sumg3 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 sumbwt sumg1 sumg2 sumg3;
run;
```

```
title3 "Checks the Adjustment ratio";
title4 "Print if: ( a1> 7 ) or ( cntg1 + cntg2 < 100 )";
proc print data=cellsa1;
where ( a1> 7 ) or ( cntg1 + cntg2 < 100 );
var &domain1. cntg1-cntg3 cellcnt sumg1-sumg3 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 sumbwt sumg1 sumg2 sumg3;
run;

title3 "Univariate of Adjustment ratio (A1)";
proc univariate data=cellsa1 normal ;
var a1;
run;

proc sort data=mpridsa1;
by &domain1.;
run;

proc sort data=cellsa1;
by &domain1.;
run;

data adj_one;
merge mpridsa1 cellsa1;
by &domain1.;
if fnstatus in (11,12,20,31) then adj1 = a1;
    else adj1 = 0;
adjwt1 = adj1 * bwt;
run;

title3 "Checks for ADJ_ONE Data Set";
title4 "Cross Freq of fnstatus and Adjustment Factor by various Domains";
proc freq data=adj_one;
table &domain1.*fnstatus*adj1/ list missing;
run;

title3 "Checks for ADJ_ONE Data Set";
title4 "Cross Freq of Adjusted Weight (Adjwt1) and BWT by variaous Domains";
proc freq data=adj_one;
tables adjwt1*&domain1.*bwt/missing list;
where adjwt1 ~=0;
run;

/*
proc freq data=adj_one;
tables &domain1.*stratum*bwt/missing list;
where adjwt1 ~=0;
run;
*/

title3 " Checking the individuals with the largest adjwt";
proc sort data=adj_one out=sorted;
by descending adjwt1;
run;

title3 " Checking the individuals with the largest adjwt";
title4 " sorting adjwt1 descending order (obs=200)";
proc print data=sorted (obs=200);
var &domain1. fnstatus BWT a1 adj1 adjwt1 ;
run;

proc means data=adj_one n sum NOPRINT;
class enbgsmpl;
var adjwt1;
output out=print sum=sum;
run;

Title3 "Print the Proc Means of Adjwt1 by enbgsmpl";
Proc print data=print;
sum _freq_ sum;
where _type_=1;
run;
```

```
*************************************************************************
* Sort the original data
*************************************************************************;
PROC SORT DATA=&INPT.;
BY MPRID;
RUN;


*************************************************************************
* Sort the ADJ_ONE data set
*************************************************************************;
PROC SORT DATA=adj_one;
BY MPRID;
RUN;


*************************************************************************
* Append the adjusted weight variable (adjwt1)
*************************************************************************;
DATA out.adjwt1;
   MERGE adj_one(in=A) &INPT.(in=B);
   BY MPRID;
   if A and B;
RUN;

title3 "Sum of Adjusted Weight (Adjwt1) by Final Status";
proc means data=out.adjwt1 n sum NOPRINT;
class fnstatus;
var adjwt1;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;


title3 "Proc Univariate of Adjusted Weight";
title4 "Propensity Score Weighting Method - Individual Level Adjwt";
title5 " where fnstatus=11";
proc univariate data=out.adjwt1 normal ;
where fnstatus=11;
var adjwt1;
run;

/*Beneficiary's tnexreg*/
proc sort data=out.adjwt1;
by tnexreg;
run;

title3 "Distribution of weights by tnexreg";
title4 " where fnstatus=11";
proc means data=out.adjwt1 noprint ;
where fnstatus=11;
var adjwt1;
by tnexreg;
output out=out_tnex(drop=_type_ _freq_) n=n mean=mean std=stddev min=min max=max ;
run;

proc print data=out_tnex;
sum  n;
run;

/*Facility's tnexreg*/
proc sort data=out.adjwt1;
by TNEX_grp;
run;

title3 "Distribution of weights by Facility's TNEX region: TNEX_grp";
title4 " where fnstatus=11";
proc means data=out.adjwt1 noprint ;
where fnstatus=11;
var adjwt1;
by TNEX_grp;
output out=out_tnex(drop=_type_ _freq_) n=n mean=mean std=stddev min=min max=max ;
```

```
run;

proc print data=out_tnex;
sum  n;
run;


*****************************************************************************
* Calculate final weight based on user-specified parameters.
*****************************************************************************;
%MEND PROCESS;
%PROCESS(Pcell_A1, merged);
RUN;

/*Added in Q1FY2013*/
title "Checks ADJWT1>9000:";
data max1;
set out.adjwt1;
if adjwt1>9000;
run;

proc freq data=max1;
tables
stratum*AGE_num5*SVC_num*RANK_num*PATC_num*PCM_num*SEX_num*CHCS_num*PNLC_num*incat_num*TNEX_num*T
RS*adjwt1/list missing nocum nopercent;
run;

proc freq data=max1;
tables
stratum*AGE_grp5*SVC_grp*RANK_grp*PATC_grp*PCM_grp*SEX_grp*CHCSAddr*PNLC_grp*in_catch*TNEX_grp*TR
S*adjwt1/list missing nocum nopercent;
run;

title "Proc Contents of ADJWT1:";
proc contents data=out.adjwt1;
run;

********** The end **********;
```

F.9 **Q3FY2013\Programs\Weighting\NewWeights\adjwt2.SAS - Form the weighting classes based on the answer trees then calculate the nonresponse adjusted weight - Run Quarterly.**

```
*********************************************************************************************
**
*** Program: Adjwt2.sas
*** Task    : 06663.200
*** Purpose: Calculate the nonresponse adjusted weight
*** Inputs:  smplA2.sas7bdat, adjwt1.sas7bdat
*** Outputs: adjwt2.sas7bdat
*********************************************************************************************
**;

options ls=132 ps=79 compress=yes nocenter FORMCHAR='|-++++++++++' formdlim='~';

%let quarter=Q3FY2013;

libname in   "L:\&quarter.\Data\afinal"; /* smplA2.sas7bdat, adjwt1.sas7bdat */
libname out  "L:\&quarter.\Data\afinal"; /* adjwt2.sas7bdat */

title1 "Program: adjwt2.sas (&quarter.)";
title2 "Purpose: Calculate the nonresponse adjusted weight";

*******************************************************************************
Merge smplA2 with adjwt1 to get the variable adjwt1
*******************************************************************************;
proc sort data=in.smplA2 out=smplA2;
by MPRID;
run;

proc sort data=in.adjwt1(keep=MPRID adj1 adjwt1)
out=adjwt1;
by MPRID;
run;

data merged only1 only2 problem;
merge smplA2(in=A) adjwt1(in=B);
by MPRID;
if A and B then output merged;
else if A and NOT B then output only1;
else if B and NOT A then output only2;
else output problem;
run;


*******************************************************************************
Since there is not much going on in 2nd stage, we decided not to do the modeling,
and instead to create the weight cells based on the A2 tree for the current quarter.
Pcell_A2=adjustment stage||region||cell index.
adjustment stage: 1-unknown eligblity adjustment stage, 2 - nonresponse adjustment stage
region: 1 - conus, 0-oconus
cell index: 01- #of terminal nodes
*******************************************************************************;
data merged;
set merged;
length Pcell_A2 $4;

/*Based on Conus_A2_level3_AgeGRP5_tree.htm*/
/*Q3FY2013*/
if conus='1' then do;
   if patc_grp in ('NADD') then do;
      if sex_grp='2' then pcell_a2='2101';
         else if sex_grp='1' then do;
            if age_grp5 in ('2','4','5') then pcell_a2='2102';
               else if age_grp5 in ('1','3') then pcell_a2='2103';
      end;
   end;
   else if patc_grp in ('DEPACT') then do;
      if in_catch = '0' then pcell_a2='2104';
      else if in_catch = '1' then do;
            if age_grp5 in ('2','3','4') then pcell_a2='2105';
               else if age_grp5='1' then pcell_a2='2106';
```

```
            end;
        end;
    else if patc_grp in ('ACTDTY') then do;
            if rank_grp in ('W123O123','E1234') then pcell_a2='2107';
            else if rank_grp in ('W45O45678910','E56789101112') then do;
                if pcm_grp in ('NON','CIV') then pcell_a2='2108';
                else if pcm_grp in ('MTF') then pcell_a2='2109';
        end;
    end;
end;
/*Q3FY2013*/
else if conus='0' then do;
    if age_grp5 in ('3','4','5') then do;
            if chcsaddr = '1' then do;
                    if patc_grp in ('NADD','DEPACT') then pcell_a2='2001';
                    else if patc_grp='ACTDTY' then pcell_a2='2002';
                end;
                else if chcsaddr = '0' then pcell_a2='2003';
        end;
        else if age_grp5 in ('2') then pcell_a2='2004';
    else if age_grp5 in ('1') then pcell_a2='2005';
end;
run;

title3 'Check the construction of weighting classes';
proc freq data=merged;
tables conus*Pcell_A2/missing list;
run;

/*Q3FY2013*/
title3 'Check the Construction of Weighting Classes (CONUS)';
proc freq data=merged;
where conus='1';
tables pcell_a2*conus*patc_grp*sex_grp*age_grp5*in_catch*rank_grp*pcm_grp/missing list;
run;

/*Q3FY2013*/
title3 'Check the Construction of Weighting Classes (OCONUS)';
proc freq data=merged;
where conus='0';
tables pcell_a2*age_grp5*chcsaddr*patc_grp/missing list;
run;


* Calculate nonresponse adjusted weight based on user-specified domains.
*************************************************************************;
%MACRO PROCESS(DOMAIN2, INPT);

title3 "Freq of fnstatus";
proc freq data=&inpt.;
tables fnstatus/missing list;
run;

proc sort data=&inpt.;
BY &domain2.;
run;

DATA CELLSA2 (KEEP= &domain2. NUMER DENOM numercnt denomcnt A2);
    set &inpt. ;
    BY &domain2.;

    IF FIRST.&domain2. THEN DO;
        A2 = 0.0;
        NUMER = 0.0;
        DENOM = 0.0;
        numercnt = 0;
        denomcnt = 0;
    END;


    RETAIN NUMER DENOM A2 numercnt denomcnt;

    IF FNSTATUS IN (11,12,20) THEN
```

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```
        do;
            NUMER + adjwt1;
            numercnt + 1;
        end;

    IF FNSTATUS = 11 THEN
        do;
            DENOM + adjwt1;
            denomcnt + 1;
        end;

    IF LAST.&domain2. THEN DO;
        A2 = NUMER/DENOM;
        OUTPUT CELLSA2;
    END;
RUN;

title3 "Check for CELLSA2 Data Set";
title4 "Checks the Adjustment Ratio";
proc print data=cellsa2;
var &domain2. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

title3 "Checks the Adjustment Ratio";
title4 "Print if ( a2 > 7 ) or ( denomcnt < 100 )";
proc print data=cellsa2;
where ( a2 > 7 ) or ( denomcnt < 100 );
var &domain2. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

title3 "Proc Univarate of Adjustment Ratio (A2)";
proc univariate data=cellsa2 normal ;
var a2;
run;

proc sort data=cellsa2;
by &domain2.;
run;

data adjwt2;
merge &inpt. cellsa2;
by &domain2.;
if fnstatus = 11 then adj2 = a2;
    else adj2 = 0;
adjwt2 = adj2 * adjwt1;
label adjwt2 = "Nonrsponse adjusted weight";
KEEP MPRID fnstatus enbgsmpl adj1 adj2 adjwt1 &domain2. a2 adjwt2 ;
run;

title3 "Check for ADJWT2 Data Set";
title4 "Cross Freq of fnstatus and Adjustment Factor (adj2) with variaous Domains";
proc freq data=adjwt2;
table &domain2.*fnstatus*adj2 / list missing;
run;

proc means data=adjwt2 n sum NOPRINT;
class fnstatus;
var adjwt2;
output out=print sum=sum;
run;

title3 "Printing proc means of Adjust2 by fnstatus";
Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

proc means data=adjwt2 n sum NOPRINT;
class enbgsmpl;
var adjwt2;
output out=print sum=sum;
```

```
run;

title3 "Printing proc means of Adjust2 by enbgsmpl";
Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

data out.adjwt2;
set adjwt2;
run;
%MEND PROCESS;

%PROCESS(Pcell_A2, merged);

title3 "Proc Contents of Nonresponse Adjusted Weight (Adjwt2)";
proc contents data=out.adjwt2;
run;

********* The End ************;
```

F.10   Q3FY2013\Programs\Weighting\NewWeights\adjwtp.SAS - Assign the final adjusted weight for everybody in the sample file - Run Quarterly.

```
*****************************************************************************
*** Program: adjwtp.sas
*** Task   : 06663.200
*** Purpose: Assign the final adjusted weight for all sample cases
*** Inputs:  Adjwt1.sas7bdat adjwt2.sas7bdat, selectq.sas7bdat, framea.sas7bdat
*** Outputs: Adjwtp.sas7bdat
***
*****************************************************************************;

options ls=132 ps=79 compress=yes nocenter FORMCHAR='|-++++++++++' formdlim='~';

%let quarter=Q3FY2013;

libname inr    "K:\&quarter.";                * Extract.sas7bdat;
libname in     "L:\&quarter.\Data\afinal";    * adjwt1.sas7bdat, adjwt2.sas7bdat;
libname inv9   "L:\&quarter.\Data\afinal";    * selectq.sas7bdat;
libname in_f   "L:\&quarter.\Data\afinal";    * framea.sas7bdat;
libname out    "L:\&quarter.\Data\afinal";    * adjwtp.sas7bdat;

title1 "Program: Adjwtp.sas (&quarter.)";
title2 "Purpose: Assign the final adjusted weight";

*****************************************************************************
* Sort the original data selectq.sd2
*****************************************************************************;
proc sort data=inv9.selectq
     (keep=BWT COM_GEO D_HEALTH dageqy ENBGSMPL FNSTATUS MPCSMPL MPRID
           PATCAT PCM PNLCATCD PNSEXCD SERVAFF SEXSMPL STRATUM SVCSMPL WEB TNEXREG)
   out=selectq;
   format _all_;
   by mprid;
run;


*****************************************************************************
* Sort the ADJWT1, ADJWT2, data set
*****************************************************************************;
proc sort data=selectq;
by MPRID;
run;

PROC SORT DATA=in.adjwt1(keep=mprid pcell_a1 a1 adj1 adjwt1) out=adjwt1;
BY MPRID;
RUN;

PROC SORT DATA=in.adjwt2(keep=mprid pcell_a2 a2 adj2 adjwt2) out=adjwt2;
BY MPRID;
RUN;

PROC SORT DATA=in.smplA1A2(keep=mprid conus tnex_grp chcsaddr /*fnstatus*/) out=smplA1A2;
BY MPRID;
RUN;

*****************************************************************************
* Append final weight variable (adjwt)
*****************************************************************************;
DATA out.adjwtp;
   MERGE selectq adjwt1 adjwt2 smplA1A2;
   BY MPRID;

   encounter=chcsaddr;
   drop chcsaddr;

*Assign a1, adj1, adjwt1 for fnstatus=32;
   if fnstatus = 32 then do;
     a1=1;
     adj1=1;
        adjwt1 = bwt*adj1;
        end;
```

```
*Assign a2, adj2, adjwt2 for fnstatus in (31, 32, 41, 42);
   if fnstatus in (31, 32, 41, 42) then do;
     if fnstatus in (31, 32) then do;
          a2=1;
          adj2=1;
        end;
        else if fnstatus in (41, 42) then do;
          a2=0;
          adj2=0;
        end;
        adjwt2=adj2*adjwt1;
   end;

adjwt = adjwt2;

RUN;

title3 'Sum of Adjwt By Final Status';
proc means data=out.adjwtp n sum NOPRINT;
class fnstatus;
var adjwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

title3 'Frame counts By enbgsmpl';
proc freq data=in_f.framea;
tables enbgsmpl/missing list;
run;

title3 'Sum of Adjwt By enbgsmpl';
proc means data=out.adjwtp n sum NOPRINT;
class enbgsmpl;
var adjwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

title3 'Selectq using BWT as the weight';
title4 'Sum of BWT by Final Status';
proc means data=selectq n sum NOPRINT;
class fnstatus;
var bwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

title3 'Sum of BWT by enbgsmpl';
proc means data=selectq  n sum NOPRINT;
class enbgsmpl;
var bwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;


title3 'Checks for Adjwt Dataset';
```

```
proc sort data=out.adjwtp out=chk;
by pcell_a1 pcell_a2 fnstatus;
run;

data sub_chk;
set chk(keep = com_geo stratum pcell_a1 pcell_a2 fnstatus bwt adj1 adj2 adjwt);
by pcell_a1 pcell_a2 fnstatus;
prodadjs = adj1 * adj2;
retain cellcnt sumadjwt;
if first.fnstatus then
    do;
        cellcnt = 1;
        sumadjwt = adjwt;
    end;
    else
        do;
            cellcnt = cellcnt +1;
            sumadjwt = sumadjwt + adjwt;
        end;
if last.fnstatus then output sub_chk;
run;

proc print data=sub_chk noobs;
var pcell_a1 pcell_a2 fnstatus bwt adj1 adj2 prodadjs adjwt cellcnt sumadjwt;
sum cellcnt sumadjwt;
run;

proc freq data=sub_chk noprint;
tables prodadjs/missing list out=prodadjs;
run;

title3 "Univariate of Prodadjs = adj1 * adj2";
proc univariate data=prodadjs normal ;
var prodadjs;
run;

title3 "Univariate of Adjwt (fnstatus=11)";
proc univariate data=out.adjwtp normal ;
where fnstatus=11;
var adjwt;
run;

title3 " Checking the individuals with the largest adjwt";
proc sort data=out.adjwtp out=sorted;
by descending adjwt;
run;

data sorted;
set sorted;
prodadjs=a1*a2;
run;

title3 "Proc Print: Checking the individuals with the largest adjwt (obs=200 descending)";
proc print data=sorted (obs=200);
var stratum pcell_a1 pcell_a2 BWT fnstatus a1 adj1 adjwt1 a2 adj2 adjwt prodadjs;
run;

data OUT.adjwtp;
set OUT.adjwtp;
drop a1 a2 ;
run;

*tnexreg;
proc sort data=out.adjwtp;
by tnexreg;
run;

title3 "Distribution of weights by tnexreg";
proc means data=out.adjwtp noprint ;
where fnstatus=11;
var adjwt;
by tnexreg;
output out=out_tnex(drop=_type_ _freq_) n=n mean=mean std=stddev min=min max=max ;
```

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```
run;

proc print data=out_tnex;
sum  n;
run;

title3 "Contents of OUT.adjwtp";
proc contents data=out.adjwtp;
run;


************ The End **************;
```

F.11.A Q3FY2013\Programs\Weighting\NewWeights\postwt.SAS - Poststratify the weights - Run Quarterly.

```
********************************************************************************************
******
*** Program: postwt.sas
*** Task   : 06663.200
*** Purpose: Do the poststratification to force weighted counts to population counts in certain
domain.
*** Inputs : framea.sas7bdat: the frame file
***          adjwtp.sas7bdat: weighted survey data
***
*** Outputs: postwt.sas7bdat: final weight data after poststratification
*** Written: Haixia Xu on 12/27/2006
*** Note:    1) From Q1FY2011, we will create POSTCELL from Sampling 'Stratum'instead of
(Group||Comgeo)
***          ie., Postcell=substr(Stratum,1,5)
********************************************************************************************
*******;

*** Set up options. ***;
options ls=132 ps=79 compress=no nocenter obs=max;* obs=10;* mprint mlogic symbolgen;

%let quarter = Q3FY2013;

Title1 "Program: postwt.sas (&quarter.)";
Title2 "Purpose:  Do the poststratification";

*** Set up the input and output paths. ***;
libname in    "L:\&quarter.\Data\AFinal"; /* adjwtp.sas7bdat */
libname inv9  "L:\&quarter.\Data\AFinal"; /* framea.sas7bdat */
libname out   "L:\&quarter.\Data\AFinal"; /* postwt.sas7bdat */

%include "L:\&quarter.\Programs\Weighting\NewWeights\calpoststr.sas";
%include "L:\&quarter.\Programs\Weighting\NewWeights\design_effects_unequal_weights.sas";

***Sample***;
data framea;
set inv9.framea;
length postcell $5;
postcell=substr(stratum,1,5);  *Creating Postcell from Sampling Stratum;

****************************************************************
*Construct Necessary Variables:
****************************************************************;
***facility TNEX region***;
length TNEX_grp $1;
if d_health in ('00', '13', '14', '15') then TNEX_grp='O';
else if d_health in ('17', '01','05') then TNEX_grp='N';
else if d_health in ('18','04') then TNEX_grp='S';
else if d_health in ('19','08','11') then TNEX_grp='W';
*Correct the TNEX regions for com_geo 0047, 9001, 9002, 9003, 9004:
All the cases in the same com_geo should be in the same TNEX region, which is the region of the
com_geo;
if COM_GEO = '0047' then TNEX_grp='S';
else if COM_GEO = '9001' then TNEX_grp='N';
else if COM_GEO = '9002' then TNEX_grp='S';
else if COM_GEO = '9003' then TNEX_grp='W';
else if COM_GEO = '9004' then TNEX_grp='O';

***CONUS region***;
length conus $1;
if TNEX_grp ='O' then conus='0';
else if TNEX_grp in ('N', 'S', 'W') then conus='1';
run;

Title3 "Checking the Construction of PostCell";
Title4 " Postcell=substr(stratum,1,5)";
proc freq data=framea;
tables stratum*Postcell/list missing;
run;

proc sort data=framea;
```

```
by MPRID;
run;

proc sort data=in.adjwtp out=adjwt;
by MPRID;
run;

data adjwt;
merge adjwt(in=A) framea(in=B keep=mprid postcell group) ;
by MPRID;
if A and B;
run;

*******************************************************************************
*** Do the Poststratification
*******************************************************************************;
options compress=yes;
%calpoststr(smpldata=adjwt, frmedata=framea, domain=postcell, preadjwt=adjwt, psratio=ps,
postwt=postwt, outdata=OUT.postwt);

*******************************************************************************
*** Compare the weighted counts and the population counts by the domains
*******************************************************************************;
options compress=no;
%macro comparecnt(smpldata=, frmedata=, domain=, weight=);

proc freq data=&smpldata. NOPRINT;
tables &domain./missing list out=weight_s(rename=(count=wtcnt) drop=percent);
weight &weight.;
run;

proc freq data=&frmedata. NOPRINT;
tables &domain./missing list out=unweight_f(rename=(count=popcnt) drop=percent);
run;

data cnt_sf;
merge weight_s(in=A) unweight_f(in=B);
by &domain.;
if a and not b and popcnt=.  then popcnt=0;
if b and not a and wtcnt=.  then wtcnt=0;
diff = wtcnt - popcnt;
*reldiff=diff/popcnt;
run;

proc print data=cnt_sf;
sum wtcnt popcnt diff;
run;

proc univariate data=cnt_sf;
var diff;
run;

%mend comparecnt;

title3 'Check to see if the poststratification is done correctly';
title4 'Compare the weighted count and the frame count by the different domains';
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=postcell, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=group, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=TNEX_grp, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=PCM, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=enbgsmpl,weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=patcat, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=stratum, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=com_geo, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=servaff, weight=postwt);


*_____
*Domain=(TNEX_grp*PCM)
*_____;
title3 'Check to see if the poststratification is done correctly';
title4 'Compare the weighted count and the frame count by (TNEX*PCM)';
proc freq data=in.postwt NOPRINT;
tables TNEX_grp*PCM/missing list out=weight_s(rename=(count=wtcnt) drop=percent);
```

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```
weight postwt;
run;

proc freq data=framea NOPRINT;
tables TNEX_grp*PCM/missing list out=unweight_f(rename=(count=popcnt) drop=percent);
run;

data cnt_sf;
merge weight_s(in=A) unweight_f(in=B);
by TNEX_grp PCM;
diff = wtcnt - popcnt;
*reldiff=diff/popcnt;
if A and B;
run;

proc print data=cnt_sf;
sum wtcnt popcnt diff ;
run;

proc univariate data=cnt_sf;
var diff ;
run;

*_____
*Domain=(TNEX_grp*PCM)
where Group=(1,2,3)
*_____;
title3 'Check to see if the poststratification is done correctly';
title4 'Compare the weighted count and the frame count by (TNEX*PCM)';
title5 " where, Group = (1,2,3)";
proc freq data=in.postwt NOPRINT;
tables TNEX_grp*PCM/missing list out=weight_s(rename=(count=wtcnt) drop=percent);
weight postwt;
where group IN ('1','2','3');
run;

proc freq data=framea NOPRINT;
tables TNEX_grp*PCM/missing list out=unweight_f(rename=(count=popcnt) drop=percent);
where group IN ('1','2','3');
run;

data cnt_sf;
merge weight_s(in=A) unweight_f(in=B);
by TNEX_grp PCM;
diff = wtcnt - popcnt;
*reldiff=diff/popcnt;
if A and B;
run;

proc print data=cnt_sf;
sum wtcnt popcnt diff;
run;

proc univariate data=cnt_sf;
var diff ;
run;

*_____
*Domain=(TNEX_grp*servaff)
*_____;
title3 'Check to see if the poststratification is done correctly';
title4 'Compare the weighted count and the frame count by (TNEX*servaff)';
proc freq data=in.postwt NOPRINT;
tables TNEX_grp*servaff/missing list out=weight_s(rename=(count=wtcnt) drop=percent);
weight postwt;
*where group IN ('1','2','3');
run;

proc freq data=framea NOPRINT;
tables TNEX_grp*servaff/missing list out=unweight_f(rename=(count=popcnt) drop=percent);
run;

data cnt_sf;
```

```
merge weight_s(in=A) unweight_f(in=B);
by TNEX_grp servaff;
diff = wtcnt - popcnt;
*reldiff=diff/popcnt;
if A and B;
run;

proc print data=cnt_sf;
sum wtcnt popcnt diff ;
run;

proc univariate data=cnt_sf;
var diff ;
run;



*********************************************************************************
*** Compare the weighted sum before and after the poststratification
********************************************************************************;

%macro procmeans(weightvar=, classvar=);
proc means data=OUT.postwt noprint;
class &classvar.;
var &weightvar.;
output out=out sum=/autoname;
run;

data print;
set out;
where _type_=1;
run;

title3 "weighted info by &classvar. using &weightvar. as weight";
proc print data=print;
sum _freq_  bwt_sum adjwt1_sum adjwt2_sum adjwt_sum postwt_sum;
run;
%mend procmeans;

%procmeans(weightvar= bwt adjwt1 adjwt2 adjwt postwt, classvar=fnstatus);
*%procmeans(weightvar= bwt adjwt1 adjwt2 adjwt postwt, classvar=stratum);

*********************************************************************************
*** Output the datasets
********************************************************************************;

options compress=yes;

data out.postwt;
set out.postwt(drop=adjwt );
label  ENBGSMPL ='ENBGSMPL - Beneficiary/Enrollment Status'
       PCM = 'Primary care Manager Code';
run;

*********************************************************************************
*** Calculate the Design Effects
********************************************************************************;

**create dataset of completes only;
data postwt_fnl;
set out.postwt;
where fnstatus=11;
run;

%design_effects_unequal_weights ( postwt_fnl, postcell,  postwt, deff_overall, deff_postcell );
%design_effects_unequal_weights ( postwt_fnl, com_geo,  postwt, deff_overall, deff_cac );
%design_effects_unequal_weights ( postwt_fnl, enbgsmpl, postwt, deff_overall, deff_enb );
%design_effects_unequal_weights ( postwt_fnl, tnexreg,  postwt, deff_overall, deff_tnexreg );
%design_effects_unequal_weights ( postwt_fnl, TNEX_grp, postwt, deff_overall, deff_tnexgrp );
%design_effects_unequal_weights ( postwt_fnl, conus,    postwt, deff_overall, deff_conus );
%design_effects_unequal_weights ( postwt_fnl, servaff,  postwt, deff_overall, deff_servaff );
%design_effects_unequal_weights ( postwt_fnl, TNEX_grp servaff,  postwt, deff_overall,
deff_TNEXservaff );
```

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```
title3 'Design Effects Overall';
proc print data = deff_overall;
run;

*** For postcell ***;
title3 "Design Effects for postcell";
proc print data= deff_postcell;
sum _freq_;
run;

*** For geographic Area ***;
title3 "Design Effects for com_geo";
proc print data= deff_cac;
sum _freq_;
run;

*** For ENBGSMPL Groups ***;
title3 'Design Effects for ENBGSMPL';
proc print data= deff_enb;
sum _freq_;
run;

*** For Beneficiary TNEX Region ***;
title3 'Design Effects for TNEXREG';
proc print data= deff_tnexreg;
sum _freq_;
run;

*** For Facility TNEX region ***;
title3 "Design Effects for Facility's TNEX region";
proc print data= deff_tnexgrp;
sum _freq_;
run;

*** For conus region ***;
title3 "Design Effects for conus";
proc print data= deff_conus;
sum _freq_;
run;

*** For Service Affiliation for the facility  ***;
title3 "Design Effects for Facility's Service Affiliation";
proc print data= deff_servaff;
sum _freq_;
run;

*** For TNEX_grp*Servaff ***;
title3 "Design Effects for TNEX_grp by Servaff";
proc print data= deff_TNEXservaff;
sum _freq_;
run;

title3 "Contents of OUT.postwt";
proc contents data=OUT.postwt;
run;


********** The end ***********;
```

F.11.B Q3FY2013\Programs\Weighting\NewWeights\calpoststr.SAS - Include file for postwt.sas.

```
*************************************************************
* Macro to do the poststrification
*************************************************************;
%macro calpoststr(smpldata=, frmedata=, domain=, preadjwt=, psratio=, postwt=, outdata=);

proc freq data=&smpldata. NOPRINT;
where fnstatus in (11, 31, 32);
tables &domain./missing list out=unweight_s(rename=(count=unwtcnt) drop=percent);
run;

proc freq data=&smpldata. NOPRINT;
tables &domain./missing list out=weight_s(rename=(count=wtcnt) drop=percent);
weight &preadjwt.;
run;

proc freq data=&frmedata. NOPRINT;
tables &domain./missing list out=unweight_f(rename=(count=popcnt) drop=percent);
run;

data cnt_sf out.only_f_calpoststr;
merge unweight_s(in=A)  weight_s(in=B) unweight_f(in=C);
by &domain.;
if A and B and C then do;
  &psratio.=popcnt/wtcnt;
  label &psratio.="poststratification ratio";
  output cnt_sf;
end;
else if C and NOT A then output out.only_f_calpoststr;
run;

*Sorting data with Poststratification Ratio by PS;
proc sort data=cnt_sf out=test;
by &psratio.;
run;

title3 "Check the calculation of poststratification ratio";
title4 "(sorted by PS)";
proc print data=test;
sum unwtcnt wtcnt popcnt;
run;

title3 "Univariate of poststratification ratio";
proc univariate data=cnt_sf;
var &psratio.;
run;

title3 "Check the small cells or too small/large ratios - or (unwtcnt<15) or (&psratio. < 0.75)
or (&psratio. > 2)";
proc print data=cnt_sf;
where (&psratio. > 2) or (&psratio. < 0.75) or (unwtcnt <15);
run;

*Append cnt_sf back to the adjusted weight data;
proc sort data=&smpldata.;
by &domain.;
run;

data &outdata.;
merge &smpldata. cnt_sf;
by &domain.;
run;

data &outdata.;
set &outdata.;
if fnstatus in (11, 31, 32) then &psratio.=&psratio.;
else if fnstatus in (12, 20, 41, 42) then &psratio.=0;
&postwt. = &preadjwt.*&psratio.;
run;

title3 "check the calculation of final weight";
```

```
proc print data=&outdata.(obs=200);
var &domain. fnstatus &preadjwt. &psratio. &postwt.;
run;

title3 "Univariate of final weight";
proc univariate data=&outdata.;
var &postwt.;
where fnstatus=11;
run;
%mend calpoststr;
```

F.11.C Q3FY2013\Programs\Weighting\NewWeights\design_effects_unequal_weights.sas - Include file for calpoststr.SAS.

```
****************************************************************************


Name:
design_effects_unequal_weights


Purpose:
Calculate the design effects due to unequal weights.  Creates two data sets.
One data set contains the overall design effect and the information used to
calculate the design effect.  The other data set contains the design effects
for each category of the analysis variable and the information used to
calculate these design effects.  In the two data sets, the additional
information refers to the number of observations, the sum of the squared
weights, and the sum of the weights squared.


Programmer:
Darryl V. Creel


Parameters:
There are five:

   (1) in_data_set - The input data set.

   (2) analysis_variable - The analysis variable contains the categories
                            by which the design effects are calculated.

   (3) weight_variable - The weight variable.

   (4) out_overall_data_set - Name of the data set that contains the
                               overall design effect.

   (5) out_data_set - Name of the output data set that contains the
                       design effects for each category of the analysis
                       variable.


Output:
There are two data sets:

   (1) A data set that contains the overall design effect and the
       information used to calculte the overall design effect.  It
       includes observations that have a missing value for the analysis
       variable.  This data set is named by the out_overall_data_set
       parameter.

   (2) A data set that contains the design effects for each category
       of the analysis variable and the information used to calculate
       these design effects.  There is one observation for each category
       of the analysis variable, including a missing category, if there
       are missing values for the analysis variable. This data set is
       named by the out_data_set parameter.


Side Effects:
None


Notes:

   (1) Use with SAS V8.

   (2) Do NOT use the following variable names as parameters:
       (a) _weight_variables
       (b) _overall_design_effect
       (c) _design_effect.
```

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```
    **************************************************************************;


%macro design_effects_unequal_weights
   ( in_data_set,
     analysis_variable,
     weight_variable,
     out_overall_data_set,
     out_data_set );

   data _weight_variables;
      set &in_data_set. ( keep = &analysis_variable. &weight_variable. );
      &weight_variable._sq = &weight_variable. * &weight_variable.;
   run;

   proc means data = _weight_variables missing noprint;
      var &weight_variable. &weight_variable._sq;
      output out = _overall_design_effect
             sum ( &weight_variable. &weight_variable._sq ) =
             sum_&weight_variable. sum_&weight_variable._sq;
   run;

   data &out_overall_data_set.;
      set _overall_design_effect ( drop = _type_ );
      design_effect = ( _freq_ * sum_&weight_variable._sq ) / ( sum_&weight_variable. *
sum_&weight_variable. );
   run;

   proc sort data = _weight_variables;
      by &analysis_variable.;
   run;

   proc means data = _weight_variables missing noprint;
      var &weight_variable. &weight_variable._sq;
      by &analysis_variable;
      output out = _design_effect
             sum ( &weight_variable. &weight_variable._sq ) =
             sum_&weight_variable. sum_&weight_variable._sq;
   run;

   data &out_data_set.;
      set _design_effect ( drop = _type_ );
      design_effect = ( _freq_ * sum_&weight_variable._sq ) / ( sum_&weight_variable. *
sum_&weight_variable. );
   run;

   proc datasets;
      delete _weight_variables _overall_design_effect _design_effect;
   run;

%mend design_effects_unequal_weights;
```

F.12 Q3FY2013\Programs\Weighting\NewWeights\repwtp_trimmed.SAS - Produce the replicate weights - Run Quarterly.

```
***************************************************************************
* PROGRAM: Repwtp_Trimmed.sas
* TASK:    DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE REPLICATE WEIGHTS FOR DOD SURVEY
*          USING THE NEW WEIGHTING METHOD.
* WRITTEN: 12/30/1999 BY Keith Ranthbun
* Modified 1) Haixia Xu on 12/27/2006
*          2) H. Xu on 03/30/2007 for q3fy2007 weighting
*
* INPUTS : postwt.sas7bdat - Final Weights file
*          framea_postwt.sas7bdat - The q3 frame file with
*          corrected PCM and postcell defined
*
* OUTPUTS: repwtp.sas7bdat - Replicate Weights File
*
* Note   : 1) Beginning in Q1FY2011, we create POSTCELL from Sampling Stratum
*             Oldway: Postcell=(Group||Comgeo)
*             Newway: Postcell=substr(Stratum,1,5)
*          2) The order of trimming was switched in Q4Fy2011. See "trimming decision"
*             note in L:\Q4FY2011\Programs\Weighting\NewWeights\checking
***************************************************************************;

%let quarter=Q3FY2013;

LIBNAME INv6  "L:\&quarter.\Data\Afinal"; /* framea.sas7bdat */
LIBNAME IN    "L:\&quarter.\Data\Afinal"; /* postwt.sas7bdat */
LIBNAME OUT   "L:\&quarter.\Data\Afinal"; /* repwtp.sas7bdat */

OPTIONS PS=79 LS=132 errors=10 COMPRESS=no NOCENTER formdlim='~'/*mlogic mprint symbolgen*/;

title1 "Program: Repwtp_Trimmed.sas (&quarter.)";
title2 "Purpose: Create the Replicate Weights";


/*MACRO FOR TRIMMING */
%macro trimmer(domain,oldw,neww);
data trim;
set trim;
%if &neww.^= newtrim1 %then %do;
drop number means stdev sumweight cutoff toobig trimadj sumold sumnew;
%end;
run;

proc sort data=trim;
by &domain;
run;

proc means data=trim n mean std sum noprint;
var &oldw;
by &domain;
where fnstatus=11;
output out=meanspostwt n=number mean=means std=stdev sum=sumweight;
run;

data trim;
merge trim meanspostwt;
by &domain;
cutoff=means+stdev*6;
toobig=.;
trimadj=.;
if &oldw>cutoff and fnstatus=11 then toobig=1;
if toobig=1 then &neww=cutoff;
if cutoff=. and toobig=1 then &neww=&oldw;
if toobig=. then &neww=&oldw;
run;

proc means data=trim sum noprint;
var &oldw &neww;
by &domain;
```

```
where fnstatus=11;
output out=meansbig sum=sumold sumnew;
run;

data trim;
merge trim meansbig;
by &domain;
run;

data trim;
set trim;
/*cutoff~=. filter guards against divide by zero error if there is only 1 obs in domain */
if cutoff~=. then trimadj=sumold/sumnew;
if trimadj=. or fnstatus~=11 then trimadj=1;
&neww=trimadj*&neww;
run;

proc means data=trim sum noprint;
var &oldw &neww;
by &domain;
where fnstatus=11;
output out=sumcheck sum=old new;
run;

/*
data sumcheck;
set sumcheck;
diff=new-old;
run;

proc means data=sumcheck;
var diff;
run;

proc print data=sumcheck;
var &domain old new;
run;

proc freq data=trim;
table &oldw*&neww*toobig*stratum/list missing;
where &oldw>4000;
run;

proc freq data=trim;
table toobig*&oldw*&neww*stratum /list missing;
where toobig=1;
run;
*/
%mend trimmer;


%MACRO PROCESS(DOMAIN1,DOMAIN2,DOMAIN3,reps);
*************************************************************************
* calculate the population counts to be used in the poststratification
*************************************************************************;
data framea;
set inv6.framea;
length POSTCELL $5;
postcell=substr(stratum,1,5);  *Creating Postcell from Sampling Stratum;
run;

proc freq data=framea NOPRINT;
tables &domain3./missing list out=framecnt(drop=percent rename=(count=popcnt));
run;


*************************************************************************
* Sort the final weights file by user-specified domains
*************************************************************************;

PROC SORT DATA=IN.postwt_trimmed OUT=postwt;
    BY stratum MPRID ;
RUN;
```

```
**************************************************************************
* Append SUBSET index (I) to each observation
**************************************************************************;
DATA SUBSETS;
   SET postwt;
   BY stratum MPRID;

   IF _N_ = 1 OR MOD(_N_-1,&reps.) = 0 THEN SUBSET = 1;
   ELSE SUBSET + 1;

   RETAIN SUBSET;
   BBWT = BWT * (&reps. / (&reps. - 1));
RUN;

**************************************************************************
**************************************************************************
* Generate JackKnife/replicated weights adjwt01-adjwt60
**************************************************************************
**************************************************************************;
%DO I = 1 %TO &reps.;

DATA SUBSET;
   SET SUBSETS;
   IF &I. = SUBSET THEN DELETE; *Remove the current subset;
RUN;

****************************************************************************
* Calculate adjustment factor A1 for each cell
****************************************************************************;

proc sort data=subset;
by &domain1.;
run;

****************************************************************************
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
****************************************************************************;
DATA CELLSA1 (KEEP=SUMBBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 &domain1. stratum com_geo enbgsmpl
patcat)
     MPRIDSA1 (KEEP=MPRID FNSTATUS BBWT &DOMAIN1. &DOMAIN2. &domain3. stratum com_geo enbgsmpl
patcat)
     ;
   SET subset;
   BY &DOMAIN1.;

if FNSTATUS in (11, 12, 20, 31, 41, 42) THEN DO;

   IF FIRST.&DOMAIN1. THEN DO;
      CELLCNT = 0;
      cntg1   = 0;
      cntg2   = 0;
      cntg3   = 0;
      SUMBBWT  = 0.0;
      SUMG1    = 0.0;
      SUMG2    = 0.0;
      SUMG3    = 0.0;
      A1 = 0.0;
   END;
   CELLCNT + 1;

   ****************************************************
   * Accumulate total weight sum
   ****************************************************;

   SUMBBWT + BBWT;

   ****************************************************
   * Accumulate group 1 weight sum
   ****************************************************;

   IF FNSTATUS IN (11,12) THEN
      do;
```

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```
        SUMG1 + BBWT;
        cntg1 + 1;
     end;

  ******************************************************
  * Accumulate group 2 weight sum
  ******************************************************;

  ELSE IF FNSTATUS in (20,31) THEN
     do;
        SUMG2 + BBWT;
        cntg2 + 1;
     end;

  ******************************************************
  * Accumulate group 3 weight sum
  ******************************************************;

  ELSE IF FNSTATUS in (41,42) THEN
     do;
        SUMG3 + BBWT;
        cntg3 + 1;
     end;

  RETAIN SUMBBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 MPRID;

  IF LAST.&DOMAIN1. THEN DO;
     A1 = (SUMG1 + SUMG2 + SUMG3)/(SUMG1 + SUMG2);
     OUTPUT CELLSA1;
  END;
END;

  OUTPUT MPRIDSA1;
RUN;

proc sort data=mpridsa1;
by &domain1.;
run;

proc sort data=cellsa1;
by &domain1.;
run;

data adj_one;
merge mpridsa1 cellsa1;
by &domain1.;
if fnstatus in (11,12,20,31) then adj1 = a1;
   else if fnstatus = 32 then adj1=1;
   else adj1 = 0;
adj_wt1 = adj1 * bbwt;
run;

*****************************************************************************
* Calculate adjustment factor A2 for each cell.
* This is the Nonresponse adjustment and creates the final weight (adjwt).
*****************************************************************************;

proc sort data=adj_one;
by &domain2.;
run;

DATA CELLSA2 (KEEP= &domain2. NUMER DENOM numercnt denomcnt A2);
   set adj_one;
   BY &domain2.;

IF FNSTATUS in (11, 12, 20) THEN DO;

   IF FIRST.&domain2. THEN DO;
      A2 = 0.0;
      NUMER = 0.0;
      DENOM = 0.0;
      numercnt = 0;
      denomcnt = 0;
```

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```
        END;


    RETAIN NUMER DENOM A2 numercnt denomcnt;

    IF FNSTATUS IN (11,12,20) THEN
        do;
            NUMER + adj_wt1;
            numercnt + 1;
        end;

    IF FNSTATUS = 11 THEN
        do;
            DENOM + adj_wt1;
            denomcnt + 1;
        end;

    IF LAST.&domain2. THEN DO;
        A2 = NUMER/DENOM;
        OUTPUT CELLSA2;
    END;
END;

RUN;

proc sort data=adj_one;
by &domain2.;
run;

proc sort data=cellsa2;
by &domain2.;
run;

data adj_two;
merge adj_one cellsa2;
by &domain2.;
if fnstatus = 11 then adj2 = a2;
    else if fnstatus in (31, 32) then adj2 = 1;
    else adj2 = 0;
adj_wt2 = adj2 * adj_wt1;
*KEEP MPRID FNSTATUS adj_wt2 bbwt &DOMAIN1. &DOMAIN2. &domain3.;
run;

****************************************************************************
* Calculate poststratification adjustment factor ps for each cell.
****************************************************************************;
proc freq data=adj_two NOPRINT;
tables &domain3./missing list out=weighted(drop=percent rename=(count=wtcnt));
weight adj_wt2;
run;

proc sort data=framecnt;
by &domain3.;
run;

proc sort data=weighted;
by &domain3.;
run;

data ps;
merge framecnt(in=A) weighted(in=B);
by &domain3.;
ps = popcnt/wtcnt;
if A and B;
run;

proc sort data=ps;
by &domain3.;
run;

proc sort data=adj_two;
by &domain3.;
run;
```

```
data subset&i.;
merge adj_two ps;
by &domain3.;
jkweight = ps * adj_wt2;
subset = &i.;
*KEEP MPRID subset jkweight;
run;

proc sort data=subset&i.;
by mprid;
run;

***********************************;
/*          TRIMMING            */
***********************************;
data trim;
set subset&i.;
run;

*****************************************
*For Q3FY2013: we trim once by PATCAT:
***********************************;
%trimmer(patcat,jkweight,newtrim3);


*********************************
Update Trimwt=. :
For Q3FY2013 : Trimwt=newtrim3 :
*********************************;
data trim;
set trim;
trimwt=newtrim3;  *Q3FY2013: PATCAT ;
run;

***********************************
  POSTSTRATIFY THE TRIMMED WEIGHTS
***********************************;
proc freq data=trim NOPRINT;
tables &domain3./missing list out=weighted(drop=percent rename=(count=wtcnt));
weight trimwt;
run;

proc sort data=framecnt;
by &domain3.;
run;

proc sort data=weighted;
by &domain3.;
run;

data ps;
merge framecnt(in=A) weighted(in=B);
by &domain3.;
ps2 = popcnt/wtcnt;
if A and B;
run;

proc sort data=ps;
by &domain3.;
run;

proc sort data=trim;
by &domain3.;
run;

data subset&i.;
merge trim ps;
by &domain3.;
jkweight2 = ps2 * trimwt;
subset = &i.;
*KEEP MPRID subset jkweight2;
run;
```

```
proc sort data=subset&i.;
by mprid;
run;

proc means data=subset&i.;
var jkweight2;
run;

***************************************************************************
***************************************************************************
* End of JackKnife/replicated weights WRWT01-WRWT60 assignments
***************************************************************************
***************************************************************************;
%END;

***************************************************************************
* Combine all of the JackKnife weight subsets by MPRID
***************************************************************************;
DATA ALLSETS;
    SET  SUBSET1   SUBSET2   SUBSET3   SUBSET4   SUBSET5
         SUBSET6   SUBSET7   SUBSET8   SUBSET9   SUBSET10
         SUBSET11  SUBSET12  SUBSET13  SUBSET14  SUBSET15
         SUBSET16  SUBSET17  SUBSET18  SUBSET19  SUBSET20
         SUBSET21  SUBSET22  SUBSET23  SUBSET24  SUBSET25
         SUBSET26  SUBSET27  SUBSET28  SUBSET29  SUBSET30
         SUBSET31  SUBSET32  SUBSET33  SUBSET34  SUBSET35
         SUBSET36  SUBSET37  SUBSET38  SUBSET39  SUBSET40
         SUBSET41  SUBSET42  SUBSET43  SUBSET44  SUBSET45
         SUBSET46  SUBSET47  SUBSET48  SUBSET49  SUBSET50
         SUBSET51  SUBSET52  SUBSET53  SUBSET54  SUBSET55
         SUBSET56  SUBSET57  SUBSET58  SUBSET59  SUBSET60
    ;
        BY MPRID;
         ARRAY JKWT(&reps.) wrwt1-wrwt&reps.; RETAIN wrwt1-wrwt&reps.;
         IF FIRST.MPRID THEN DO;
         DO I = 1 TO &reps.; DROP I;
            JKWT(I) = . ;
        END;
 END;
    JKWT(SUBSET) = JKWEIGHT2;
    IF LAST.MPRID THEN OUTPUT;
    KEEP MPRID SUBSET wrwt1-wrwt&reps.;
RUN;


***************************************************************************
* Sort the original data, get the final weight (WRWT), append the
* JackKnife/Replicated weights (WRWT1-WRWT60), and label variables.
***************************************************************************;
PROC SORT DATA=IN.postwt_trimmed OUT=trimwt;
BY MPRID;
RUN;

proc sort data=allsets;
by mprid;
run;

options compress=yes;

**********************
 OUTPUT FINAL DATA :
**********************;
DATA OUT.repwtp ;
    MERGE trimwt ALLSETS;
    BY MPRID;

    LABEL
        MPRID  = 'MPR ID Number'
        WRWT1  = 'Replicated/JackKnife Weight 1'
        WRWT2  = 'Replicated/JackKnife Weight 2'
        WRWT3  = 'Replicated/JackKnife Weight 3'
        WRWT4  = 'Replicated/JackKnife Weight 4'
```

```
       WRWT5  = 'Replicated/JackKnife Weight 5'
       WRWT6  = 'Replicated/JackKnife Weight 6'
       WRWT7  = 'Replicated/JackKnife Weight 7'
       WRWT8  = 'Replicated/JackKnife Weight 8'
       WRWT9  = 'Replicated/JackKnife Weight 9'
       WRWT10 = 'Replicated/JackKnife Weight 10'
       WRWT11 = 'Replicated/JackKnife Weight 11'
       WRWT12 = 'Replicated/JackKnife Weight 12'
       WRWT13 = 'Replicated/JackKnife Weight 13'
       WRWT14 = 'Replicated/JackKnife Weight 14'
       WRWT15 = 'Replicated/JackKnife Weight 15'
       WRWT16 = 'Replicated/JackKnife Weight 16'
       WRWT17 = 'Replicated/JackKnife Weight 17'
       WRWT18 = 'Replicated/JackKnife Weight 18'
       WRWT19 = 'Replicated/JackKnife Weight 19'
       WRWT20 = 'Replicated/JackKnife Weight 20'
       WRWT21 = 'Replicated/JackKnife Weight 21'
       WRWT22 = 'Replicated/JackKnife Weight 22'
       WRWT23 = 'Replicated/JackKnife Weight 23'
       WRWT24 = 'Replicated/JackKnife Weight 24'
       WRWT25 = 'Replicated/JackKnife Weight 25'
       WRWT26 = 'Replicated/JackKnife Weight 26'
       WRWT27 = 'Replicated/JackKnife Weight 27'
       WRWT28 = 'Replicated/JackKnife Weight 28'
       WRWT29 = 'Replicated/JackKnife Weight 29'
       WRWT30 = 'Replicated/JackKnife Weight 30'
       WRWT31 = 'Replicated/JackKnife Weight 31'
       WRWT32 = 'Replicated/JackKnife Weight 32'
       WRWT33 = 'Replicated/JackKnife Weight 33'
       WRWT34 = 'Replicated/JackKnife Weight 34'
       WRWT35 = 'Replicated/JackKnife Weight 35'
       WRWT36 = 'Replicated/JackKnife Weight 36'
       WRWT37 = 'Replicated/JackKnife Weight 37'
       WRWT38 = 'Replicated/JackKnife Weight 38'
       WRWT39 = 'Replicated/JackKnife Weight 39'
       WRWT40 = 'Replicated/JackKnife Weight 40'
       WRWT41 = 'Replicated/JackKnife Weight 41'
       WRWT42 = 'Replicated/JackKnife Weight 42'
       WRWT43 = 'Replicated/JackKnife Weight 43'
       WRWT44 = 'Replicated/JackKnife Weight 44'
       WRWT45 = 'Replicated/JackKnife Weight 45'
       WRWT46 = 'Replicated/JackKnife Weight 46'
       WRWT47 = 'Replicated/JackKnife Weight 47'
       WRWT48 = 'Replicated/JackKnife Weight 48'
       WRWT49 = 'Replicated/JackKnife Weight 49'
       WRWT50 = 'Replicated/JackKnife Weight 50'
       WRWT51 = 'Replicated/JackKnife Weight 51'
       WRWT52 = 'Replicated/JackKnife Weight 52'
       WRWT53 = 'Replicated/JackKnife Weight 53'
       WRWT54 = 'Replicated/JackKnife Weight 54'
       WRWT55 = 'Replicated/JackKnife Weight 55'
       WRWT56 = 'Replicated/JackKnife Weight 56'
       WRWT57 = 'Replicated/JackKnife Weight 57'
       WRWT58 = 'Replicated/JackKnife Weight 58'
       WRWT59 = 'Replicated/JackKnife Weight 59'
       WRWT60 = 'Replicated/JackKnife Weight 60'
    ;
RUN;


TITLE1 "2011 DoD Quarterly Health Survey Final/Replicated Weights";
title2 "Checks for the Replicate Weights";
TITLE3 "Program Name: Repwtp_Trimmed.sas";


*****************************************************
Check the structure of the data set OUT.repwtp;
*****************************************************;

proc sort data=OUT.repwtp out=sorted;
by stratum mprid;
run;

proc print data=sorted (obs=500);
var stratum mprid SUBSET fnstatus postwt trimwt postwt2 wrwt1-wrwt5;
```

```
run;

PROC MEANS DATA=OUT.repwtp n sum;
VAR  postwt trimwt postwt2 WRWT1-WRWT&reps.;
RUN;

PROC SORT DATA=OUT.repwtp out=repwtp;
BY MPRID;
RUN;

DATA OUT.repwtp;
   SET repwtp;
   BY MPRID;

   ARRAY WGTS(&reps.) WRWT1-WRWT&reps.;
   DO I = 1 TO &reps.; DROP I;
      IF WGTS(I) EQ . THEN WGTS(I) = 0;
   END;

   KEEP MPRID BWT postwt trimwt postwt2 WRWT1-WRWT&reps. fnstatus &domain1.
        &domain2. &domain3. com_geo web encounter;
RUN;

title4 "Check the replicate weights -- for all 51,000 cases";
PROC MEANS DATA=OUT.repwtp n sum;
VAR  postwt trimwt postwt2 wrwt1-wrwt&reps.;
output out=sums sum(postwt trimwt postwt2 wrwt1-wrwt&reps.)=postwt trimwt postwt2 wrwt1-
wrwt&reps.;
RUN;

proc transpose data=sums out=t_sums;
var postwt trimwt postwt2 wrwt1-wrwt&reps.;
run;

proc univariate data=t_sums normal ;
var col1;
run;

title4 "Check the replicate weights -- for the final completes";
PROC MEANS DATA=OUT.repwtp n sum;
where fnstatus=11;
VAR  postwt trimwt postwt2 wrwt1-wrwt&reps.;
output out=sums sum(postwt trimwt postwt2 wrwt1-wrwt&reps.)=postwt trimwt postwt2 wrwt1-
wrwt&reps.;
RUN;

proc transpose data=sums out=t_sums;
var postwt trimwt postwt2 wrwt1-wrwt&reps.;
run;

proc univariate data=t_sums normal ;
var col1;
run;


**added for Amang q4 2002;
data repwt2;
  set out.repwtp;
  where fnstatus = 11;
  array subset2(60) wrwt1-wrwt60;
  do m=1 to 60;
     if subset2(m)=0 then
            subset=m;
  end;
run;

proc sort data = repwt2;
by subset;
run;

proc means data = repwt2 noprint;
by subset;
var postwt2 wrwt1-wrwt60;
```

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```
output out = amang sum= / autoname;
run;

***added by Haixia on 05/11/2005 for q1, 2005 weighting.
rename wrwt1_sum, ..., wrwt60_sum as sum_wrwt1, ..., sum_wrwt60
so the numbered range list sum_wrwt1 - sum_wrwt60 can be used in the proc print below;

data amang;
set amang;
rename postwt2_sum = sum_postwt2;
%do i =1 %to 60;
rename wrwt&i._sum = sum_wrwt&i.;
%end;
run;

proc print data = amang;
sum _freq_ sum_postwt2  sum_wrwt1 - sum_wrwt60;
run;

*********************************************************************
* CREATE FINAL REPWT DATASET FOR KEITH -- Rename the variables
*********************************************************************;
data out.repwtp (drop = postwt postwt2 com_geo trimwt encounter web);
set in.repwtp;
fwrwt = postwt2;
%do i =1 %to 60;
rename wrwt&i.= fwrwt&i.;
%end;
label &domain1. = 'Weighting cell in the unknown eligibility adjustment';
label &domain2. = 'Weighting cell in the nonresponse adjustment';
label &domain3. = "ps cell for new wts - for all 4 quarters";
label fwrwt = "Final NEW Weight";
run;

data out.repwtp;
set out.repwtp;
* Label wts;
    %DO I = 1 %TO 60;
        LABEL    FWRWT&I. = "Replicated/JackKnife NEW Weight &I.";
    %END;
run;

PROC CONTENTS DATA=OUT.repwtp;
run;

%MEND process;

%PROCESS(pcell_a1, pcell_a2, postcell, 60);


********************    END **************************;
```

F.13   Q3FY2013\Programs\WEIGHTING\ADDWGTSA.SAS - Merge the final quarterly weights with the final questionnaire/sample file - Run Quarterly.

```
******************************************************************************
*
* PROGRAM:  ADDWGTSA.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (6401-903)
* PURPOSE:  MERGE THE FINAL WEIGHTS FILE WITH THE FINAL
*           QUESTIONNAIRE/SAMPLE FILE
*
* WRITTEN:  02/02/2001 BY KEITH RATHBUN
*
* INPUTS:   1) REPWTP.sas7bdat - Final/Replicated Weights file - FORM A
*           2) MERGEQ.sas7bdat - Final FORM A Questionnaire/Sample File
*
* OUTPUTS:  1) HCSyyq_n.sas7bdat - Final FORM A Questionnaire/Sample File
*              combined with Final/Replicated Weights file - FORM A
*              where  yy = Year
*                      q = Quarter Number
*                      n = Final Dataset Suffix/Version Number
*           2) HCSyyq_v.XPT - Final Public-Use Adult SAS XPORT Dataset
*
* MODIFIED: 1) 4/23/2002 - DKB added DROP statement to drop the permanent
*              random number variable (PRN) that does not need to be on the
*              final data file sent to DoD
*           2) 4/17/2003 - JA added length statement to order variables from
*              weight file.  The variable TREATU_R is positioned after the
*              replicate weights.
*           3) 2/17/2005 - JA dropped CACSMPL from repwt because it has been
*              added to mergeq.sd2 in the mergeq.sas program. This is because
*              in Q4, CACSMPL had to be updated for reporting purposes.
*           4) 5/13/2005 - JA kept only necessary variables from the weight
*              weight file.
*           5) 12/27/2005 - JA merged new/adjusted weights and old weights
*           6) 5/22/2006 - JA added xcatch to the dataset
*           7) 1/17/2008 - Keith Rathbun added creation of DTA, SAV and
*              XPT versions of the final dataset.
*           8) 2/9/2010 - JA added creation of private use file
*           9) 10/12/2010 - MER drop ENRID from public-use data set
*          10) 11/16/2010 - MER add MSA_ID to private-use file
*          11) 12/09/2011 - MER removed Lackland fix
*
******************************************************************************;
* Define global parameters.
******************************************************************************;
%LET DSN1 = HCS133_1; * Public-Use data set;
%LET DSN2 = HCS133_2; * Private-Use data set;
%LET DSNw = REPWTP;   * Final and replicate weight file;
%LET QTR  = Q3FY2013; * Current Quarters data folder name;

******************************************************************************
* Define libraries and options.
******************************************************************************;
LIBNAME IN1    "..\..\DATA\AFINAL";
LIBNAME IN2    "K:\&QTR";                  * Location of restricted-use sample file;
LIBNAME OUT    "..\..\DATA\AFINAL";
LIBNAME LIBRARY "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=NO NOCENTER MPRINT MLOGIC;

******************************************************************************
* Merge the final weights file with the final Questionnaire/Sample file
******************************************************************************;
PROC SORT DATA=IN1.&DSNw   OUT=&DSNw;  BY MPRID; RUN;
PROC SORT DATA=IN1.MERGEQ  OUT=MERGEQ; BY MPRID; RUN;

PROC CONTENTS DATA=IN1.&DSNw;  Title 'repwtp- New weights'; RUN;
PROC CONTENTS DATA=IN1.MERGEQ; Title 'mergeq'; RUN;

******************************************************************************
* Create and attach XCATCH (Catchment Reporting variable) to final dataset.
* Note that dataset TMPXCTCH with XCATCH is created by this include file.
```

```
****************************************************************************;
DATA TEMP1;
   SET MERGEQ;
   IF FNSTATUS = 11;
RUN;

%INCLUDE "XCATCH.INC"; * Requires input dataset called TEMP1;

PROC SORT DATA=TMPXCTCH; BY MPRID; RUN;

DATA OUT.&DSN1(DROP=PRN      DMIS_ID  D_PAR     ENRID
                     CACSMPL SERVAREA DCATCH    MSM
                     D_FAC   DAGEQY   FIELDAGE PNLCATCD
                     DMEDELG MEDTYPE  MBRRELCD MRTLSTAT)
         T_&DSN2(DROP=PRN DMIS_ID  D_PAR )
                 ;
   MERGE MERGEQ(IN=IN2 DROP=MIQCNTL COM_GEO)
         TMPXCTCH(IN=IN3)
         &DSNw(IN=IN1 KEEP=MPRID POSTCELL FWRWT FWRWT1--FWRWT60
                      RENAME=(fwrwt=FWRWT  postcell=POSTCELL
                              fwrwt1=FWRWT1 fwrwt2=FWRWT2 fwrwt3=FWRWT3 fwrwt4=FWRWT4
fwrwt5=FWRWT5
                              fwrwt6=FWRWT6 fwrwt7=FWRWT7 fwrwt8=FWRWT8 fwrwt9=FWRWT9
fwrwt10=FWRWT10
                              fwrwt11=FWRWT11 fwrwt12=FWRWT12 fwrwt13=FWRWT13 fwrwt14=FWRWT14
fwrwt15=FWRWT15
                              fwrwt16=FWRWT16 fwrwt17=FWRWT17 fwrwt18=FWRWT18 fwrwt19=FWRWT19
fwrwt20=FWRWT20
                              fwrwt21=FWRWT21 fwrwt22=FWRWT22 fwrwt23=FWRWT23 fwrwt24=FWRWT24
fwrwt25=FWRWT25
                              fwrwt26=FWRWT26 fwrwt27=FWRWT27 fwrwt28=FWRWT28 fwrwt29=FWRWT29
fwrwt30=FWRWT30
                              fwrwt31=FWRWT31 fwrwt32=FWRWT32 fwrwt33=FWRWT33 fwrwt34=FWRWT34
fwrwt35=FWRWT35
                              fwrwt36=FWRWT36 fwrwt37=FWRWT37 fwrwt38=FWRWT38 fwrwt39=FWRWT39
fwrwt40=FWRWT40
                              fwrwt41=FWRWT41 fwrwt42=FWRWT42 fwrwt43=FWRWT43 fwrwt44=FWRWT44
fwrwt45=FWRWT45
                              fwrwt46=FWRWT46 fwrwt47=FWRWT47 fwrwt48=FWRWT48 fwrwt49=FWRWT49
fwrwt50=FWRWT50
                              fwrwt51=FWRWT51 fwrwt52=FWRWT52 fwrwt53=FWRWT53 fwrwt54=FWRWT54
fwrwt55=FWRWT55
                              fwrwt56=FWRWT56 fwrwt57=FWRWT57 fwrwt58=FWRWT58 fwrwt59=FWRWT59
fwrwt60=FWRWT60
                ));
   BY MPRID;
   IF FNSTATUS = 11;

   IF NOT (IN1 AND IN2)
   THEN PUT "ERROR: NO MATCHING MPRID WITH MERGEQ..sas7bdat AND &DSNw..sas7bdat";


   IF IN1 AND IN2 AND IN3;

   FORMAT XCATCH CACR.
      ;

RUN;


****************************************************************************
* Extract private-use variables from quarterly sample file.
****************************************************************************;
DATA SAMPLA02;
   SET IN2.SAMPLA02
       (KEEP=MPRID MASTCD MAPRZIP MAPRZIPX PNBRTHDT PGCD RANKCD MSA_ID);
RUN;
PROC SORT DATA=SAMPLA02; BY MPRID; RUN;

****************************************************************************
* Append private-use variables to the public-use file.
****************************************************************************;
DATA OUT.&DSN2;
```

```
   MERGE T_&DSN2(IN=IN1) SAMPLA02(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2; *KEEP only eligible respondents;
RUN;


TITLE1 "DOD Quarterly Health Care Survey (6663-300)";
TITLE2 "Program Name: ADDWGTSA.SAS";
TITLE3 "Program Inputs: Mergeq.sas7bdat -- &DSNw..sas7bdat";
TITLE4 "Program Outputs: &DSN1..sas7bdat/XPT";
PROC CONTENTS DATA=OUT.&DSN1; RUN;

*****************************************************************************
* Output the restricted use CONTENTS text file for delivery with the
* database CD.
*****************************************************************************;
PROC PRINTTO PRINT="&DSN2..TXT" NEW; RUN;
OPTIONS PAGENO=1;
TITLE4 "Program Outputs: &DSN2..sas7bdat/XPT";
PROC CONTENTS DATA=OUT.&DSN2; RUN;

*****************************************************************************
* Define and generate SAS Transport file.
*****************************************************************************;
LIBNAME XFILE1 XPORT "..\..\data\afinal\&DSN1..XPT";
PROC COPY IN=OUT OUT=XFILE1; * Converts input file to transport file;
          SELECT &DSN1;       * Selects sas7bdat file to copy;
RUN;

LIBNAME XFILE2 XPORT "..\..\data\afinal\&DSN2..XPT";
PROC COPY IN=OUT OUT=XFILE2; * Converts input file to transport file;
          SELECT &DSN2;       * Selects sas7bdat file to copy;
RUN;

*****************************************************************************
* END IT HERE
* Note that SPSS and STATA exports are not being created here because
* proc export does not support the library/formatted file option needed
* for delivery.  The code below is kept just in case this option is
* supported at a later time.
*****************************************************************************;
ENDSAS;
*****************************************************************************
* Generate Dataset in STATA format.
*****************************************************************************;
PROC EXPORT
   DATA = OUT.&DSN1
   OUTFILE = "..\..\DATA\AFINAL\&DSN1..DTA"
   DBMS = DTA
   REPLACE;
RUN;

PROC EXPORT
   DATA = OUT.&DSN2
   OUTFILE = "..\..\DATA\AFINAL\&DSN2..DTA"
   DBMS = DTA
   REPLACE;
RUN;

*****************************************************************************
* Generate Dataset in SPSS format.
*****************************************************************************;
PROC EXPORT
   DATA = OUT.&DSN1
   OUTFILE = "..\..\DATA\AFINAL\&DSN1..SAV"
   DBMS = SAV
   REPLACE;
RUN;

PROC EXPORT
   DATA = OUT.&DSN2
   OUTFILE = "..\..\DATA\AFINAL\&DSN2..SAV"
   DBMS = SAV
```

```
    REPLACE;
RUN;
```

F.14   WEIGHTING\COMB2013.SAS - Combine quarterly datasets into one annual file - Annual.

```
*******************************************************************************
*
*  PROGRAM:   COMB2013.SAS
*  TASK:      ANNUAL DOD HEALTH CARE SURVEY ANALYSIS (6244-300)
*  PURPOSE:   Combine quarterly datasets into one annual file.
*
*  WRITTEN:   12/23/2002 BY KEITH RATHBUN.
*
*   INPUTS:   1) HCSyyq_2.sas7bdat - Q1-Q4 DOD HCS Analysis files
*                    Where yy = Year (11)
*                          q = Quarter Number (1-4)
*
*  MODIFIED:  1) September 17, 2009 by Emma Ernst for 2009 database
*             2) October 12, 2010 by Mike Rudacille for 2010 database
*                Switched from HCSyyq_1 to HCSyyq_2, as some of the necessary variables
*                are now only available in the restricted use dataset
*             3) September 23, 2011 by Mike Rudacille for 2011 database
*             4) September 20, 2012 by Amanda Kudis for 2012 database
*             5) July 24, 2013 by Amanda Kudis for 2013 datasets
*
*   OUTPUT:   1) COMB2013.sas7bdat - Combined quarterly datasets in one annual file
*
*    NOTES:   1) The output dataset produced by this program contains all
*                of the original quarterly responses plus additional
*                responses that "trickled" in after the end of the
*                fielding period. The variable called QUARTER can be used
*                to identify which version of the quarterly survey is
*                applicable to the respondent.
*
*  INCLUDES:  1) XCATCH.INC - Create catchment reporting variable
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;
LIBNAME INQ1      "..\..\..\Q1FY2013t\DATA\AFINAL";
LIBNAME INQ2      "..\..\..\Q2FY2013t\DATA\AFINAL";
LIBNAME INQ3      "..\..\..\Q3FY2013\DATA\AFINAL"; *AMK NO TRICKLE FOR 2013;
*LIBNAME INQ4      "..\..\..\Q4FY2012\DATA\AFINAL"; /***AMK NO Q4 FOR 2013; JMA 11/17/2011 -
Unlike other years, In 2011, we used trickle Q4 data ***/
LIBNAME OUT       "..\..\DATA";
LIBNAME LIBRARY   "..\..\Data\fmtlib";
OPTIONS COMPRESS=YES LS=132 PS=79 NOCENTER NOFMTERR;

*******************************************************************************
* Extract variable names for each quarter for overlap checking purposes.
*******************************************************************************;
PROC CONTENTS DATA=INQ1.HCS131_2 OUT=Q1(KEEP=NAME) NOPRINT; RUN;
PROC SORT; BY NAME; RUN;

PROC CONTENTS DATA=INQ2.HCS132_2 OUT=Q2(KEEP=NAME) NOPRINT; RUN;
PROC SORT; BY NAME; RUN;

PROC CONTENTS DATA=INQ3.HCS133_2 OUT=Q3(KEEP=NAME) NOPRINT; RUN;
PROC SORT; BY NAME; RUN;

/*PROC CONTENTS DATA=INQ4.HCS134_2 OUT=Q4(KEEP=NAME) NOPRINT; RUN;*AMK NO Q4 FOR 2013;
PROC SORT; BY NAME; RUN;*/

DATA VARIABLES;
   MERGE Q1(IN=INQ1) Q2(IN=INQ2) Q3(IN=INQ3) /*Q4(IN=INQ4)*/;*AMK NO Q4 FOR 2013;
   BY NAME;
   LENGTH Q1-Q3 $3; *AMK NO Q4 FOR 2013;
   IF INQ1 THEN Q1 = "YES"; ELSE Q1 = "NO";
   IF INQ2 THEN Q2 = "YES"; ELSE Q2 = "NO";
   IF INQ3 THEN Q3 = "YES"; ELSE Q3 = "NO";
   /*IF INQ4 THEN Q4 = "YES"; ELSE Q4 = "NO";*AMK NO Q4 FOR 2013;*/
RUN;

TITLE1 "Annual DOD Health Care Survey Database (6244-300)";
TITLE2 "Program Name: COMB2013.SAS By Keith Rathbun";
```

```
TITLE3 "Program Inputs: HCSyyq_2.sas7bdat - Q1-Q3 DOD HCS Sample and Analysis files"; *AMK NO Q4
FOR 2013;
TITLE4 "Program Output: COMB2013.sas7bdat - Combined quarterly datasets in one annual file";

*******************************************************************************
* Print summary of variable name quarterly overlap.
*******************************************************************************;
PROC PRINT; RUN;

*******************************************************************************
* Combine quarterly datasets with all of the "trickle" data into one file.
*******************************************************************************;
DATA COMB2013(DROP= XCATCH /* Xcatch will be recreated based on annual counts */);
    SET INQ1.HCS131_2              /* MER 10/5/11 - MISS_3 was out of scope in 2011 and was
dropped */
        INQ2.HCS132_2              /* starting in Q2. This DROP statement can be removed in
COMB2012 */
        INQ3.HCS133_2              /* AMK REMOVED (DROP=MISS_3) for 2012*/
        /*INQ4.HCS124_2*/; *AMK NO Q4 FOR 2013;
    BY MPRID;
    LABEL FIELDAGE = "Age at start of fielding period"
          DAGEQY  = "Age at time of data collection"
        ;
RUN;

*******************************************************************************
* Sort by MPRID and check for duplicates.  There should not be duplicates.
*******************************************************************************;
PROC SORT DATA=COMB2013 NODUPKEY OUT=TEMP1; BY MPRID; RUN;

*******************************************************************************
* Create and attach XCATCH (Catchment Reporting variable) to final dataset.
* Note that dataset TEMP with XCATCH is created by this include file.
*******************************************************************************;
%INCLUDE "XCATCH.INC"; * Requires input dataset called TEMP1;
PROC SORT DATA=TMPXCTCH; BY MPRID; RUN;


DATA OUT.COMB2013
     HCS131_2x(KEEP=MPRID XCATCH) HCS132_2x(KEEP=MPRID XCATCH)
     HCS133_2x(KEEP=MPRID XCATCH) /*HCS124_2x(KEEP=MPRID XCATCH)*/ ; *AMK NO Q4 FOR 2013;

    MERGE TEMP1(IN=IN1) TMPXCTCH(IN=IN2);
    BY MPRID;
    IF IN1 AND IN2 THEN DO;
       IF XCATCH = 1350 THEN XCATCH = 117; /* MER 11/15/08 Map new Lackland */
                                           /* catchment area to old one     */

       IF XCATCH = 37 THEN XCATCH = 67; /* MER 11/7/12 Map old Walter Reed */
                                        /* catchment area to new one       */
       OUTPUT OUT.COMB2013;
       IF QUARTER="Q1FY2013" THEN OUTPUT HCS131_2x;
       IF QUARTER="Q2FY2013" THEN OUTPUT HCS132_2x;
       IF QUARTER="Q3FY2013" THEN OUTPUT HCS133_2x;
       *IF QUARTER="Q4FY2012" THEN OUTPUT HCS124_2x;*AMK NO Q4 FOR 2013;
    END;
RUN;

DATA INQ1.HCS131_2;
    UPDATE INQ1.HCS131_2 HCS131_2x;
    BY MPRID;
RUN;

DATA INQ2.HCS132_2;
    UPDATE INQ2.HCS132_2 HCS132_2x;
    BY MPRID;
RUN;

DATA INQ3.HCS133_2;
    UPDATE INQ3.HCS133_2 HCS133_2x;
    BY MPRID;
RUN;
```

```
/*DATA INQ4.HCS124_2;
    UPDATE INQ4.HCS124_2 HCS124_2x;
    BY MPRID;
RUN;*/ *AMK NO Q4 FOR 2013;


PROC CONTENTS; RUN;
```

F.15   WEIGHTING\ADDWGTS.SAS - Merge the combined annual weights with the final questionnaire/sample file - Annual.

```
****************************************************************************
*
* PROGRAM:  ADDWGTS.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (6244-300)
* PURPOSE:  MERGE THE FINAL WEIGHTS FILE WITH THE FINAL
*           QUESTIONNAIRE/SAMPLE FILE
*
* WRITTEN:  02/02/2001 BY KEITH RATHBUN
*
* MODIFIED: 1) 01/15/2002 BY KEITH RATHBUN: Updated to combine all quarterly
*              datasets including trickles with the annual weights file.
*           2) 12/30/2002 BY KEITH RATHBUN: Updated for 2002 survey.
*           3) 01/20/2004 BY LUCY LU: Updated for 2003 survey.
*           4) 02/10/2004 BY KEITH RATHBUN: Added catchment reporting variable
*              (XCATCH) constructed in STEP1Q.
*           5) 03/03/05 BY LUCY LU: Updateed for 2004 annual survey.
*              -- Create macro variables and eliminate macro program,
*              -- update the length statement for year 2004.
*           6) 01/04/2006 BY KEITH RATHBUN: Updated for 2005 survey.
*           7) 09/18/2007 BY LUCY LU: Updated for 2007 survey.
*           8) 09/17/2009 BY Emma Ernst: Updated for 2009 survey.
*           9) 10/13/2010 BY MIKE RUDACILLE: Updated for 2010 survey.
*              Modified to produce both public and private use datasets.
*          10) 09/23/2011 BY MIKE RUDACILLE: Updated for 2011 survey.
*          11) 09/20/2012 by AMANDA KUDIS: Updated for 2012 survey.
*          12) 07/24/13 BY AMANDA KUDIS: Updates for 2013 survey.
*
* INPUTS:   1) CREPWT.sas7bdat  - Final/Replicated Weights file – FORM A
*           2) COMB2013.sas7bdat - Combined Q1-Q3 FORM A Questionnaire/Sample File *AMK NO Q4 FOR
2013;
*
* OUTPUTS:  1) HCSyyA_n.sas7bdat - Final FORM A Questionnaire/Sample File
*              combined with Final/Replicated Weights file – FORM A
*              where  yy = Year
*                      A = Form A – Annual
*                      n = Final Dataset Suffix/Version Number
*           2) HCSyyA_n.XPT - Final Adult SAS XPORT Dataset
*              where  yy = Year
*                      A = Form A – Annual
*                      n = Final Dataset Suffix/Version Number
*
* NOTES:    1) This program combines all of the quarterly input datasets
*              including trickles with the annual weights file.
*
****************************************************************************;
LIBNAME OUT         "..\..\DATA";
LIBNAME LIBRARY "..\..\Data\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER NOFMTERR;

%LET DSNI_1 = CREPWT;
%LET DSNI_2 = COMB2013;
%LET DSNO_1 = HCS13A_1;
%LET DSNO_2 = HCS13A_2;

****************************************************************************
* Merge the final weights file with the final Questionnaire/Sample file
****************************************************************************;
PROC SORT DATA=OUT.&DSNI_1 OUT=&DSNI_1; WHERE FNSTATUS EQ 11; BY MPRID; RUN;
PROC SORT DATA=OUT.&DSNI_2 OUT=&DSNI_2; BY MPRID; RUN;

DATA &DSNO_2(DROP= DRP_RND1  /* jma Oct 24 2008 */
          );

   MERGE &DSNI_2(IN=IN2 )
         &DSNI_1(IN=IN1 KEEP=MPRID CFWT CFWT1-CFWT180); *AMK changed CFWT240 to CFWT180 for
2013*/
   BY MPRID;
```

```
    IF FNSTATUS = 11;
    IF IN1 AND IN2;
    IF NOT (IN1 AND IN2) THEN PUT "ERROR: NO MATCHING MPRID WITH &DSNI_1..sas7bdat AND
&DSNI_2..sas7bdat";


    FORMAT CACSMPL CACR.  WEB WEB.  /* MER 11/7/12 - changed from CAC to CACR format */
            /*TRICKDUP $trckdup. */

        N1 N1_J1 N1_J2 N1_J3 N1_J4 N1_J5 N1_J6 N1_Q1 N1_AA1 N1_AC1 N1_AC2 N1_AC3
        N2 N3 N4 N5 N5A1 N5A2 N5A3
        N6 N7 N8 N8_01
        N9 N10 N10_B1
        N11 N12 N13 N14 N15 N16
        N17 N17_Q0 N17_Q1 N17_Q2
        N18 N19A N19B N20 N21 N22 N23
        N24 N25
            notes.

            XBMI xbmi.;

     LABEL CFWT='Combined Annual NEW Weight';


  RUN;


DATA OUT.&DSNO_2 ;
    ***********************************************************************
    * Reorder file for documentation purposes.
    ***********************************************************************;
    LENGTH
        MPRID       $ 8         /* ID                 */
        SVCSMPL       8         /* sampling variable */
        SEXSMPL       8         /* sampling variable */
        STRATUM     $ 7         /* sampling variable */
        CACSMPL       8         /* sampling variable */
        ENBGSMPL    $ 2         /* sampling variable */
        MPCSMPL       8         /* sampling variable */
        NHFF          8         /* sampling variable */
        SERVAREA    $ 2         /* sampling variable */
        QUARTER     $ 8         /* sampling variable */
        /*PRN           8*/        /* sampling variable */
        DCATCH      $ 4         /* sampling variable */
        ENRID       $ 4         /* sampling variable */
        /*DMIS_ID     $ 9*/        /* sampling variable */
        MSM         $ 2         /* sampling variable */
        D_FAC       $ 9         /* sampling variable */
        /*D_PAR       $ 4*/        /* sampling variable */
        D_HEALTH    $ 2         /* sampling variable */
        TNEXREG     $ 1         /* sampling variable */
        SERVAFF     $ 1         /* sampling variable */
        /*COM_GEO     $ 4*/        /* sampling variable */ /* MER 7/20/10 - Added to sampling
vars so it won't be */
                                                /* at the end of the proc contents by
default anymore. */
                                                /* This variable gets dropped in
ADDWGTSA.sas.        */


        MRTLSTAT    $ 1         /* DEERS variable     */
        RACEETHN    $ 1         /* DEERS variable     */
        PNSEXCD     $ 1         /* DEERS variable     */
        DAGEQY      $ 3         /* DEERS variable     */
        RDAGEQY       3         /* DEERS variable     */
        FIELDAGE    $ 3         /* DEERS variable     */
        RFLDAGE       3         /* DEERS variable     */
        PCM         $ 3         /* DEERS variable     */
        ACV         $ 1         /* DEERS variable     */
        DBENCAT     $ 3         /* DEERS variable     */
        DMEDELG     $ 1         /* DEERS variable     */
        DSPONSVC    $ 1         /* DEERS variable     */
        MBRRELCD    $ 1         /* DEERS variable     */
```

```
MEDTYPE     $ 1           /* DEERS variable      */
PATCAT      $ 7           /* DEERS variable      */
PNTYPCD     $ 1           /* DEERS variable      */
PNLCATCD    $ 1           /* DEERS variable      */


H13001        4           /* Questionnaire variable    */
H13002A       4           /* Questionnaire variable    */
H13002C       4           /* Questionnaire variable    */
H13002F       4           /* Questionnaire variable    */
H13002G       4           /* Questionnaire variable    */
H13002H       4           /* Questionnaire variable    */
H13002I       4           /* Questionnaire variable    */
H13002J       4           /* Questionnaire variable    */
H13002K       4           /* Questionnaire variable    */
H13002L       4           /* Questionnaire variable    */
H13002M       4           /* Questionnaire variable    */
H13002N       4           /* Questionnaire variable    */
H13002O       4           /* Questionnaire variable    */
H13002P       4           /* Questionnaire variable    */
H13002Q       4           /* Questionnaire variable    */
H13002R       4           /* Questionnaire variable    */
H13002S       4           /* Questionnaire variable    */
H13002T       4           /* Questionnaire variable    */
H13002U       4           /* Questionnaire variable    */
H13003        4           /* Questionnaire variable    */
H13004        4           /* Questionnaire variable    */
H13005        4           /* Questionnaire variable    */
H13006        4           /* Questionnaire variable    */
H13007        4           /* Questionnaire variable    */
H13008        4           /* Questionnaire variable    */
H13009        4           /* Questionnaire variable    */
H13010        4           /* Questionnaire variable    */
H13011        4           /* Questionnaire variable    */
H13012        4           /* Questionnaire variable    */
H13013        4           /* Questionnaire variable    */
H13014        4           /* Questionnaire variable    */
H13015        4           /* Questionnaire variable    */
H13016        4           /* Questionnaire variable    */
H13017        4           /* Questionnaire variable    */
H13018        4           /* Questionnaire variable    */
H13019        4           /* Questionnaire variable    */
H13020        4           /* Questionnaire variable    */
H13021        4           /* Questionnaire variable    */
H13022        4           /* Questionnaire variable    */
H13023        4           /* Questionnaire variable    */
H13024        4           /* Questionnaire variable    */
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H13026        4           /* Questionnaire variable    */
H13027        4           /* Questionnaire variable    */
H13028        4           /* Questionnaire variable    */
H13029        4           /* Questionnaire variable    */
H13030        4           /* Questionnaire variable    */
H13031        4           /* Questionnaire variable    */
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H13033        4           /* Questionnaire variable    */
H13034        4           /* Questionnaire variable    */
H13035        4           /* Questionnaire variable    */
H13036        4           /* Questionnaire variable    */
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H13038        4           /* Questionnaire variable    */
H13039        4           /* Questionnaire variable    */
H13040        4           /* Questionnaire variable    */
H13041        4           /* Questionnaire variable    */
H13042        4           /* Questionnaire variable    */
H13043        4           /* Questionnaire variable    */
H13044        4           /* Questionnaire variable    */
H13045        4           /* Questionnaire variable    */
H13046        4           /* Questionnaire variable    */
H13047        4           /* Questionnaire variable    */
H13048        4           /* Questionnaire variable    */
H13049        4           /* Questionnaire variable    */
H13050        4           /* Questionnaire variable    */
```

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H13051          4               /* Questionnaire variable     */
H13052          4               /* Questionnaire variable     */
H13053          4               /* Questionnaire variable     */
H13054          4               /* Questionnaire variable     */
H13055          4               /* Questionnaire variable     */
H13056          4               /* Questionnaire variable     */
H13057A         4               /* Questionnaire variable     */
H13057B         4               /* Questionnaire variable     */
H13057C         4               /* Questionnaire variable     */
H13057D         4               /* Questionnaire variable     */
H13058          4               /* Questionnaire variable     */
H13059B         4               /* Questionnaire variable     */
H13060          4               /* Questionnaire variable     */
H13061          4               /* Questionnaire variable     */
H13062          4               /* Questionnaire variable     */
H13063          4               /* Questionnaire variable     */
H13064          4               /* Questionnaire variable     */
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H13066          4               /* Questionnaire variable     */
H13067          4               /* Questionnaire variable     */
H13068          4               /* Questionnaire variable     */
H13069          4               /* Questionnaire variable     */
H13070          4               /* Questionnaire variable     */
H13071F         4               /* Questionnaire variable     */
H13071I         4               /* Questionnaire variable     */
H13072          4               /* Questionnaire variable     */
H13073          4               /* Questionnaire variable     */
H13073A         4               /* Questionnaire variable     */
H13073B         4               /* Questionnaire variable     */
H13073C         4               /* Questionnaire variable     */
H13073D         4               /* Questionnaire variable     */
H13073E         4               /* Questionnaire variable     */
H13074          4               /* Questionnaire variable     */
H13075          4               /* Questionnaire variable     */
H13076          4               /* Questionnaire variable     */
H13077          4               /* Questionnaire variable     */
H13078          4               /* Questionnaire variable     */
H13079          4               /* Questionnaire variable     */

SREDA           4               /* Questionnaire variable     */
SRRACEA         4               /* Questionnaire variable     */
SRRACEB         4               /* Questionnaire variable     */
SRRACEC         4               /* Questionnaire variable     */
SRRACED         4               /* Questionnaire variable     */
SRRACEE         4               /* Questionnaire variable     */
SRAGE           4               /* Questionnaire variable     */

S13009          4               /* Q1 & Q2 & Q3 Supplement       */
S13010          4               /* Q1 & Q2 & Q3 Supplement       */
S13011          4               /* Q1 & Q2 & Q3 Supplement       */
S13014          4               /* Q1 & Q2 & Q3 Supplement       */
S13B01          4               /* Q1 & Q2 & Q3 Supplement       */
S13B02          4               /* Q1 & Q2 & Q3 Supplement       */
S13B03          4               /* Q1 & Q2 & Q3 Supplement       */
S13B04          4               /* Q1 & Q2 & Q3 Supplement       */
S13B23          4               /* Q1 & Q2 & Q3 Supplement             */
S13B24          4               /* Q1 & Q2 & Q3 Supplement             */
S13B25          4               /* Q1 & Q2 & Q3 Supplement             */
S13B26          4               /* Q1 & Q2 & Q3 Supplement             */
S13AA01         4               /* Q1 Supplement          */
S13AA02A        4               /* Q1 Supplement          */
S13AA02B        4               /* Q1 Supplement          */
S13AA02C        4               /* Q1 Supplement          */
S13AA02D        4               /* Q1 Supplement          */
S13AA02E        4               /* Q1 Supplement          */
S13AA02F        4               /* Q1 Supplement          */
S13AA02G        4               /* Q1 Supplement          */
S13AA02H        4               /* Q1 Supplement          */
S13AA02I        4               /* Q1 Supplement          */
S13AA02J        4               /* Q1 Supplement          */
S13AA02K        4               /* Q1 Supplement          */
S13AA02L        4               /* Q1 Supplement          */
S13AA02V        4               /* Q1 Supplement          */
```

```
S13AA02M        4                  /* Q1 Supplement       */
S13AA02N        4                  /* Q1 Supplement       */
S13AA02O        4                  /* Q1 Supplement       */
S13AA02P        4                  /* Q1 Supplement       */
S13AA02Q        4                  /* Q1 Supplement       */
S13AA02R        4                  /* Q1 Supplement       */
S13AA02S        4                  /* Q1 Supplement       */
S13AA02T        4                  /* Q1 Supplement       */
S13AA02U        4                  /* Q1 Supplement       */
S13AA02W        4                  /* Q1 Supplement       */
S13AA03         4                  /* Q1 Supplement       */
S13AA04A        4                  /* Q1 Supplement       */
S13AA04B        4                  /* Q1 Supplement       */
S13AA04C        4                  /* Q1 Supplement       */
S13AA04D        4                  /* Q1 Supplement       */
S13AA04E        4                  /* Q1 Supplement       */
S13AA05         4                  /* Q1 Supplement       */
S13015          4                  /* Q1 Supplement       */
S13N11          4                  /* Q1 Supplement       */
S13N12A         4                  /* Q1 Supplement       */
S13N12B         4                  /* Q1 Supplement       */
S13N12C         4                  /* Q1 Supplement       */
S13N12D         4                  /* Q1 Supplement       */
S13N12E         4                  /* Q1 Supplement       */
S13N12F         4                  /* Q1 Supplement       */
S13N12G         4                  /* Q1 Supplement       */
S13N12H         4                  /* Q1 Supplement       */
S13N12I         4                  /* Q1 Supplement       */
S13N12J         4                  /* Q1 Supplement       */
S13N12K         4                  /* Q1 Supplement       */
S13N12L         4                  /* Q1 Supplement       */
S13N12M         4                  /* Q1 Supplement       */
S13J01          4                  /* Q2 Supplement       */
S13J02A         4                  /* Q2 Supplement       */
S13J02B         4                  /* Q2 Supplement       */
S13J02C         4                  /* Q2 Supplement       */
S13J02D         4                  /* Q2 Supplement       */
S13J02E         4                  /* Q2 Supplement       */
S13J02F         4                  /* Q2 Supplement       */
S13J02G         4                  /* Q2 Supplement       */
S13J02H         4                  /* Q2 Supplement       */
S13J02I         4                  /* Q2 Supplement       */
S13J03          4                  /* Q2 Supplement       */
S13J04          4                  /* Q2 Supplement       */
S13J05          4                  /* Q2 Supplement       */
S13J06          4                  /* Q2 Supplement       */
S13J07A         4                  /* Q2 Supplement       */
S13J07B         4                  /* Q2 Supplement       */
S13J07C         4                  /* Q2 Supplement       */
S13J07D         4                  /* Q2 Supplement       */
S13J07E         4                  /* Q2 Supplement       */
S13J07F         4                  /* Q2 Supplement       */
S13J07G         4                  /* Q2 Supplement       */
S13J07H         4                  /* Q2 Supplement       */
S13J07I         4                  /* Q2 Supplement       */
S13J07J         4                  /* Q2 Supplement       */
S13J07K         4                  /* Q2 Supplement       */
S13J07L         4                  /* Q2 Supplement       */
S13J07M         4                  /* Q2 Supplement       */
S13J07N         4                  /* Q2 Supplement       */
S13J07O         4                  /* Q2 Supplement       */
S13J08          4                  /* Q2 Supplement       */
S13J09A         4                  /* Q2 Supplement       */
S13J09B         4                  /* Q2 Supplement       */
S13J09C         4                  /* Q2 Supplement       */
S13J09D         4                  /* Q2 Supplement       */
S13J09E         4                  /* Q2 Supplement       */
S13J09F         4                  /* Q2 Supplement       */
S13J09G         4                  /* Q2 Supplement       */
S13J09H         4                  /* Q2 Supplement       */
S13J09I         4                  /* Q2 Supplement       */
S13J09J         4                  /* Q2 Supplement       */
S13J09K         4                  /* Q2 Supplement       */
```

```
S13J09L          4             /* Q2 Supplement       */
S13J10           4             /* Q2 Supplement       */
S13J13A          4             /* Q2 Supplement       */
S13J13B          4             /* Q2 Supplement       */
S13J13C          4             /* Q2 Supplement       */
S13J13D          4             /* Q2 Supplement       */
S13J13E          4             /* Q2 Supplement       */
S13J13F          4             /* Q2 Supplement       */
S13J13G          4             /* Q2 Supplement       */
S13J13H          4             /* Q2 Supplement       */
S13J13I          4             /* Q2 Supplement       */
S13J13J          4             /* Q2 Supplement       */
S13J13K          4             /* Q2 Supplement       */
S13J13L          4             /* Q2 Supplement       */
S13J13M          4             /* Q2 Supplement       */
S13J13N          4             /* Q2 Supplement       */
S13J14           4             /* Q2 Supplement       */
S13AC01          4             /* Q2 Supplement       */
S13AC02A         4             /* Q2 Supplement       */
S13AC02B         4             /* Q2 Supplement       */
S13AC02C         4             /* Q2 Supplement       */
S13AC02D         4             /* Q2 Supplement       */
S13AC02E         4             /* Q2 Supplement       */
S13AC02F         4             /* Q2 Supplement       */
S13AC02G         4             /* Q2 Supplement       */
S13AC03          4             /* Q2 Supplement       */
S13AC04          4             /* Q2 Supplement       */
S13AC05A         4             /* Q2 Supplement       */
S13AC05B         4             /* Q2 Supplement       */
S13AC05C         4             /* Q2 Supplement       */
S13AC05D         4             /* Q2 Supplement       */
S13AC05E         4             /* Q2 Supplement       */
S13AC05F         4             /* Q2 Supplement       */
S13AC05G         4             /* Q2 Supplement       */
S13C09           4             /* Q3 Supplement       */
S13C10           4             /* Q3 Supplement       */
S13C11           4             /* Q3 Supplement       */
S13C12           4             /* Q3 Supplement       */
S13C13           4             /* Q3 Supplement       */
S13C14           4             /* Q3 Supplement       */
S13Q01           4             /* Q3 Supplement       */
S13Q02           4             /* Q3 Supplement       */
S13Q03           4             /* Q3 Supplement       */
S13Q04           4             /* Q3 Supplement       */
S13Q05           4             /* Q3 Supplement       */
S13Q08           4             /* Q3 Supplement       */


ONTIME       $ 3             /* Survey fielding variable */
FLAG_FIN     $ 5             /* Survey fielding variable */
DUPFLAG      $ 3             /* Survey fielding variable */
FNSTATUS       8             /* Survey fielding variable */
KEYCOUNT       8             /* Survey fielding variable */
WEB            8             /* Survey fielding variable */
/** jma 11/17/11 MIQCNTL    $ 12  ***/         /* Survey fielding variable */


/* EXPFLAG        8           /* CS flag variable    *//*AMK removed for 2013*/
N1             8             /* CS flag variable    */
N1_J1          8             /* CS flag variable    */
N1_J2          8             /* CS flag variable    */
N1_J3          8             /* CS flag variable    */
N1_J4          8             /* CS flag variable    */
N1_J5          8             /* CS flag variable    */
N1_J6          8             /* CS flag variable    */
N1_Q1          8             /* CS flag variable    */
N1_AA1         8             /* CS flag variable    */
N1_AC1         8             /* CS flag variable    */
N1_AC2         8             /* CS flag variable    */
N1_AC3         8             /* CS flag variable    */
N2             8             /* CS flag variable    */
N3             8             /* CS flag variable    */
N4             8             /* CS flag variable    */
```

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```
N5           8          /* CS flag variable    */
N5A1         8          /* CS flag variable    */
N5A2         8          /* CS flag variable    */
N5A3         8          /* CS flag variable    */
N6           8          /* CS flag variable    */
N7           8          /* CS flag variable    */
N8           8          /* CS flag variable    */
N8_01        8          /* CS flag variable    */
N9           8          /* CS flag variable    */
N10          8          /* CS flag variable    */
N10_B1       8          /* CS flag variable    */
N11          8          /* CS flag variable    */
N12          8          /* CS flag variable    */
N13          8          /* CS flag variable    */
N14          8          /* CS flag variable    */
N15          8          /* CS flag variable    */
N16          8          /* CS flag variable    */
N17          8          /* CS flag variable    */
N17_Q0       8          /* CS flag variable    */
N17_Q1       8          /* CS flag variable    */
N17_Q2       8          /* CS flag variable    */
N18          8          /* CS flag variable    */
N19A         8          /* CS flag variable    */
N19B         8          /* CS flag variable    */
N20          8          /* CS flag variable    */
N21          8          /* CS flag variable    */
N22          8          /* CS flag variable    */
N23          8          /* CS flag variable    */
N24          8          /* CS flag variable    */
N25          8          /* CS flag variable    */


MISS_1       8          /* CS Count            */
MISS_4       8          /* CS Count            */
MISS_5       8          /* CS Count            */
MISS_6       8          /* CS Count            */
MISS_7       8          /* CS Count            */
MISS_9       8          /* CS Count            */
MISS_TOT     8          /* CS Count            */

JSFLAG       8          /* constructed      */
XENRLLMT     8          /* constructed      */
XENR_PCM     8          /* constructed      */
XINS_COV     8          /* constructed      */
XBENCAT      8          /* constructed      */
XENR_RSV     8          /* constructed      */
XINS_RSV     8          /* constructed      */
XREGION      3          /* constructed      */
XTNEXREG     3          /* constructed      */
XCATCH       8          /* constructed      */
USA          3          /* constructed      */
XOCONUS      3          /* constructed      */
OUTCATCH     8          /* constructed      */
XSEXA        8          /* constructed      */
XBMI         8          /* constructed      */
XBMICAT      3          /* constructed      */
XBNFGRP      8          /* constructed      */
XSERVAFF     3          /* constructed      */
KMILOPQY     8          /* constructed      */
KCIVOPQY     8          /* constructed      */
KCIVINS      8          /* constructed      */
HP_PRNTL     8          /* constructed      */
HP_MAMOG     8          /* constructed      */
HP_MAM50     8          /* constructed      */
HP_PAP       8          /* constructed      */
HP_BP        8          /* constructed      */
HP_FLU       8          /* constructed      */
HP_OBESE     8          /* constructed      */
HP_SMOKE     8          /* constructed      */
HP_SMKH3     8          /* constructed      */
HP_CESH3     8          /* constructed      */

POSTCELL     $5         /* Postratification Variables */
```

```
BWT             8           /* weights        */

FWRWT           8           /* weights        */
FWRWT1          8           /* weights        */
FWRWT2          8           /* weights        */
FWRWT3          8           /* weights        */
FWRWT4          8           /* weights        */
FWRWT5          8           /* weights        */
FWRWT6          8           /* weights        */
FWRWT7          8           /* weights        */
FWRWT8          8           /* weights        */
FWRWT9          8           /* weights        */
FWRWT10         8           /* weights        */
FWRWT11         8           /* weights        */
FWRWT12         8           /* weights        */
FWRWT13         8           /* weights        */
FWRWT14         8           /* weights        */
FWRWT15         8           /* weights        */
FWRWT16         8           /* weights        */
FWRWT17         8           /* weights        */
FWRWT18         8           /* weights        */
FWRWT19         8           /* weights        */
FWRWT20         8           /* weights        */
FWRWT21         8           /* weights        */
FWRWT22         8           /* weights        */
FWRWT23         8           /* weights        */
FWRWT24         8           /* weights        */
FWRWT25         8           /* weights        */
FWRWT26         8           /* weights        */
FWRWT27         8           /* weights        */
FWRWT28         8           /* weights        */
FWRWT29         8           /* weights        */
FWRWT30         8           /* weights        */
FWRWT31         8           /* weights        */
FWRWT32         8           /* weights        */
FWRWT33         8           /* weights        */
FWRWT34         8           /* weights        */
FWRWT35         8           /* weights        */
FWRWT36         8           /* weights        */
FWRWT37         8           /* weights        */
FWRWT38         8           /* weights        */
FWRWT39         8           /* weights        */
FWRWT40         8           /* weights        */
FWRWT41         8           /* weights        */
FWRWT42         8           /* weights        */
FWRWT43         8           /* weights        */
FWRWT44         8           /* weights        */
FWRWT45         8           /* weights        */
FWRWT46         8           /* weights        */
FWRWT47         8           /* weights        */
FWRWT48         8           /* weights        */
FWRWT49         8           /* weights        */
FWRWT50         8           /* weights        */
FWRWT51         8           /* weights        */
FWRWT52         8           /* weights        */
FWRWT53         8           /* weights        */
FWRWT54         8           /* weights        */
FWRWT55         8           /* weights        */
FWRWT56         8           /* weights        */
FWRWT57         8           /* weights        */
FWRWT58         8           /* weights        */
FWRWT59         8           /* weights        */
FWRWT60         8           /* weights        */

CFWT            8           /* weights        */
CFWT1           8           /* weights        */
CFWT2           8           /* weights        */
CFWT3           8           /* weights        */
CFWT4           8           /* weights        */
CFWT5           8           /* weights        */
CFWT6           8           /* weights        */
CFWT7           8           /* weights        */
```

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```
CFWT8        8            /* weights        */
CFWT9        8            /* weights        */
CFWT10       8            /* weights        */
CFWT11       8            /* weights        */
CFWT12       8            /* weights        */
CFWT13       8            /* weights        */
CFWT14       8            /* weights        */
CFWT15       8            /* weights        */
CFWT16       8            /* weights        */
CFWT17       8            /* weights        */
CFWT18       8            /* weights        */
CFWT19       8            /* weights        */
CFWT20       8            /* weights        */
CFWT21       8            /* weights        */
CFWT22       8            /* weights        */
CFWT23       8            /* weights        */
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CFWT37       8            /* weights        */
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CFWT57       8            /* weights        */
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CFWT59       8            /* weights        */
CFWT60       8            /* weights        */
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CFWT63       8            /* weights        */
CFWT64       8            /* weights        */
CFWT65       8            /* weights        */
CFWT66       8            /* weights        */
CFWT67       8            /* weights        */
CFWT68       8            /* weights        */
CFWT69       8            /* weights        */
CFWT70       8            /* weights        */
CFWT71       8            /* weights        */
CFWT72       8            /* weights        */
CFWT73       8            /* weights        */
CFWT74       8            /* weights        */
CFWT75       8            /* weights        */
CFWT76       8            /* weights        */
CFWT77       8            /* weights        */
CFWT78       8            /* weights        */
CFWT79       8            /* weights        */
CFWT80       8            /* weights        */
```

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CFWT81          8               /* weights          */
CFWT82          8               /* weights          */
CFWT83          8               /* weights          */
CFWT84          8               /* weights          */
CFWT85          8               /* weights          */
CFWT86          8               /* weights          */
CFWT87          8               /* weights          */
CFWT88          8               /* weights          */
CFWT89          8               /* weights          */
CFWT90          8               /* weights          */
CFWT91          8               /* weights          */
CFWT92          8               /* weights          */
CFWT93          8               /* weights          */
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CFWT100         8               /* weights          */
CFWT101         8               /* weights          */
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CFWT131         8               /* weights          */
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CFWT136         8               /* weights          */
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CFWT141         8               /* weights          */
CFWT142         8               /* weights          */
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CFWT144         8               /* weights          */
CFWT145         8               /* weights          */
CFWT146         8               /* weights          */
CFWT147         8               /* weights          */
CFWT148         8               /* weights          */
CFWT149         8               /* weights          */
CFWT150         8               /* weights          */
CFWT151         8               /* weights          */
CFWT152         8               /* weights          */
CFWT153         8               /* weights          */
```

```
            CFWT154         8          /* weights              */
            CFWT155         8          /* weights              */
            CFWT156         8          /* weights              */
            CFWT157         8          /* weights              */
            CFWT158         8          /* weights              */
            CFWT159         8          /* weights              */
            CFWT160         8          /* weights              */
            CFWT161         8          /* weights              */
            CFWT162         8          /* weights              */
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            CFWT164         8          /* weights              */
            CFWT165         8          /* weights              */
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            CFWT171         8          /* weights              */
            CFWT172         8          /* weights              */
            CFWT173         8          /* weights              */
            CFWT174         8          /* weights              */
            CFWT175         8          /* weights              */
            CFWT176         8          /* weights              */
            CFWT177         8          /* weights              */
            CFWT178         8          /* weights              */
            CFWT179         8          /* weights              */
            CFWT180         8          /* weights              */
    /*      CFWT181         8          /* weights              */ /*AMK FOR 2013 WEIGHTS ONLY GO UP TO 180
    B/C NO Q4 */
    /*      CFWT182         8          /* weights              */
    /*      CFWT183         8          /* weights              */
    /*      CFWT184         8          /* weights              */
    /*      CFWT185         8          /* weights              */
    /*      CFWT186         8          /* weights              */
    /*      CFWT187         8          /* weights              */
    /*      CFWT188         8          /* weights              */
    /*      CFWT189         8          /* weights              */
    /*      CFWT190         8          /* weights              */
    /*      CFWT191         8          /* weights              */
    /*      CFWT192         8          /* weights              */
    /*      CFWT193         8          /* weights              */
    /*      CFWT194         8          /* weights              */
    /*      CFWT195         8          /* weights              */
    /*      CFWT196         8          /* weights              */
    /*      CFWT197         8          /* weights              */
    /*      CFWT198         8          /* weights              */
    /*      CFWT199         8          /* weights              */
    /*      CFWT200         8          /* weights              */
    /*      CFWT201         8          /* weights              */
    /*      CFWT202         8          /* weights              */
    /*      CFWT203         8          /* weights              */
    /*      CFWT204         8          /* weights              */
    /*      CFWT205         8          /* weights              */
    /*      CFWT206         8          /* weights              */
    /*      CFWT207         8          /* weights              */
    /*      CFWT208         8          /* weights              */
    /*      CFWT209         8          /* weights              */
    /*      CFWT210         8          /* weights              */
    /*      CFWT211         8          /* weights              */
    /*      CFWT212         8          /* weights              */
    /*      CFWT213         8          /* weights              */
    /*      CFWT214         8          /* weights              */
    /*      CFWT215         8          /* weights              */
    /*      CFWT216         8          /* weights              */
    /*      CFWT217         8          /* weights              */
    /*      CFWT218         8          /* weights              */
    /*      CFWT219         8          /* weights              */
    /*      CFWT220         8          /* weights              */
    /*      CFWT221         8          /* weights              */
    /*      CFWT222         8          /* weights              */
    /*      CFWT223         8          /* weights              */
    /*      CFWT224         8          /* weights              */
    /*      CFWT225         8          /* weights              */
```

```
/*       CFWT226      8            /* weights          */
/*       CFWT227      8            /* weights          */
/*       CFWT228      8            /* weights          */
/*       CFWT229      8            /* weights          */
/*       CFWT230      8            /* weights          */
/*       CFWT231      8            /* weights          */
/*       CFWT232      8            /* weights          */
/*       CFWT233      8            /* weights          */
/*       CFWT234      8            /* weights          */
/*       CFWT235      8            /* weights          */
/*       CFWT236      8            /* weights          */
/*       CFWT237      8            /* weights          */
/*       CFWT238      8            /* weights          */
/*       CFWT239      8            /* weights          */
/*       CFWT240      8            /* weights          */
        ;

    SET  &DSNO_2;

    LABEL XCATCH = "XCATCH - Catchment Area (Reporting) ";
    FORMAT XCATCH CACR.;
    BY MPRID;
RUN;

TITLE1 "DOD Annual Health Care Survey (0663-300)";
TITLE2 "Program Name: ADDWGTS.SAS";
TITLE3 "Program Inputs: &DSNI_1..sas7bdat -- &DSNI_2..sas7bdat";
TITLE4 "Program Outputs: &DSNO_1..sas7bdat -- &DSNO_2..sas7bdat";

PROC CONTENTS POSITION; RUN;

/* Create public-use dataset */
DATA OUT.&DSNO_1;
    SET OUT.&DSNO_2(DROP=MSA_ID /** jma 11/17/2011***/
                    CACSMPL   SERVAREA DCATCH   MSM
                    D_FAC     DAGEQY   FIELDAGE PNLCATCD
                    DMEDELG   MEDTYPE  MBRRELCD MRTLSTAT
                    PNBRTHDT  PGCD     MASTCD   MAPRZIP
                    MAPRZIPX  RANKCD   ENRID);
RUN;

PROC CONTENTS POSITION; RUN;

****************************************************************************
* Output the restricted use CONTENTS text file for delivery with the
* database CD.
****************************************************************************;
PROC PRINTTO PRINT="&DSNO_2..TXT" NEW; RUN;
OPTIONS PAGENO=1;
TITLE4 "Program Outputs: &DSNO_2..sas7bdat/XPT";
PROC CONTENTS DATA=OUT.&DSNO_2; RUN;

****************************************************************************
* Define and generate SAS Transport file.
****************************************************************************;
LIBNAME XFILE1 XPORT "..\..\data\&DSNO_1..XPT";
PROC COPY IN=OUT OUT=XFILE1; * Converts input file to transport file;
        SELECT &DSNO_1;      * Selects sas7bdat file to copy;
RUN;

LIBNAME XFILE2 XPORT "..\..\data\&DSNO_2..XPT";
PROC COPY IN=OUT OUT=XFILE2; * Converts input file to transport file;
        SELECT &DSNO_2;      * Selects sas7bdat file to copy;
RUN;
```

F.16   WEIGHTING\FIX2011XCATCH.SAS - Fix catchment reporting variable (XCATCH) for 2011 - Annual.

```
*****************************************************************************
*
* PROGRAM: Fix2011XCATCH.SAS
* PURPOSE: Fix catchment reporting variable (XCATCH) for 2011
* WRITTEN  November 6, 2007 BY Keith Rathbun
* TASK:    2012 DoD Database Development (6244-300)
*
* INPUTS:  1) FRAMEA.sas7bdat - 2011 Quarterly Sample Frames
*          2) HCS11A_1/2.sas7bdat - 2011 Combined Annual HCSDB dataset
*
* UPDATES: 1) September 17, 2009 by Emma Ernst for 2009 database
*          2) September 2, 2010 by Mike Rudacille for 2010 database
*          3) September 23, 2011 by Mike Rudacille for 2011 database
*          4) September 19, 2012 by Amanda Kudis for 2012 database
*
* OUTPUTS: 1) XCATCH11.sas7bdat - 2011 combined corrected Annual HCSDB dataset
*             (output in the 2012 data area)
*
* NOTES:   1) XCATCH needed to be redefined with the 2012 definition
*             on the 2011 annual dataset
*
*****************************************************************************;
OPTIONS NOFMTERR NOCENTER LS=132 PS=80 COMPRESS=YES;
LIBNAME OUT    "..\..\DATA";
LIBNAME IN2011 "..\..\..\2011\DATA";

*****************************************************************************
* Extract variables necessary to construct XCATCH by QUARTER.
*****************************************************************************;
%MACRO GET_QTR(QTR=);
   PROC SORT DATA=IN2011.HCS11A_2
       (KEEP=MPRID ENRID PCM DCATCH D_HEALTH D_FAC SERVAFF XREGION PATCAT QUARTER TNEXREG)
        OUT=TEMP1_&QTR;
      BY MPRID;
      WHERE QUARTER = "&QTR";
   RUN;
%MEND;

%GET_QTR(QTR=Q1FY2011);
%GET_QTR(QTR=Q2FY2011);
%GET_QTR(QTR=Q3FY2011);
%GET_QTR(QTR=Q4FY2011);

*****************************************************************************
* Extract D_PAR for use with creating XCATCH.
*****************************************************************************;
%MACRO GETD_PAR(LOC=);
   LIBNAME IN "..\..\..\&LOC.\DATA\AFINAL";
   PROC SORT DATA=IN.FRAMEA(KEEP=MPRID D_PAR) OUT=&LOC.;
      BY MPRID;
   RUN;
%MEND;

%GETD_PAR(LOC=Q1FY2011);
%GETD_PAR(LOC=Q2FY2011);
%GETD_PAR(LOC=Q3FY2011);
%GETD_PAR(LOC=Q4FY2011);

DATA Q1;
   MERGE Q1FY2011(IN=IN1) TEMP1_Q1FY2011(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

DATA Q2;
   MERGE Q2FY2011(IN=IN1) TEMP1_Q2FY2011(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;
```

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```
DATA Q3;
   MERGE Q3FY2011(IN=IN1) TEMP1_Q3FY2011(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

DATA Q4;
   MERGE Q4FY2011(IN=IN1) TEMP1_Q4FY2011(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

DATA TEMP1;
   SET Q1 Q2 Q3 Q4;
   BY MPRID;

   IF      SERVAFF = 'A' THEN XSERVAFF = 1; * Army;
   ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2; * Air Force;
   ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3; * Navy;
   ELSE XSERVAFF = 4;                       * Other;

   *************************************************************************
   * Assign XTNEXREG and XOCONUS using XREGION.
   *************************************************************************;
   IF XREGION IN (1,2,5) THEN XTNEXREG = 1;
   ELSE IF XREGION IN (3,4,6) THEN XTNEXREG = 2;
   ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG = 3;
   ELSE IF XREGION IN (13,14,15) THEN XTNEXREG = 4;
   ELSE IF XREGION = . THEN DO; /* MER 03/23/10 - If XREGION is missing, set XTNEXREG = TNEXREG
*/
      IF TNEXREG = 'N' THEN XTNEXREG=1;
      ELSE IF TNEXREG = 'S' THEN XTNEXREG=2;
      ELSE IF TNEXREG = 'W' THEN XTNEXREG=3;
      ELSE IF TNEXREG = 'O' THEN XTNEXREG=4;
      ELSE XTNEXREG=.;
   END;

   IF XREGION      = 13 THEN XOCONUS = 1;
   ELSE IF XREGION = 14 THEN XOCONUS = 2;
   ELSE IF XREGION = 15 THEN XOCONUS = 3;
RUN;

*****************************************************************************
* Create and attach XCATCH (Catchment Reporting variable) to final dataset.
* Note that dataset TMPXCTCH with XCATCH is created by this include file.
*****************************************************************************;
%INCLUDE "XCATCH.INC"; * Requires input dataset called TEMP1;
PROC SORT DATA=TMPXCTCH; BY MPRID; RUN;

PROC SORT DATA=IN2011.HCS11A_1(DROP=XCATCH) OUT=HCS11A_1;
   BY MPRID;
RUN;

DATA OUT.XCATCH11;
   MERGE HCS11A_1(IN=IN1) TMPXCTCH(IN=IN2);
   BY MPRID;
   FORMAT _ALL_;
   KEEP MPRID XCATCH QUARTER;
RUN;

TITLE1 "Annual DOD Health Care Survey Database (6244-300)";
TITLE2 "Program Name: Fix2011XCATCH.SAS By Keith Rathbun";
TITLE3 "Program Inputs: 2011 HCSDB sample and analysis files";
TITLE4 "Program Output: XCATCH11.sas7bdat - FY 2011 Combined XCATCH dataset";

PROC FREQ;
   TABLES XCATCH /MISSING LIST;
RUN;
```

F.17 WEIGHTING\FIX2012XCATCH.SAS - Fix catchment reporting variable (XCATCH) for 2012 - Annual.

```
***************************************************************************
*
* PROGRAM: Fix2010XCATCH.SAS
* PURPOSE: Fix catchment reporting variable (XCATCH) for 2010
* WRITTEN  November 6, 2007 BY Keith Rathbun
* TASK:    2012 DoD Database Development (6244-300)
*
* INPUTS: 1) FRAMEA.sas7bdat - 2010 Quarterly Sample Frames
*         2) HCS10A_1/2.sas7bdat - 2010 Combined Annual HCSDB dataset
*
* UPDATES: 1) September 17, 2009 by Emma Ernst for 2009 database
*          2) September 2, 2010 by Mike Rudacille for 2010 database
*          3) September 23, 2011 by Mike Rudacille for 2011 database
*          4) September 23, 2012 by Mike Rudacille for 2012 database
*
* OUTPUTS: 1) XCATCH12.sas7bdat - 2012 combined corrected Annual HCSDB dataset
*             (output in the 2013 data area)
*
* NOTES:   1) XCATCH needed to be redefined with the 2011 definition
*             on the 2012 annual dataset
*
***************************************************************************;
OPTIONS NOFMTERR NOCENTER LS=132 PS=80 COMPRESS=YES;
LIBNAME OUT    "..\..\DATA";
LIBNAME IN2012 "..\..\..\2012\DATA";

***************************************************************************
* Extract variables necessary to construct XCATCH by QUARTER.
***************************************************************************;
%MACRO GET_QTR(QTR=);
   PROC SORT DATA=IN2012.HCS12A_2
        (KEEP=MPRID ENRID PCM DCATCH D_HEALTH D_FAC SERVAFF XREGION PATCAT QUARTER TNEXREG)
        OUT=TEMP1_&QTR;
      BY MPRID;
      WHERE QUARTER = "&QTR";
   RUN;
%MEND;

%GET_QTR(QTR=Q1FY2012);
%GET_QTR(QTR=Q2FY2012);
%GET_QTR(QTR=Q3FY2012);
%GET_QTR(QTR=Q4FY2012);

***************************************************************************
* Extract D_PAR for use with creating XCATCH.
***************************************************************************;
%MACRO GETD_PAR(LOC=);
   LIBNAME IN "..\..\..\&LOC.\DATA\AFINAL";
   PROC SORT DATA=IN.FRAMEA(KEEP=MPRID D_PAR) OUT=&LOC.;
      BY MPRID;
   RUN;
%MEND;

%GETD_PAR(LOC=Q1FY2012);
%GETD_PAR(LOC=Q2FY2012);
%GETD_PAR(LOC=Q3FY2012);
%GETD_PAR(LOC=Q4FY2012);

DATA Q1;
   MERGE Q1FY2012(IN=IN1) TEMP1_Q1FY2012(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

DATA Q2;
   MERGE Q2FY2012(IN=IN1) TEMP1_Q2FY2012(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;
```

```
DATA Q3;
   MERGE Q3FY2012(IN=IN1) TEMP1_Q3FY2012(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

DATA Q4;
   MERGE Q4FY2012(IN=IN1) TEMP1_Q4FY2012(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

DATA TEMP1;
   SET Q1 Q2 Q3 Q4;
   BY MPRID;

   IF      SERVAFF = 'A' THEN XSERVAFF = 1; * Army;
   ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2; * Air Force;
   ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3; * Navy;
   ELSE XSERVAFF = 4;                       * Other;

   *************************************************************************
   * Assign XTNEXREG and XOCONUS using XREGION.
   *************************************************************************;
   IF XREGION IN (1,2,5) THEN XTNEXREG = 1;
   ELSE IF XREGION IN (3,4,6) THEN XTNEXREG = 2;
   ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG = 3;
   ELSE IF XREGION IN (13,14,15) THEN XTNEXREG = 4;
   ELSE IF XREGION = . THEN DO; /* MER 03/23/10 - If XREGION is missing, set XTNEXREG = TNEXREG
*/
      IF TNEXREG = 'N' THEN XTNEXREG=1;
      ELSE IF TNEXREG = 'S' THEN XTNEXREG=2;
      ELSE IF TNEXREG = 'W' THEN XTNEXREG=3;
      ELSE IF TNEXREG = 'O' THEN XTNEXREG=4;
      ELSE XTNEXREG=.;
   END;

   IF XREGION      = 13 THEN XOCONUS = 1;
   ELSE IF XREGION = 14 THEN XOCONUS = 2;
   ELSE IF XREGION = 15 THEN XOCONUS = 3;
RUN;

*******************************************************************************
* Create and attach XCATCH (Catchment Reporting variable) to final dataset.
* Note that dataset TMPXCTCH with XCATCH is created by this include file.
*******************************************************************************;
%INCLUDE "XCATCH.INC"; * Requires input dataset called TEMP1;
PROC SORT DATA=TMPXCTCH; BY MPRID; RUN;

PROC SORT DATA=IN2012.HCS12A_1(DROP=XCATCH) OUT=HCS12A_1;
   BY MPRID;
RUN;

DATA OUT.XCATCH12;
   MERGE HCS12A_1(IN=IN1) TMPXCTCH(IN=IN2);
   BY MPRID;
   FORMAT _ALL_;
   KEEP MPRID XCATCH QUARTER;
RUN;

TITLE1 "Annual DOD Health Care Survey Database (6244-300)";
TITLE2 "Program Name: Fix2012XCATCH.SAS By Keith Rathbun";
TITLE3 "Program Inputs: 2012 HCSDB sample and analysis files";
TITLE4 "Program Output: XCATCH12.sas7bdat - FY 2012 Combined XCATCH dataset";

PROC FREQ;
   TABLES XCATCH /MISSING LIST;
RUN;
```

F.18 WEIGHTING\XCATCH.INC - Create detailed CACSMPL for annual report cards - Annual.

```
****************************************************************************
*
* PROGRAM:   XCATCH.INC
* TASK:      DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE:   CREATE DETAILED CACSMPL FOR ANNUAL REPORT CARDS
*
* WRITTEN:   01/20/2004 BY KEITH RATHBUN
*
* MODIFIED:  1) 02/14/2005 BY LUCY LU. RENAME STEP1Q.INC TO XCATCH.INC
*            2) 03/10/2005 BY LUCY LU, REVISED PROGRAM TO RUN 2002 AND 2003 FILES
*            3) 01/06/2006 BY KEITH RATHBUN.  Updated for 2006.  Removed
*               PROCESS macro.
*
*
* INPUTS:    1) TEMP1.sas7bdat - Temporary SAS dataset
*            2) TMA.sas7bdat - TMA-provided catchment definitions
*
* OUTPUT:    1) TEMP.sas7bdat  - Temporary SAS dataset
*
* NOTES:     1) This program is setup to run for all survey years as long
*               as the necessary variables are passed to it in TEMP1.
*            2) Required variables in TEMP1 dataset include the following:
*               MPRID, ENRID, PCM, DCATCH, D_PAR, D_HEALTH, and D_FAC.
*
* INCLUDES:  1) AssignGEOCELL.inc
*            2) AssignCOM_GEO.inc
*
****************************************************************************;

%LET smplqtr=Q3FY2013;

LIBNAME TMA V9 "..\..\..\&smplqtr\DATA\AFINAL";
DATA TEMP(KEEP=MPRID GEOCELL PCM ENRID XTNEXREG XSERVAFF XOCONUS PATCAT);
   SET TEMP1;
   BY MPRID;
   if pcm = 'MTF' then do;
      %INCLUDE "..\..\..\&smplqtr\Programs\Sampling\AssignGeoCell.inc";
      else if ('1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or
         ('6991' <= enrid <= '6994')   or ('6501' <=enrid <='6512') or
         ('7166' <= enrid <= '7195') or ('6700' <= enrid <= '6881') or enrid='0000'
         then geocell=dcatch; *administrative assignment 1976-1980 added q4 2002, 6700-6881 added
q1 2004,
                            0000 added q1,2005;
        else if ('8001' <= enrid <= '8036') or ('6901' <= enrid <= '6919')
         then geocell = dcatch; *Managed care contractor assignment, added in q1 2005; *8001-8036
added q2 2005;
      else if ('3031' <= enrid <= '3057')
         then geocell = dcatch; ***On board ship***;
      else if enrid in ('0002', '0041', '0044', '0082', '0111', '0213', '0235', '0585', '5208',
'0250',
                        '0449', '0626', '0012')
         then geocell = dcatch; ***Inactive***;  *0626 added q2 2003, 0012 added q4 2003,
                                             0041, 0044, 0082, 0111, 0213, 0235, 0585 added
q2 2005;
      else if enrid = ' ' then geocell = dcatch; ***enrolled, but missing ENRID, added q2
2005***;
      ****************************************************************;
      else if ('0190' <= enrid <='0199') then geocell = dcatch;**BYDON;
      ****************************************************************;
      else geocell = enrid;
   end;
   else if patcat='ACTDTY' then geocell=dcatch; /*Added in q1fy2007, Put the rest of ACTDTY in
their dcatch for sampling purpose*/
   else geocell=dcatch;
RUN;

PROC SORT DATA=TEMP; BY GEOCELL; RUN;

data TMA (keep = geocell d_par d_fac d_instal d_health d_dmis servaff);
   set TMA.TMA;
```

```
    rename facility_Type_Code   =d_fac
           installation_Name     =d_instal
           dmis_facility_Name    =d_dmis
           facility_Service_Code=servaff ;
    length d_par $4.;
    d_par = DMIS_PARENT_ID;
    length geocell $4.;
    geocell = DMIS_ID;
    length d_health $2.;
    d_health = HEALTH_Service_region;
run;

PROC SORT DATA=TMA; BY GEOCELL; RUN;

DATA TEMP;
    MERGE TEMP(IN=IN1) TMA(IN=IN2);
    BY GEOCELL;
    LENGTH FLAG $15;
    IF IN1 AND IN2 THEN FLAG = "BOTH";
    ELSE IF IN1 THEN FLAG = "HCSDB ONLY";
    ELSE FLAG = "TMA XLS ONLY";
    IF IN1;
RUN;

PROC FREQ;
    TABLES FLAG /MISSING LIST;
RUN;

DATA TEMP(KEEP=MPRID XCATCH XTNEXREG XSERVAFF XOCONUS);
    SET TEMP;
    LENGTH XCATCH 8;
    com_geo = geocell;
    if pcm = 'MTF' then do;
        %INCLUDE "..\..\..\&smplqtr\Programs\Sampling\AssignCOM_GEO.inc";
        else if ('1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or
            ('6991' <= enrid <= '6994')   or ('6501' <=enrid <='6512') or
            ('7166' <= enrid <= '7195') or ( '6700' <= enrid <= '6881' ) or enrid = '0000' or
            ('8001' <= enrid <= '8036') or ('6901' <= enrid <= '6919') or
            ('3031' <= enrid <= '3057') or
            enrid in ('0002', '0041', '0044', '0082', '0111', '0213', '0235', '0585', '5208',
'0250',
                        '0449', '0626', '0012') or
            ('0190' <= enrid <='0199') then com_geo = geocell;
        else com_geo = d_par;
    end;
    else if patcat='ACTDTY' then com_geo=d_par;

    if d_fac='NONCAT' or d_fac='TGRO' or d_fac="TPR" then do;
        if d_health in ('01','02','05','17') then com_geo = '9901';
        else if d_health in ('03','04','06','18') then com_geo = '9902';
        else if d_health in ('07','08','09','10','11','12','19') then com_geo = '9903';
        else if d_health in ('00','13','14','15') then com_geo = '9904';
    end;
    *************************************************************************************;
    ***d_fac="TPR" and d_health = '17', '18', '19' were added above for Q4, 2004,  ***;
    ***since we got the new regions 17(North T_NEX),18(South T_NEX),19(West T_NEX).***;
    *************************************************************************************;

    *** If the facility is unknown then set com_geo indicates unknown facility ***;
    *** '0999' added 03/15 to account for id 6992;
    if com_geo in ('9900', '0999', '0998',' ') then com_geo = '9904';

    ***********************************************************************;
    ***Made the following 9 Navy sites stand alone in q1,2005:        ***;
    ***'0026','0068','0231','0378','0387','0405','0407','0508','6215'***;
    ***********************************************************************;
    if geocell in ('0026','0068','0231','0378','0387','0405','0407','0508','6215') then
com_geo=geocell;

    xcatch = INPUT(com_geo,8.);
    label xcatch = "XCATCH - Catchment Area (Reporting)";
RUN;
```

```
PROC SORT DATA=TEMP; BY XCATCH; RUN;

PROC SUMMARY DATA=TEMP NWAY;
     CLASS XCATCH;
     OUTPUT OUT=TEMPCNT(DROP=_TYPE_ rename=_FREQ_=XCATCHno);
RUN;

PROC PRINT DATA=TEMPCNT;
RUN;

DATA TMPXCTCH(KEEP=MPRID XCATCH);
   MERGE TEMPCNT TEMP;
   BY XCATCH;

   /*** JMA 10/25/2006 Values of Xcatch which occur less than 20 times in
    *** the dataset will be updated
    ***/


   IF XCATCHno < 60 THEN DO;
      XCATCH=SUM(9000,100*XTNEXREG,XSERVAFF);

      IF XOCONUS=1 THEN XCATCH=SUM(9400,XSERVAFF);
      IF XOCONUS=2 THEN XCATCH=SUM(9500,XSERVAFF);
      IF XOCONUS=3 THEN XCATCH=SUM(9600,XSERVAFF);
   END;

RUN;
```

F.19   WEIGHTING\CREPWT.SAS - Calculate combined replicate weights - Annual.

```
*************************************************************************
* PROGRAM: CREPWT.SAS
* TASK:    2013 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE COMBINED ANNUAL REPLICATE WEIGHTS FOR DOD SURVEY
*          - New Weights REQUESTED BY DON JANG.
* CREATED: 12/19/2001 by Esther M Friedman
* UPDATED: 02/09/2006 by Haixia Xu for 2005 annual weighting - new weights
*          10/10/2006 by Haixia Xu for 2006 annual weighting - new weights
*          10/09/2007 by Haixia Xu for 2007 annual weighting - new weights
*          10/09/2008 by Haixia Xu for 2008 annual weighting - new weights
*          10/04/2010 by Haixia Xu for 2010 annual weighting - new weights
*          10/03/2011 by Sabrina R.for 2011 annual weighting - new weights
*          07/18/2013 by Karlesha R. for 2013 annual weighting - new weights
*
* INPUTS:  framea.sas7bdat - Quarterly frame files
*          REPWTP.sas7bdat - Quarterly new weights
*
* OUTPUTS: crepwt.sd2 - Combined anuual replicates for new weights
*
* NOTES: FY 2013 is the first time Q3t and Q4 were not used in calculating
*        Annual Weights. Data for these two quarters were not collected to
*        budget cuts.
*************************************************************************;

%let year=2013;

/*repwtp.sas7bdat*/
LIBNAME IN1  "L:\Q1FY&year.t\data\afinal";
LIBNAME IN2  "L:\Q2FY&year.t\data\afinal";
LIBNAME IN3  "L:\Q3FY&year.\data\afinal";

/*framea.sas7bdat*/
LIBNAME INf1 "L:\Q1FY&year.\data\afinal";
LIBNAME INf2 "L:\Q2FY&year.\data\afinal";
LIBNAME INf3 "L:\Q3FY&year.\data\afinal";

/* crepwt.sas7bdat */
LIBNAME OUT  "L:\&year.\Data";

%include "L:\Q1FY&year.\programs\weighting\newweights\design_effects_unequal_weights.sas";

OPTIONS PS=79 LS=132 COMPRESS=no errors=0 NOCENTER mlogic mprint symbolgen;

title1 "Program:CREPWT.SAS";
title2 "PURPOSE: CREATES ANNUAL COMBINED WEIGHT AND COMBINED REPLICATED WEIGHT - New weights";


*************************************************************************
* MERGE THE  NEW (with trickles) QUARTERLY WEIGHT FILES
*************************************************************************;
%macro doqrt(qrt=);
data repwtq&qrt.;
set in&qrt..repwtp(keep=mprid fnstatus postcell bwt fwrwt fwrwt1-fwrwt60);
quarter=&qrt.;
label quarter = 'Dod quarter indicator';
format _all_;
run;

proc sort data=repwtq&qrt.;
by mprid;
run;

%mend doqrt;

%doqrt(qrt=1);
%doqrt(qrt=2);
%doqrt(qrt=3);

*merge the new quarterly files;
data repwt;
```

```
set repwtq1 repwtq2 repwtq3;
by mprid;
run;


*****************************
* CREATE THE ANNUAL WEIGHTS
*****************************;
* Use Equal Weighting Method:  Divide each quarterly weight by 3;
data repwt;
  set repwt;
  cfwt=fwrwt/3;
  label cfwt= 'combined annual NEW wt';
run;


**************************
* CHECK NEW ANNUAL WEIGHTS
**************************;
title3 "Combined replicate file";
proc freq data=repwt;
tables quarter fnstatus fnstatus*quarter/list missing;
run;


title3 "Weighted using fwrwt - quarterly new wt";
proc freq data=repwt;
tables quarter fnstatus fnstatus*quarter/list missing;
weight fwrwt;
run;


title3 "Weighted using cfwt - combined annual new wt";
proc freq data=repwt;
tables quarter fnstatus fnstatus*quarter/list missing;
weight cfwt;
run;


title3 'Checks for cfwt and fwrwt for fnstatus=11';
Proc print data=repwt (obs=200) noobs;
var quarter cfwt fwrwt;
where fnstatus=11;
run;


title3 'Checks for fwrwt by quarter for fnstatus=11';
proc sort data=repwt;
by quarter;
run;


proc means data=repwt n sum mean min max Q1 median Q3;
var fwrwt;
by quarter;
where fnstatus=11;
run;


title3 'Checks for cfwt for fnstatus=11';
proc univariate data=repwt;
var cfwt;
where fnstatus=11;
run;


options compress=yes;



*****************************
* CREATE THE REPLICATE WEIGHTS
*****************************;
data crepwt_newwt ( drop = rep );
set repwt;
array repwt[60] fwrwt1 - fwrwt60;
array annual_repwt[180] cfwt1 - cfwt180;
do rep = 1 to 180;
if 1 <= rep <= 60 then
    do;
    if quarter in ( 2, 3 ) then
       annual_repwt[rep] = fwrwt;
    else
```

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```
      annual_repwt[rep] = repwt[rep];
   end;
else if 61 <= rep <= 120 then
   do;
   if quarter in ( 1, 3 ) then
      annual_repwt[rep] = fwrwt;
   else
      annual_repwt[rep] = repwt[rep - 60];
   end;
else if 121 <= rep <= 180 then
   do;
   if quarter in ( 1, 2 ) then
      annual_repwt[rep] = fwrwt;
   else
      annual_repwt[rep] = repwt[rep - 120];
   end;
      annual_repwt[rep] = annual_repwt[rep]/3;
end;*replicate loop;
run;


* Check the new cfwts;
title3 'Checks for the sum of the new cfwts';
PROC MEANS DATA=crepwt_newwt n sum;
VAR  cfwt cfwt1-cfwt180;
output out=sums sum(cfwt cfwt1-cfwt180) = cfwt cfwt1-cfwt180;
RUN;

proc transpose data=sums out=t_sums;
VAR  cfwt cfwt1-cfwt180;
run;

proc univariate data=t_sums normal ;
var col1;
run;


************************************;
* Output the combined annual replicate weights - Old and New weights
************************************;
* Label wts;
%MACRO LABWT;
    %DO J = 1 %TO 180;
         LABEL CFWT&J.  = "Combined Replicated NEW Weight &J.";
    %END;
%MEND LABWT;

data out.crepwt;
set crepwt_newwt;
if _N_=1 then do;
  label CFWT  = "Combined annual NEW Weight"
%LABWT;
end;
run;

title3 'Contents of crepwt.sd2';
proc contents data=out.crepwt ;
run;


******************************************************************************
*** Calculate the Design Effects
*** As per Nancy and Sonya's requests, check the deff for the annual wts to see
*** how the quarterly weight affects the annual estimates.
******************************************************************************;

%macro mergefiles(qrt=);

data frame&qrt.;
set inf&qrt..framea(keep=mprid enbgsmpl tnexreg d_health com_geo servaff);

***facility TNEX region***;
length TNEX_grp $1;
if d_health in ('00', '13', '14', '15') then TNEX_grp='O';
else if d_health in ('17', '01','05') then TNEX_grp='N';
```

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```
else if d_health in ('18','04') then TNEX_grp='S';
else if d_health in ('19','08','11') then TNEX_grp='W';
*Correct the TNEX regions for com_geo 0047, 9001, 9002, 9003, 9004:
All the cases in the same com_geo should be in the same TNEX region, which is the region of the
com_geo;
if COM_GEO = '0047' then TNEX_grp='S';
else if COM_GEO = '9001' then TNEX_grp='N';
else if COM_GEO = '9002' then TNEX_grp='S';
else if COM_GEO = '9003' then TNEX_grp='W';
else if COM_GEO = '9004' then TNEX_grp='O';

if tnex_grp in ('N', 'S', 'W') then conus=1;
else if tnex_grp ='O' then conus=0;

run;

title3 "Check the construction TNEX_grp, conus for quarter &qrt.";
proc freq data=frame&qrt.;
tables TNEX_grp*d_health conus*tnex_grp/missing list;
run;

proc sort data=in&qrt..repwtp(keep=mprid) out=repwt; by mprid; run;
proc sort data=frame&qrt.; by mprid; run;

data merged&qrt.;
merge repwt(in=A) frame&qrt.(in=B);
by mprid;
if a and b;
run;

%mend mergefiles;

%mergefiles(qrt=1);
%mergefiles(qrt=2);
%mergefiles(qrt=3);

data merged123;
set merged1 merged2 merged3;
by mprid;
run;

proc sort data=out.crepwt(keep=mprid fnstatus bwt fwrwt cfwt) out=crepwt;
by mprid;
run;

data merged;
merge crepwt(in=A) merged123(in=B);
by mprid;
if a and b;
run;

**create dataset of completes only;
data postwt_fnl;
set merged;
where fnstatus=11;
run;

%design_effects_unequal_weights ( postwt_fnl, enbgsmpl, cfwt, deff_overall, deff_enb );
%design_effects_unequal_weights ( postwt_fnl, tnexreg,  cfwt, deff_overall, deff_tnexreg );
%design_effects_unequal_weights ( postwt_fnl, TNEX_grp, cfwt, deff_overall, deff_tnexgrp );
%design_effects_unequal_weights ( postwt_fnl, conus,    cfwt, deff_overall, deff_conus );
%design_effects_unequal_weights ( postwt_fnl, servaff,  cfwt, deff_overall, deff_servaff );
%design_effects_unequal_weights ( postwt_fnl, TNEX_grp servaff,  cfwt, deff_overall,
deff_TNEXservaff );

*** For Overall ***;
title3 'Design Effects Overall';
proc print data = deff_overall;
run;

*** For ENBGSMPL Groups ***;
title3 'Design Effects for ENBGSMPL';
proc print data= deff_enb;
```

```
sum _freq_;
run;

*** For Beneficiary TNEX Region ***;
title3 'Design Effects for TNEXREG';
proc print data= deff_tnexreg;
sum _freq_;
run;

*** For Facility TNEX region ***;
title3 "Design Effects for Facility's TNEX region";
proc print data= deff_tnexgrp;
sum _freq_;
run;

*** For conus region ***;
title3 "Design Effects for conus";
proc print data= deff_conus;
sum _freq_;
run;

*** For Service Affiliation for the facility  ***;
title3 "Design Effects for Facility's Service Affiliation";
proc print data= deff_servaff;
sum _freq_;
run;

*** For TNEX_grp*Servaff ***;
title3 "Design Effects for TNEX_grp by Servaff";
proc print data= deff_TNEXservaff;
sum _freq_;
run;

******************** The End **********************;
```

F.20.A   Response_Rate\ANNUAL_RR.SAS - Combine Q1-Q3 and annual Response Rates into one excel file.

```
******************************************************************************
* PROGRAM: ANNUAL_RR.SAS
* TASK:    DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE: Combine Q1-Q3 and Annual Response_Rates.xls files
*          into one file called Response_Rates_Annual.xls.
* WRITTEN: 03/15/2005 BY KEITH RATHBUN
*
* MODIFIED:
*
* INPUT:   1) RESPONSE_RATES.XLS files (Q1-Q3 and Annual)
*          2) EMPTY_ANNUAL.XLS file (empty template)
*
* OUTPUT:  1) RESPONSE_RATES_ANNUAL.XLS
*
* INCLUDES: None
*
* NOTES:
*
* 1) This program must be run in BATCH mode.  DO NOT modify the directory
*    references to be hard-wired to support interactive use.
* 2) For FY2012, dropping HAS_EMAIL
* 3) From FY2013: We donot receiving any Q3t and Q4 Weights. Annual Wt and RR
*    are calculated using Q1t, Q2t and Q3 quarters.
******************************************************************************;
OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=1 NOXWAIT NOCENTER mprint mlogic symbolgen;

LIBNAME LIBRARY   "..\..\DATA\FMTLIB";

******************************************************************************
* Assign Q1-Q3 and annual spreadsheet file names and year.
******************************************************************************;
%LET FILE1 = ..\..\..\Q1FY2013t\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE2 = ..\..\..\Q2FY2013t\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE3 = ..\..\..\Q3FY2013\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE4 = RESPONSE_RATES.XLS;

%LET YEAR  = 2013;

TITLE1 "Program: ANNUAL_RR.SAS";
TITLE2 "Purpose: Combine Q1-Q3 and Annual Response Rate XLS files";

******************************************************************************
* Assign sheetnames and establish global variables.
******************************************************************************
* All of the response_rates.xls files must be populated with the following
* sheetnames (generated by TABLE02.SAS):
******************************************************************************;

%LET DSN1  = TABLE02A;
*%LET DSN2  = XREGION;
*%LET DSN2  = HAS_EMAIL;
%LET DSN3  = XOCONUS;
%LET DSN4  = USA;
%LET DSN5  = SEXSMPL;
%LET DSN6  = ENBGSMPL;
%LET DSN7  = CACSMPL;
%LET DSN8  = PATCAT;
%LET DSN9  = SERVAFF;
%LET DSN10 = SVCSMPL;
%LET DSN11 = XTNEXREG;
%LET DSN12 = PATCATSVCSMPL;
%LET DSN13 = PATCATSEXSMPL;
%LET DSN14 = XTNEXREGCACSMPL;
*%LET DSN15 = PATCATHAS_EMAIL;
*%LET DSN16 = USAPATCATHAS_EMAIL;

******************************************************************************
* Macro used to read Q1-Q3 and annual spreadsheet files.
******************************************************************************;
%MACRO READXLS(DSN=, NUMDOM=);
```

```
      %IF &NUMDOM LE 1 %THEN %DO; * Read 3 columns in sheet;
         FILENAME INDATA DDE "excel|&DSN!r5c1:r9999c3";
      %END;
      %ELSE %IF &NUMDOM = 2 %THEN %DO; * Read 4 columns in sheet;
         FILENAME INDATA DDE "excel|&DSN!r5c1:r9999c4";
      %END;
      %ELSE %IF &NUMDOM = 3 %THEN %DO; * Read 5 columns in sheet;
         FILENAME INDATA DDE "excel|&DSN!r5c1:r9999c5";
      %END;
      DATA &DSN.&I;
         INFILE INDATA DLM='09'X NOTAB LRECL=500 PAD MISSOVER DSD;
         LENGTH DOMAIN1-DOMAIN3 $40;
         LENGTH DSN $30;
         %IF &NUMDOM = 0 %THEN %DO;
            INPUT DOMAIN1 : $CHAR40.
                  RR      : 4.1
                  RRW     : 4.1;
            DOMAIN1 = "TABLE02A";
         %END;
         %IF &NUMDOM = 1 %THEN %DO;
            INPUT DOMAIN1 : $CHAR40.
                  RR      : 4.1
                  RRW     : 4.1;
         %END;
         %ELSE %IF &NUMDOM = 2 %THEN %DO;
            INPUT DOMAIN1 : $CHAR40.
                  DOMAIN2 : $CHAR40.
                  RR      : 4.1
                  RRW     : 4.1;
         %END;
         %ELSE %IF &NUMDOM = 3 %THEN %DO;
            INPUT DOMAIN1 : $CHAR40.
                  DOMAIN2 : $CHAR40.
                  DOMAIN3 : $CHAR40.
                  RR      : 4.1
                  RRW     : 4.1;
         %END;
         NUMDOM = &NUMDOM;
         FNUM = &I;
         DSN = "&DSN";
      RUN;
   %MEND READXLS;

   ****************************************************************************
   * Read Q1-Q3 and annual spreadsheet files.
   ****************************************************************************;
   %MACRO READIT;
      %GLOBAL I;
      %DO I = 1 %TO 4; /*5*/
         X "START &&FILE&I";
         %READXLS(DSN=&DSN1,  NUMDOM=0);
         *%READXLS(DSN=&DSN2,  NUMDOM=1);
         %READXLS(DSN=&DSN3,  NUMDOM=1);
         %READXLS(DSN=&DSN4,  NUMDOM=1);
         %READXLS(DSN=&DSN5,  NUMDOM=1);
         %READXLS(DSN=&DSN6,  NUMDOM=1);
         %READXLS(DSN=&DSN7,  NUMDOM=1);
         %READXLS(DSN=&DSN8,  NUMDOM=1);
         %READXLS(DSN=&DSN9,  NUMDOM=1);
         %READXLS(DSN=&DSN10, NUMDOM=1);
         %READXLS(DSN=&DSN11, NUMDOM=1);
         %READXLS(DSN=&DSN12, NUMDOM=2);
             %READXLS(DSN=&DSN13, NUMDOM=2);
         %READXLS(DSN=&DSN14, NUMDOM=2);
         *%READXLS(DSN=&DSN15, NUMDOM=2);
             *%READXLS(DSN=&DSN16, NUMDOM=3);

         ****************************************************************
         * Quit spreadsheet application.
         ****************************************************************;
         FILENAME CMDS DDE "EXCEL|SYSTEM";
         DATA _NULL_;
            FILE CMDS;
```

```
            PUT '[QUIT]';
        RUN;
    %END;
%MEND READIT;

%READIT;

*********************************************************************************
* Macro used to merge the Q1-Q3 and annual spreadsheet files by DOMAIN(s).
*********************************************************************************;
%MACRO MERGEIT(DSN=, NUMDOM=);
    %IF &NUMDOM LE 1 %THEN %DO;
        PROC SORT DATA=&DSN.1; BY DOMAIN1; RUN;
        PROC SORT DATA=&DSN.2; BY DOMAIN1; RUN;
        PROC SORT DATA=&DSN.3; BY DOMAIN1; RUN;
        PROC SORT DATA=&DSN.4; BY DOMAIN1; RUN;
        /*PROC SORT DATA=&DSN.5; BY DOMAIN1; RUN;*/
    %END;
    %ELSE %IF &NUMDOM = 2 %THEN %DO;
        PROC SORT DATA=&DSN.1; BY DOMAIN1 DOMAIN2; RUN;
        PROC SORT DATA=&DSN.2; BY DOMAIN1 DOMAIN2; RUN;
        PROC SORT DATA=&DSN.3; BY DOMAIN1 DOMAIN2; RUN;
        PROC SORT DATA=&DSN.4; BY DOMAIN1 DOMAIN2; RUN;
        /*PROC SORT DATA=&DSN.5; BY DOMAIN1 DOMAIN2; RUN;*/
    %END;
    %ELSE %IF &NUMDOM = 3 %THEN %DO;
        PROC SORT DATA=&DSN.1; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;
        PROC SORT DATA=&DSN.2; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;
        PROC SORT DATA=&DSN.3; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;
        PROC SORT DATA=&DSN.4; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;
        /*PROC SORT DATA=&DSN.5; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;*/
    %END;
    DATA MERGED_&DSN;
        MERGE &DSN.1(RENAME=(RR=RR1 RRW=RRW1))
              &DSN.2(RENAME=(RR=RR2 RRW=RRW2))
              &DSN.3(RENAME=(RR=RR3 RRW=RRW3))
              &DSN.4(RENAME=(RR=RR4 RRW=RRW4))
              /*&DSN.5(RENAME=(RR=RR5 RRW=RRW5))*/;
        %IF &NUMDOM LE 1 %THEN %DO;
            BY DOMAIN1;
        %END;
        %ELSE %IF &NUMDOM = 2 %THEN %DO;
            BY DOMAIN1 DOMAIN2;
        %END;
        %ELSE %IF &NUMDOM = 3 %THEN %DO;
            BY DOMAIN1 DOMAIN2 DOMAIN3;
        %END;
    RUN;
%MEND MERGEIT;

*********************************************************************************
* Merge the Q1-Q3 and annual spreadsheet files by DOMAIN(s).
*********************************************************************************;
%MERGEIT(DSN=&DSN1,  NUMDOM=0);
*%MERGEIT(DSN=&DSN2,  NUMDOM=1);
%MERGEIT(DSN=&DSN3,  NUMDOM=1);
%MERGEIT(DSN=&DSN4,  NUMDOM=1);
%MERGEIT(DSN=&DSN5,  NUMDOM=1);
%MERGEIT(DSN=&DSN6,  NUMDOM=1);
%MERGEIT(DSN=&DSN7,  NUMDOM=1);
%MERGEIT(DSN=&DSN8,  NUMDOM=1);
%MERGEIT(DSN=&DSN9,  NUMDOM=1);
%MERGEIT(DSN=&DSN10, NUMDOM=1);
%MERGEIT(DSN=&DSN11, NUMDOM=1);
%MERGEIT(DSN=&DSN12, NUMDOM=2);
%MERGEIT(DSN=&DSN13, NUMDOM=2);
%MERGEIT(DSN=&DSN14, NUMDOM=2);
*%MERGEIT(DSN=&DSN15, NUMDOM=2);
*%MERGEIT(DSN=&DSN16, NUMDOM=3);


*********************************************************************************
```

```
* Macro used to write the combined annual spreadsheet file for each DOMAIN/DSN.
*****************************************************************************;
%MACRO WRITEXLS(DSN=, NUMDOM=);
   DATA _NULL_;
      SET MERGED_&DSN;
      **********************************************************************
      * Add values for each DOMAIN to each sheet.
      **********************************************************************;
      %IF &NUMDOM LE 1 %THEN %DO;
         /*FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c11";*/
            FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c9";
         FILE OUTDATA DLM='09'X NOTAB LRECL=500;
         LENGTH OLINE $50;
         IF _N_ = 1 THEN DO;
            OLINE = "RESPONSE RATES FOR &YEAR";
            PUT OLINE;
            OLINE = "FOR DOMAIN = &DSN";
            PUT OLINE /;
            H1 = "DOMAIN";      H2 = "Q1 RR"; H3 = "Q1 RRW";
            H4 = "Q2 RR";       H5 = "Q2 RRW";
            H6 = "Q3 RR";       H7 = "Q3 RRW";
            *H8 = "Q4 RR";       *H9 = "Q4 RRW";
            H10 = "Annual RR"; H11 = "Annual RRW";
            PUT H1  : $CHAR50.
                H2  : $CHAR50.
                H3  : $CHAR50.
                H4  : $CHAR50.
                H5  : $CHAR50.
                H6  : $CHAR50.
                H7  : $CHAR50.
                /*H8  : $CHAR50.
                H9  : $CHAR50.*/
                H10 : $CHAR50.
                H11 : $CHAR50.
              ;
         END;
         PUT DOMAIN1: $CHAR40.
             RR1    : 4.1
             RRW1   : 4.1
             RR2    : 4.1
             RRW2   : 4.1
             RR3    : 4.1
             RRW3   : 4.1
             RR4    : 4.1
             RRW4   : 4.1
           /*RR5    : 4.1
             RRW5   : 4.1*/
             ;
      %END;
      %ELSE %IF &NUMDOM = 2 %THEN %DO;
        /*FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c12";*/
            FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c10";
         FILE OUTDATA DLM='09'X NOTAB LRECL=500;
         LENGTH OLINE $50;
         IF _N_ = 1 THEN DO;
            OLINE = "RESPONSE RATES FOR &YEAR";
            PUT OLINE;
            OLINE = "FOR DOMAIN = &DSN";
            PUT OLINE /;
            H1 = "DOMAIN1";     H2 = "DOMAIN2";
            H3 = "Q1 RR";       H4 = "Q1 RRW";
            H5 = "Q2 RR";       H6 = "Q2 RRW";
            H7 = "Q3 RR";       H8 = "Q3 RRW";
            *H9 = "Q4 RR";       *H10 = "Q4 RRW";
            H11 = "Annual RR"; H12 = "Annual RRW";
            PUT H1  : $CHAR50.
                H2  : $CHAR50.
                H3  : $CHAR50.
                H4  : $CHAR50.
                H5  : $CHAR50.
                H6  : $CHAR50.
                H7  : $CHAR50.
                H8  : $CHAR50.
```

```
                    /*H9  : $CHAR50.
                      H10 : $CHAR50.*/
                      H11 : $CHAR50.
                      H12 : $CHAR50.
                       ;
             END;
             PUT DOMAIN1: $CHAR40.
                 DOMAIN2: $CHAR40.
                 RR1    : 4.1
                 RRW1   : 4.1
                 RR2    : 4.1
                 RRW2   : 4.1
                 RR3    : 4.1
                 RRW3   : 4.1
                 RR4    : 4.1
                 RRW4   : 4.1
               /*RR5    : 4.1
                 RRW5   : 4.1*/
                  ;
         %END;
         %ELSE %IF &NUMDOM = 3 %THEN %DO;
           /*FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c13";*/
                 FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c11";
            FILE OUTDATA DLM='09'X NOTAB LRECL=500;
            LENGTH OLINE $50;
            IF _N_ = 1 THEN DO;
                OLINE = "RESPONSE RATES FOR &YEAR";
                PUT OLINE;
                OLINE = "FOR DOMAIN = &DSN";
                PUT OLINE /;
                H1  = "DOMAIN1";   H2  = "DOMAIN2"; H3 = "DOMAIN3";
                H4  = "Q1 RR";     H5  = "Q1 RRW";
                H6  = "Q2 RR";     H7  = "Q2 RRW";
                H8  = "Q3 RR";     H9  = "Q3 RRW";
                *H10 = "Q4 RR";     *H11 = "Q4 RRW";
                H12 = "Annual RR"; H13 = "Annual RRW";
                PUT H1  : $CHAR50.
                    H2  : $CHAR50.
                    H3  : $CHAR50.
                    H4  : $CHAR50.
                    H5  : $CHAR50.
                    H6  : $CHAR50.
                    H7  : $CHAR50.
                    H8  : $CHAR50.
                    H9  : $CHAR50.
                  /*H10 : $CHAR50.
                    H11 : $CHAR50.*/
                    H12 : $CHAR50.
                    H13 : $CHAR50.
                     ;
             END;
             PUT DOMAIN1: $CHAR40.
                 DOMAIN2: $CHAR40.
                 DOMAIN3: $CHAR40.
                 RR1    : 4.1
                 RRW1   : 4.1
                 RR2    : 4.1
                 RRW2   : 4.1
                 RR3    : 4.1
                 RRW3   : 4.1
                 RR4    : 4.1
                 RRW4   : 4.1
               /* RR5    : 4.1
                 RRW5   : 4.1*/
                  ;
         %END;
      RUN;
%MEND;


*******************************************************************************
* Copy empty template file to the combined annual response rate spreadsheet
* and start the XLS file.
****************************************************************************;
```

```
X "COPY EMPTY_ANNUAL.XLS RESPONSE_RATES_ANNUAL.XLS";
X "START RESPONSE_RATES_ANNUAL.XLS";

*******************************************************************************
* Write the combined annual spreadsheet file for each DOMAIN/DSN.
******************************************************************************;
%WRITEXLS(DSN=&DSN1,  NUMDOM=0);
*%WRITEXLS(DSN=&DSN2,  NUMDOM=1);
%WRITEXLS(DSN=&DSN3,  NUMDOM=1);
%WRITEXLS(DSN=&DSN4,  NUMDOM=1);
%WRITEXLS(DSN=&DSN5,  NUMDOM=1);
%WRITEXLS(DSN=&DSN6,  NUMDOM=1);
%WRITEXLS(DSN=&DSN7,  NUMDOM=1);
%WRITEXLS(DSN=&DSN8,  NUMDOM=1);
%WRITEXLS(DSN=&DSN9,  NUMDOM=1);
%WRITEXLS(DSN=&DSN10, NUMDOM=1);
%WRITEXLS(DSN=&DSN11, NUMDOM=1);
%WRITEXLS(DSN=&DSN12, NUMDOM=2);
%WRITEXLS(DSN=&DSN13, NUMDOM=2);
%WRITEXLS(DSN=&DSN14, NUMDOM=2);
*%WRITEXLS(DSN=&DSN15, NUMDOM=2);
*%WRITEXLS(DSN=&DSN16, NUMDOM=3);


*******************************************************************************
* Quit spreadsheet application.
******************************************************************************;
FILENAME CMDS DDE "EXCEL|SYSTEM";
DATA _NULL_;
   FILE CMDS;
   PUT '[SAVE]';
   PUT '[QUIT]';
RUN;



*************************** End **************************************;
```

F.20.B Response_Rate\TABLE02.SAS - Calculate the annual Response Rates.

```
***************************************************************************
* PROGRAM: TABLE02.SAS
* TASK:    DOD HEALTH CARE SURVEY ANALYSIS (06663.300)
* PURPOSE: BUILD TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY
*          Quarterly DOD HEALTH CARE SURVEY FILE.
* WRITTEN: 11/09/1999 BY KEITH RATHBUN
*
* MODIFIED:
* 1) 12/14/2000, Keith Rathbun - Added printing of weighted (WN) and
*    unweighted (SN) population sizes.  Also, Update for quarterly survey
*    to use BWT instead of BWT99 (generalized variable name for ease of
*    maintenance).
* 2) 02/01/2001, Keith Rathbun - Added the PERIOD parameter.
* 3) 01/30/2002, Esther Friedman - added nested macro so it would run
*    for all 4 quarters trickle files.
* 4) 11/16/2004, Haixia Xu for Q3, 2004 RR
*                - Changed FNSTATUS from 30 to 31, SN3->SN31, WN3->WN31
*                - Use MERGEQ.SD2 as the input data
*                - Produce the RR for servaff and xtnexreg
* 5) 01/18/2005, Keith Rathbun - Added CREATXLS macro.
*
* LAST UPDATED:
*    10/24/2012, Sabrina R.- Updated for 2012 Annual
*
* INPUT:    1) MERGEQ.sas7bdat (All quarters)
*
* INCLUDES: 1) TABLE02.IN1
*           2) TABLE02.IN2
*
* NOTES:
*
* 1) This program must be run in BATCH mode.  DO NOT modify the directory
*    references to be hard-wired to support interactive use.
* 2) If you add a new domain combination, you will need to update the
*    EMPTY.XLS file to have a new sheet with the same name as the domain
*    variable(s) combination.
*
***************************************************************************;
OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=1 NOXWAIT NOCENTER NOFMTERR;* mprint mlogic symbolgen;
%let year=2013;

LIBNAME in1t      "..\..\..\Q1FY&year.t\DATA\AFINAL"; * Q1 mergeq with late response;
LIBNAME in2t      "..\..\..\Q2FY&year.t\DATA\AFINAL"; * Q2 mergeq with late response;
LIBNAME in3       "..\..\..\Q3FY&year.\DATA\AFINAL";  * Q3 mergeq with late response;


LIBNAME inr1      "K:\Q1FY&year."; * Q1 sample;
LIBNAME inr2      "K:\Q2FY&year."; * Q2 sample;
LIBNAME inr3      "K:\Q3FY&year."; * Q3 sample;

LIBNAME LIBRARY  "..\..\DATA\FMTLIB";


TITLE1 "Program: TABLE02.SAS";
TITLE2 "Purpose: Compute response rates by DOMAIN";

%LET OFILES  = ..\..\DATA\Response_Rate\;
%LET QUARTER = 2013 Combined Annual;
%LET DATE    = 07-22-2013;
%LET TASKNUM = 06663.300;

proc format;
  VALUE $ENBGSm
          '01' = "Active duty"
          '02' = "Active duty fam,Prime,civ PCM"
          '03' = "Active duty fam,Prime,mil PCM"
          '04' = "Active duty fam,non-enrollee"
          '05' = "Retired,<65,civ PCM"
          '06' = "Retired,<65,mil PCM"
          '07' = "Retired,<65,non-enrollee"
```

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```
                '08' = "Retired,65+,enrolled"
                '10' = "Retired,65+,non-enrollee"
                '11' = "TRICARE Reserve Select";
     VALUE TNEX
       . = "Missing Data"
       1 = "North"
       2 = "South"
       3 = "West"
       4 = "Overseas" ;
RUN;

*********************************************************************
* Create ebg_com
********************************************************************;

%macro create_ebg(qrt=, q=);
DATA MERGEQ&qrt.;
SET in&qrt..MERGEQ;
/*01/31/2007 by H.Xu.
As per Nancy's suggestion, collapse 09 with 08, since 09 has two few beneficiaries*/
if enbgsmpl = '09' then enbgsmpl='08';
format enbgsmpl $enbgsm.;
RUN;

proc sort data=mergeq&QRt; by mprid;run;
%mend;

%create_ebg(qrt=1t,q=1);
%create_ebg(qrt=2t,q=2);
%create_ebg(qrt=3, q=3);


/*Combine 3 quarters*/
DATA MERGERR;
   SET MERGEQ1t MERGEQ2t MERGEQ3;
RUN;

PROC FREQ DATA=MERGERR;
   TABLES  PATCAT*FNSTATUS
           PATCAT RACEETHN PATCAT*RACEETHN PATCAT*SVCSMPL   /MISSING LIST;
RUN;

%MACRO PROCESS(INPT=, FORM=);
   *************************************************************
   * Process OVERALL Summary of response rates
   *************************************************************;
   DATA _NULL_;
      SET &INPT END=FINISHED;
      IF _N_ = 1 THEN DO;
         SN    = 0;
         SN1   = 0;
         SN11  = 0;
         SN12  = 0;
         SN2   = 0;
         SN31   = 0;
         SN4   = 0;
         SN41  = 0;
         SN42  = 0;
         WN    = 0;
         WN1   = 0;
         WN11 = 0;
         WN12 = 0;
         WN2   = 0;
         WN31   = 0;
         WN4   = 0;
         WN41  = 0;
         WN42 = 0;
      END;
      *************************************************************
      * Accumulate group 1 weighted and unweighted counts.
      *************************************************************;
      SN + 1;
      WN + BWT;

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```

```
    IF FNSTATUS IN(11,12) THEN DO;
       SN1 + 1;
       WN1 + BWT;
       IF FNSTATUS = 11 THEN DO;
          SN11 + 1;
          WN11 + BWT;
       END;
       ELSE DO;
          SN12 + 1;
          WN12 + BWT;
       END;
    END;
    *****************************************************
    * Accumulate group 2 weighted and unweighted counts.
    *****************************************************;
    ELSE IF FNSTATUS = 20 THEN DO;
       SN2 + 1;
       WN2 + BWT;
    END;
    *****************************************************
    * Accumulate group 3 weighted and unweighted counts.
    *****************************************************;
    ELSE IF FNSTATUS = 31 THEN DO;
       SN31 + 1;
       WN31 + BWT;
    END;
    *****************************************************
    * Accumulate group 4 weighted and unweighted counts.
    *****************************************************;
    ELSE IF FNSTATUS IN(41,42) THEN DO;
       SN4 + 1;
       WN4 + BWT;
       IF FNSTATUS = 42 THEN DO;
          SN42 + 1;
          WN42 + BWT;
       END;
       ELSE DO;
          SN41 + 1;
          WN41 + BWT;
       END;
    END;

    DROP I;
    RETAIN
       SN
       SN1
       SN11
       SN12
       SN2
       SN31
       SN4
       SN41
       SN42
       WN
       WN1
       WN11
       WN12
       WN2
       WN31
       WN4
       WN41
       WN42
      ;

    IF FINISHED THEN GO TO FINISHED;
    RETURN;

FINISHED:
  FILE "&OFILES.TABLE02&FORM..OUT" RECFM=V LRECL=9999;
  PUT; PUT; PUT;
  PUT @001 "TABLE 2: OVERALL RESPONSE RATES SUMMARY";
  PUT @001 "&DATE., TASK: &TASKNUM.";
  PUT;
```

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```
      PUT "SUMMARY OF GROUP COUNTS: FORM &FORM";
      PUT;
      PUT @131 "UNWEIGHTED COUNT"
          @181 "WEIGHTED COUNT"
        ;
      PUT @121 'FLR'
          @131 'FCR'
          @141 'FRR'
          @151 'POP'
          @171 'FLR'
          @181 'FCR'
          @191 'FRR'
          @201 'POP'
        ;
      %INCLUDE "TABLE02.IN2";
   RUN;
%MEND PROCESS;

********************************************************************
* Process Single Domain where domain1 is the variable of interest.
*******************************************************************;
%MACRO PROCESS1(DOMAIN1=, INPT=, FORM=);

   PROC SORT DATA=&INPT; BY &DOMAIN1; RUN;

   DATA _NULL_;
      SET &INPT;
      BY &DOMAIN1;
      FILE "&OFILES.&DOMAIN1..OUT" RECFM=V LRECL=9999;
      LENGTH VARNAME1 $8;
      LENGTH VARIABLE $30;
      CALL VNAME(&DOMAIN1,VARNAME1);
      VARIABLE = VARNAME1;
      %INCLUDE "TABLE02.IN1";
      IF LAST.&DOMAIN1 THEN DO;
         PUT @001 &DOMAIN1 @;
         %INCLUDE "TABLE02.IN2";
      END; * DOMAIN;
   RUN;
%MEND PROCESS1;


********************************************************************
* Process Double Domain where domain1/domain2 are the
* variables of interest.
*******************************************************************;
%MACRO PROCESS2(DOMAIN1=, DOMAIN2=, INPT=, FORM=);

   PROC SORT DATA=&INPT; BY &DOMAIN1 &DOMAIN2; RUN;

   DATA _NULL_;
      SET &INPT;
      BY &DOMAIN1 &DOMAIN2;
      FILE "&OFILES.&DOMAIN1&DOMAIN2..OUT" RECFM=V LRECL=9999;
      LENGTH VARNAME1 $8;
      LENGTH VARNAME2 $8;
      LENGTH VARIABLE $30;
      CALL VNAME(&DOMAIN1,VARNAME1);
      CALL VNAME(&DOMAIN2,VARNAME2);
      VARIABLE = VARNAME1 || " " || VARNAME2;
      %INCLUDE "TABLE02.IN1";
      IF LAST.&DOMAIN2 THEN DO;
         PUT @001 &DOMAIN1 @;
         PUT @041 &DOMAIN2 @;
         %INCLUDE "TABLE02.IN2";
         SN    = 0;
         SN1   = 0;
         SN11  = 0;
         SN12  = 0;
         SN2   = 0;
         SN31  = 0;
         SN4   = 0;
         SN41  = 0;
```

```
        SN42  = 0;
        WN    = 0;
        WN1   = 0;
        WN11  = 0;
        WN12  = 0;
        WN2   = 0;
        WN31  = 0;
        WN4   = 0;
        WN41  = 0;
        WN42  = 0;
      END; * DOMAIN;
   RUN;
%MEND PROCESS2;


*************************************************************************
* Process Triple Domain where domain1-3 are the variables of interest.
*************************************************************************;
%MACRO PROCESS3(DOMAIN1=, DOMAIN2=, DOMAIN3=, INPT=, FORM=);

   PROC SORT DATA=&INPT; BY &DOMAIN1 &DOMAIN2 &DOMAIN3; RUN;

   DATA _NULL_;
      SET &INPT;
      BY &DOMAIN1 &DOMAIN2 &DOMAIN3;
      FILE "&OFILES.&DOMAIN1&DOMAIN2&DOMAIN3..OUT" RECFM=V LRECL=9999;
      LENGTH VARNAME1 $8;
      LENGTH VARNAME2 $8;
      LENGTH VARNAME3 $8;
      LENGTH VARIABLE $30;
      CALL VNAME(&DOMAIN1,VARNAME1);
      CALL VNAME(&DOMAIN2,VARNAME2);
      CALL VNAME(&DOMAIN3,VARNAME3);
      VARIABLE = VARNAME1 || " " || VARNAME2 || " " || VARNAME3;
      %INCLUDE "TABLE02.IN1";
      IF LAST.&DOMAIN3 THEN DO;
         PUT @001 &DOMAIN1 @;
         PUT @041 &DOMAIN2 @;
         PUT @081 &DOMAIN3 @;
         %INCLUDE "TABLE02.IN2";
         SN    = 0;
         SN1   = 0;
         SN11  = 0;
         SN12  = 0;
         SN2   = 0;
         SN31   = 0;
         SN4   = 0;
         SN41  = 0;
         SN42  = 0;
         WN    = 0;
         WN1   = 0;
         WN11  = 0;
         WN12  = 0;
         WN2   = 0;
         WN31   = 0;
         WN4   = 0;
         WN41  = 0;
         WN42  = 0;
      END; * DOMAIN;
   RUN;
%MEND PROCESS3;


***Note that the ERROR message of division by zero may be printed out
in the log file due to no complete in some domains***;

***********************************************************
* PROCESS OVERALL RESPONSE RATE TABULATION - FORM A
***********************************************************;
%PROCESS(INPT=MERGERR, FORM=A);

***********************************************************
* PROCESS SINGLE DOMAIN RESPONSE RATE TABULATION - FORM A
```

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```
**********************************************************;
*%PROCESS1(DOMAIN1=xregion,   INPT=MERGERR, FORM="FORM A");
*%PROCESS1(DOMAIN1=QFLAG, INPT=MERGERR, FORM="FORM A");
*%PROCESS1(DOMAIN1=has_email,INPT=MERGERR, FORM="FORM A");
%PROCESS1(DOMAIN1=xoconus,   INPT=MERGERR, FORM="FORM A");
%PROCESS1(DOMAIN1=USA,        INPT=MERGERR, FORM="FORM A");
%PROCESS1(DOMAIN1=sexsmpl,   INPT=MERGERR, FORM="FORM A");
%PROCESS1(DOMAIN1=enbgsmpl,  INPT=MERGERR, FORM="FORM A");
%PROCESS1(DOMAIN1=cacsmpl,   INPT=MERGERR, FORM="FORM A");
%PROCESS1(DOMAIN1=patcat,    INPT=MERGERR, FORM="FORM A");
%PROCESS1(DOMAIN1=servaff,   INPT=MERGERR, FORM="FORM A");
%PROCESS1(DOMAIN1=svcsmpl,   INPT=MERGERR, FORM="FORM A");
%PROCESS1(DOMAIN1=xtnexreg, INPT=MERGERR, FORM="FORM A");

**********************************************************
* PROCESS DOUBLE DOMAIN RESPONSE RATE TABULATION - FORM A
**********************************************************;

%PROCESS2(DOMAIN1=patcat,   DOMAIN2=svcsmpl, INPT=MERGERR, FORM="FORM A");
%PROCESS2(DOMAIN1=patcat,   DOMAIN2=sexsmpl, INPT=MERGERR, FORM="FORM A");
%PROCESS2(DOMAIN1=xtnexreg, DOMAIN2=cacsmpl, INPT=MERGERR, FORM="FORM A");
*%PROCESS2(DOMAIN1=PATCAT, DOMAIN2=HAS_EMAIL, INPT=MERGERR, FORM="FORM A");

**********************************************************
* PROCESS TRIPLE DOMAIN RESPONSE RATE TABULATION - FORM A
**********************************************************;
*%PROCESS3(DOMAIN1=USA, DOMAIN2=patcat, DOMAIN3=has_email, INPT=MERGERR, FORM="FORM A");

*****************************************************************************
* Copy empty template file to constructed variables spreadsheet and
* start the XLS file.
*****************************************************************************;
X "COPY EMPTY.XLS RESPONSE_RATES.XLS";
X "START RESPONSE_RATES.XLS";

%MACRO CREATXLS(DSN=, NUMDOM=);
   *****************************************************************************
   * Read text files with response rates for each DOMAIN .
   *****************************************************************************;
   DATA &DSN(KEEP=DOMAIN1 DOMAIN2 DOMAIN3 RR RRW);
       INFILE "&OFILES.&DSN..OUT" LRECL=9999 RECFM=V;
       INPUT LINEIN $100 @; DROP LINEIN; *Skip over header records;
       LENGTH DOMAIN1-DOMAIN3 $40;
       IF _N_ GE 7 THEN DO;
           INPUT
               @001 DOMAIN1 $CHAR40.
               @041 DOMAIN2 $CHAR40.
               @081 DOMAIN3 $CHAR40.
               @121 FLR1   4.3
               @131 FCR1   4.3
               @141 FRR1   4.3
               @147 SN     7.0
               @171 FLR2   4.3
               @181 FCR2   4.3
               @191 FRR2   4.3
               @197 WN     7.0
             ;
           RR  = FRR1*100;
           RRW = FRR2*100;
           OUTPUT;
       END;
   RUN;
   *****************************************************************************
   * Add values for each DOMAIN to each sheet.
   *****************************************************************************;
   %IF &NUMDOM LE 1 %THEN %DO;
       FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c3";
       DATA _NULL_;
           SET &DSN;
           FILE OUTDATA DLM='09'X NOTAB LRECL=500;
           LENGTH OLINE $50;
           IF _N_ = 1 THEN DO;
               OLINE = "RESPONSE RATES FOR &QUARTER";
```

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```
                    PUT OLINE;
                    OLINE = "FOR DOMAIN = &DSN";
                    PUT OLINE /;
                    H1 = "DOMAIN"; H2 = "RR"; H3 = "RRW";
                    PUT H1 : $CHAR50.
                        H2 : $CHAR50.
                        H3 : $CHAR50.
                        ;
                END;
                PUT DOMAIN1: $CHAR40.
                    RR    : 4.1
                    RRW   : 4.1
                    ;
        RUN;
    %END;
    %ELSE %IF &NUMDOM = 2 %THEN %DO;
        FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c4";
        DATA _NULL_;
            SET &DSN;
            FILE OUTDATA DLM='09'X NOTAB LRECL=500;
            LENGTH OLINE $50;
            IF _N_ = 1 THEN DO;
                OLINE = "RESPONSE RATES FOR &QUARTER";
                PUT OLINE;
                OLINE = "FOR DOMAIN = &DSN";
                PUT OLINE /;
                H1 = "DOMAIN1"; H2 = "DOMAIN2"; H3 = "RR"; H4 = "RRW";
                PUT H1 : $CHAR50.
                    H2 : $CHAR50.
                    H3 : $CHAR50.
                    H4 : $CHAR50.
                    ;
            END;
            PUT DOMAIN1: $CHAR40.
                DOMAIN2: $CHAR40.
                RR    : 4.1
                RRW   : 4.1
                ;
        RUN;
    %END;
    %ELSE %IF &NUMDOM = 3 %THEN %DO;
        FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c5";
        DATA _NULL_;
            SET &DSN;
            FILE OUTDATA DLM='09'X NOTAB LRECL=500;
            LENGTH OLINE $50;
            IF _N_ = 1 THEN DO;
                OLINE = "RESPONSE RATES FOR &QUARTER";
                PUT OLINE;
                OLINE = "FOR DOMAIN = &DSN";
                PUT OLINE /;
                H1 = "DOMAIN1"; H2 = "DOMAIN2"; H3 = "DOMAIN3"; H4 = "RR"; H5 = "RRW";
                PUT H1 : $CHAR50.
                    H2 : $CHAR50.
                    H3 : $CHAR50.
                    H4 : $CHAR50.
                    H5 : $CHAR50.
                    ;
            END;
            PUT DOMAIN1 : $CHAR40.
                DOMAIN2 : $CHAR40.
                DOMAIN3 : $CHAR40.
                RR    : 4.1
                RRW   : 4.1
                ;
        RUN;
    %END;
%MEND CREATXLS;

%CREATXLS(DSN=TABLE02A, NUMDOM=0);
*CREATXLS(DSN=QFLAG, NUMDOM=1);
*%CREATXLS(DSN=HAS_EMAIL, NUMDOM=1);
%CREATXLS(DSN=XOCONUS, NUMDOM=1);
```

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```
%CREATXLS(DSN=USA, NUMDOM=1);
%CREATXLS(DSN=SEXSMPL, NUMDOM=1);
%CREATXLS(DSN=enbgsmpl, NUMDOM=1);
%CREATXLS(DSN=cacsmpl, NUMDOM=1);
%CREATXLS(DSN=PATCAT, NUMDOM=1);
%CREATXLS(DSN=SERVAFF, NUMDOM=1);
%CREATXLS(DSN=SVCSMPL, NUMDOM=1);
%CREATXLS(DSN=XTNEXREG, NUMDOM=1);
%CREATXLS(DSN=PATCATSVCSMPL, NUMDOM=2);
%CREATXLS(DSN=PATCATSEXSMPL, NUMDOM=2);
%CREATXLS(DSN=XTNEXREGcacsmpl, NUMDOM=2);
*%CREATXLS(DSN=PATCATHAS_EMAIL, NUMDOM=2);
*%CREATXLS(DSN=USAPATCATHAS_EMAIL, NUMDOM=3);
***************************************************************************
* Quit spreadsheet application.
**************************************************************************;
FILENAME CMDS DDE "EXCEL|SYSTEM";
DATA _NULL_;
   FILE CMDS;
   PUT '[SAVE]';
   PUT '[QUIT]';
RUN;


************************   End  **********************;
```

F.20.C Response_Rate\TABLE02.IN1 - Include file1 used to Calculate annual Response Rates.

```
****************************************************************************
*
* PROGRAM: TABLE02.IN1
* TASK:    2002 DOD HEALTH CARE SURVEY ANALYSIS
* PURPOSE: COMMON CODE INCLUDE FILE USED TO BUILD
*          TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY
*          2002 DOD HEALTH CARE SURVEY FILE.
* WRITTEN: 01/08/99 BY KEITH RATHBUN
*
* MODIFIED:
* 1) 5/17/1999, Keith Rathbun - Removed printing of the final location rate
*    (FLR) and final completion rate (FCR).
* 2) 7/07/1999, Keith Rathbun - Added back printing of FLR
* 3) 12/14/2000, Keith Rathbun - Update for quarterly survey to use BWT
*    instead of BWT99 (generalized variable name for ease of maintenance).
* 4) 11/16/2004 by Haixia Xu - Update the coding of FNSTATUS from 30 to 31.
*                             SN3->SN31, WN3->WN31
* 5) 01/24/2005 by Keith Rathbun - Update PUT statements to accomodate up
*    to 3 CHAR*40 domains.
*
****************************************************************************
*;
IF _N_ = 1 THEN DO;
   PUT; PUT;
   PUT @001 "TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY";
   PUT @001 "&DATE., TASK: &TASKNUM.";
   PUT;
   PUT "SUMMARY OF GROUP COUNTS: " &FORM;
   PUT "VARIABLE = " VARIABLE;
   PUT;
   PUT @131 "UNWEIGHTED COUNT"
       @181 "WEIGHTED COUNT"
      ;
   PUT @121 'FLR'
       @131 'FCR'
       @141 'FRR'
       @151 'POP'
       @171 'FLR'
       @181 'FCR'
       @191 'FRR'
       @201 'POP'
      ;
END;
IF FIRST.&DOMAIN1 THEN DO;
   SN   = 0;
   SN1  = 0;
   SN11 = 0;
   SN12 = 0;
   SN2  = 0;
   SN31 = 0;
   SN4  = 0;
   SN41 = 0;
   SN42 = 0;
   WN   = 0;
   WN1  = 0;
   WN11 = 0;
   WN12 = 0;
   WN2  = 0;
   WN31 = 0;
   WN4  = 0;
   WN41 = 0;
   WN42 = 0;
END;
**************************************************
* Accumulate group 1 weighted and unweighted counts
**************************************************
;
SN + 1;
WN + BWT;
IF FNSTATUS IN(11,12) THEN DO;
```

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```
   SN1 + 1;
   WN1 + BWT;
   IF FNSTATUS = 11 THEN DO;
      SN11 + 1;
      WN11 + BWT;
   END;
   ELSE DO;
      SN12 + 1;
      WN12 + BWT;
   END;
END;
*****************************************************
* Accumulate group 2 weighted and unweighted counts
*****************************************************
;
ELSE IF FNSTATUS = 20 THEN DO;
   SN2 + 1;
   WN2 + BWT;
END;
*****************************************************
* Accumulate group 3 weighted and unweighted counts
*****************************************************
;
ELSE IF FNSTATUS = 31 THEN DO;
   SN31 + 1;
   WN31 + BWT;
END;
*****************************************************
* Accumulate group 4 weighted and unweighted counts
*****************************************************
;
ELSE IF FNSTATUS IN(41,42) THEN DO;
   SN4 + 1;
   WN4 + BWT;
   IF FNSTATUS = 42 THEN DO;
      SN42 + 1;
      WN42 + BWT;
   END;
   ELSE DO;
      SN41 + 1;
      WN41 + BWT;
   END;
END;

DROP I;
RETAIN
   SN
   SN1
   SN11
   SN12
   SN2
   SN31
   SN4
   SN41
   SN42
   WN
   WN1
   WN11
   WN12
   WN2
   WN31
   WN4
   WN41
   WN42
   ;
```

F.20.D   Response_Rate\TABLE02.IN2 - Include file2 used to Calculate annual Response Rates.

```
****************************************************************************
*
* PROGRAM: TABLE02.IN2
* TASK:    QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS
* PURPOSE: COMMON CODE INCLUDE FILE USED TO BUILD
*          TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY
*          QUARTERLY DOD HEALTH CARE SURVEY FILE.
* WRITTEN: 01/08/99 BY KEITH RATHBUN
*
* MODIFIED:
* 1) 5/17/1999, Keith Rathbun - Removed printing of the final location rate
*    (FLR) and final completion rate (FCR).
* 2) 7/07/1999, Keith Rathbun - Added back printing of FLR
* 3) 12/14/2000, Keith Rathbun - Added printing of weighted (WN) and
*    unweighted (SN) population sizes.
* 4) 11/17/2004 BY Haixia Xu - Made changes due to the different coding of FNSTATUS:
*                        -Rewrite the formula used to calculating FRR1, FRR2
*                        -SN3->SN31, WN3->WN31
* 5) 01/24/2005 by Keith Rathbun - Update PUT statements to accomodate up
*    to 3 CHAR*40 domains.
*
****************************************************************************
*;

  *Final Response Rate;
  FRR1 = SN11/(SN1 + SN2 + SN4*((SN1 + SN2)/(SN1 + SN2 + SN31)) );
  FRR2 = WN11/(WN1 + WN2 + WN4*((WN1 + WN2)/(WN1 + WN2 + WN31)) );

  *Final Location Rate;
  L = ((SN1 + SN2)/(SN1 + SN2 + SN31))*SN41;
  WL = ((WN1 + WN2)/(WN1 + WN2 + WN31))*WN41;
  FLR1 = (SN1 + SN2 + L)/(SN1 + SN2 + SN4*((SN1 + SN2)/(SN1 + SN2 + SN31)));
  FLR2 = (WN1 + WN2 + WL)/(WN1 + WN2 + WN4*((WN1 + WN2)/(WN1 + WN2 + WN31)));

  *Final Completion Rate;
  FCR1 = SN11/(SN1 + SN2 + L);
  FCR2 = WN11/(WN1 + WN2 + WL);
  PUT @121 FLR1  4.3
      @131 FCR1  4.3
      @141 FRR1  4.3
      @147 SN   7.0
      @171 FLR2  4.3
      @181 FCR2  4.3
      @191 FRR2  4.3
      @197 WN   7.0
    ;
```

APPENDIX G

**SAS CODE FOR STATISTICAL AND WEB SPECIFICATIONS FOR THE
2013 TRICARE BENEFICIARY REPORTS – QUARTERS I-III**

G.1.A   Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\STEP1Q.SAS - Create and recode variables used in Adult Beneficiary Reports - Run Quarterly.

```
****************************************************************************
*
*  PROJECT:  DoD - Quarterly Adult Report Cards
*  PROGRAM:  STEP1Q.SAS
*  PURPOSE:  Create Dummy and Recode Variables used in Adult Report Card
*                   Create a Female dummy variable
*                   Create an Education dummy variable
*                   Create 15 region dummies combining regions.
*                           7 & 8 into region 8. That is, there
*                           isn't a region 7 dummy.
*                   Create 7 age dummy variables.
*
*            We require the most desired code to be the highest value.
*            Recode the dependent variables into:
*                   1 - the least desirable value
*                   2 - the 2nd least desirable value
*                   3 - the most desirable value
*                   . - missing
*
*            Create 7 variables GROUP1 - GROUP7
*                   IF (XINS_COV IN (1,2,6) AND H10004>=2) THEN GROUP1 = 1
*                   IF (XENR_PCM IN (1,2,6) AND H10004>=2) THEN GROUP2 = 1
*                   IF (XENR_PCM = 3,7      AND H10004>=2) THEN GROUP3 = 1
*                   IF XINS_COV IN (3)                     THEN GROUP4 = 1
*                           /*JSO 08/24/2006, Deleted 4,5*/
*                   IF XBNFGRP = 1                         THEN GROUP5 = 1
*                   IF XBNFGRP = 2                         THEN GROUP6 = 1
*                   IF XBNFGRP IN (3,4)                    THEN GROUP7 = 1
*                   GROUP8 is output for all beneficiaries
*
*  MODIFIED: 1) February 2001 By Keith Rathbun, Update for quarterly
*                adult report cards.  Removed permanent dataset ENTIRE.SD2.
*            2) August 2001 By Keith Rathbun, Updated DSN and LIBNAME
*                for 3rd quarter adult report cards.
*            3) OCTOBER 2001 BY DANIELE BEAHM, Because there was no post-
*                stratification done in Q3, changed all references of the
*                POSTSTR variable to ADJ_CELL
*            4) JANUARY 2002 BY DANIELE BEAHM, Modified group3 to include
*                XENR_PCM
*            5) April 2002 By Mike Scott, Updated variable names for 2002
*                survey.
*            6) July 2002 By Mike Scott: See Note #2.  Replaced variable
*                S02S01 with H04075 (new health status variable), deleted
*                code to recode S02S01 to H00077, and changed H00077/R00077
*                rename/recode to H04075/R04075 rename/recode.  The Hispanic/
*                Latino variable is not present.
*            7) January 2003 By Mike Scott, Changed ADJ_CELL to COM_SAMP.
*            8) March 2003 By Mike Scott, Updated variable names for 2003
*                survey.
*            9) June 2003 By Mike Scott, Updated for Q2 2003.
*           10) July 2003 By Mike Scott, Changed COM_SAMP to ADJ_CELL.
*           11) October 2003 By Mike Scott, Updated for Q3 2003.
*           12) January 2004 By Mike Scott, Updated for Q4 2003, and changed
*                DAGEQY to FIELDAGE.
*           13) March 2004 By Mike Scott, Updated for Q1 2004.
*           14) April 2004 By Keith Rathbun, Removed reverse coding for
*                H04031.  2004 survey question wording is 'Within 15 minutes'
*                instead of "More than 15 Minutes".  Added service affiliation
*                variables so only one version of this program is needed to
*                handle the consumer watch processing.
*            15) June 2004 by Regina Gramss, Updated for Q2 2004.
*           16) Sept 2004 by Regina Gramss, changed XRegion to xtenxreg, updated for Q3 2004.
*           17) Jan 2005 by Regina Gramss, changed XTENXREG to XSERVREG to include
*                service affiliation.  Regions have been changed from 4 categories to 16.
*           18) Apr 2005 by Regina Gramss, updated field names for 2005 data.
*           19) Jul 2005 by Regina Gramss, updated for Q2 2005
*           20) Oct 2005 by Regina Gramss, updated for Q3 2005
*           21) Dec 2005 by Regina Gramss, updated for Q4 2005
*           22) March 21, 2006 by Keith Rathbun, updated variable names
```

```
*                    for Q2 FY 2006.  Changed references to ADJ_CELL to be STRATUM.
*           23) July 12, 2006 by Justin Oh, updated for Q3 FY 2006
*           24) Aug 22, 2006 by Justin Oh, changed overseas to 3 regions.
*               Regions have been changed from 16 categories to 24.
*               Added XOCONUS to the Keep statement for Overseas classifications.
*               Changed XSERVREG for Overseas (Europe,Pacific,Latin America).
*               Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                       IF XINS_COV IN (3)     THEN GROUP4 = 1
*               Since only XINS_COV IN (1,2,3,6) is kept, (4,5) not needed.
*           25) Oct 03, 2006 by Justin Oh, changed input data HCS063_1 to HCS064_1
*               for Q4FY2006 reports.
*           26) Apr 05, 2007 by Justin Oh, Added %LET BCHTYPE to select BCH types
*               Benchmark OR PurchasedBenchmark.
*           27) Apr 05, 2007 by Justin Oh, Added changes to select RC types
*               ReportCards OR PurchasedReportCards.
*           28) Apr 26, 2007 by Justin Oh, Added codes, variables for new
*               reservists logic.
*           29) May 15, 2007 by Justin Oh, Changed XINS_COV to NXNS_COV to assign
*               Groups 1,3, and 4 for new reservists logic.
*           30) Jul 30, 2007 by Justin Oh, Added added DBENCAT conditions to assign
*               Groups All, 4, 5, and 6.
*           31) Oct 02, 2007 by Justin Oh, changed input data HCS073_1 to HCS074_1
*               for Q4FY2007 reports.
*           32) January 10, 2008 by Keith Rathbun, updated variable names
*               for Q1 FY 2008.
*           33) Apr 11, 2008 by Justin Oh, changed input data HCS081_1 to HCS082_1
*               for Q2FY2008 reports.
*           34) June 13, 2008 by Keith Rathbun, changed input data HCS082_1 to HCS083_1
*               for Q3FY2008 reports.
*           35) Jan 16, 2009 by Mike Rudacille, changed CONUS variable to USA
*           36) Jan 21, 2009 by Mike Rudacille, changed 2009 questionnaire variables
*               applicable to both V3 and V4 from V3 names to V4 names
*           37) March 11, 2009 by Keith Rathbun, changed input data HCS091_1 to HCS092_1
*               for Q2FY2009 reports.
*           38) April 6, 2009 by Mike Rudacille, changed variable names to reflect
*               modifications to beneficiary reports necessary for V4
*           39) June 22, 2009 By Keith Rathbun, Change weight variable from
*               FWRWT_V4 back to FWRWT.  Changed input data HCS092_1 to HCS093_1
*               for Q3FY2009 reports.
*           40) Sept 30, 2009 By Mike Rudacille, Changed input data HCS093_1 to HCS094_1
*               for Q4FY2009 reports.
*           41) December 17, 2009 By Emma Ernst, Updated program for Q1FY2010.  Updated Variables
names
*               and input dataset.
*           42) March 2, 2010 By Mike Rudacille, Changed input data HCS101_1 to HCS102_1
*           43) March 25, 2010 By Mike Rudacille, Changed input data HCS102_1 to HCS102_2.
*               The FIELDAGE var is no longer included in the HCSyyq_1 dataset.
*           44) June 19, 2010 By Mike Rudacille, Changed input data HCS102_2 to HCS103_2.
*           45) August 28, 2010 By Mike Rudacille, Changed input data HCS103_2 to HCS104_2.
*           46) December 1, 2010 By Mike Rudacille, Updated program for Q1FY2011. Updated
Variable names
*               and input dataset.
*           47) February 24, 2011 By Mike Rudacille, Changed input data HCS111_2 to HCS112_2.
*           48) December 10, 2011 By Mike Rudacille, Updated program for Q1FY2012. Updated
Variable names
*               and input dataset.
*           49) March 5, 2012 By Amanda Kudis, Updated program for Q2FY2012.
*           50) June 21, 2012 By Amanda Kudis, Updated program for Q3FY2012.
*           51) August 23, 2012 By Christine Cheu, Updated program for Q4FY2012.
*           52) November 3, 2012 By Mike Rudacille, Updated for handling of Joint Service
facilities
*           53) December 27, 2012 By Aimee Valenzuela, Update program for Q1FY2013.Updated
Variable names
*               and input dataset.
*           54) March 23, 2013 By Mike Rudacille, Update program for Q2FY2013.
*
*  INPUTS:   1) HCSyyq_2 - DoD Quarterly HCS Database
*
*  OUTPUTS:  1) GROUP1-8.sas7bdat - DoD Quarterly GROUP files as defined above
*
*  INCLUDES: 1) CONVERT.SAS - Convert item responses to proportional
*                             values for consistency w/ TOPS
*
```

```
*  NOTES:    1) Groups 1-3 modified 10/09/2000
*
*            2) In Q1_2002, S02S01 was renamed and recoded to H00077 (health
*               status variable for 2000).  H02077 was the Hispanic/Latino
*               variable.  In Q2_2002, H02077 is health status, and H02079
*               is the Hispanic/Latino variable.  To make the Quarter 2 data
*               file (HSC022_1.sd2) more consistent with the Quarter 1 file,
*               the health status variable which was H02077 is now H04075,
*               and the Hispanic/Latino variable which was H02079 is now
*               H02077.
*
**************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards             ***/
%LET RCTYPE = ReportCards;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR NOOVP COMPRESS=YES;
LIBNAME OUT      "DATA";
LIBNAME IN1      "..\..\..\Data\AFinal";
LIBNAME LIBRARY  "..\..\..\Data\Afinal\fmtlib";

TITLE1    'Program Saved as: STEP1Q.SAS';

%LET WGT = FWRWT;

proc format;
     value servreg 1 = 'North Army'
                   2 = 'North Air Force'
                   3 = 'North Navy'
                   4 = 'North Other'
                   5 = 'North Joint Service'
                   6 = 'South Army'
                   7 = 'South Air Force'
                   8 = 'South Navy'
                   9 = 'South Other'
                  10 = 'South Joint Service'
                  11 = 'West Army'
                  12 = 'West Air Force'
                  13 = 'West Navy'
                  14 = 'West Other'
                  15 = 'West Joint Service'
                  16 = 'Europe Army'
                  17 = 'Europe Air Force'
                  18 = 'Europe Navy'
                  19 = 'Europe Other'
                  20 = 'Europe Joint Service'
                  21 = 'Pacific Army'
                  22 = 'Pacific Air Force'
                  23 = 'Pacific Navy'
                  24 = 'Pacific Other'
                  25 = 'Pacific Joint Service'
                  26 = 'Latin America Army'
                  27 = 'Latin America Air Force'
                  28 = 'Latin America Navy'
                  29 = 'Latin America Other'
                  30 = 'Latin America Joint Service';

DATA ENTIRE;
   SET IN1.HCS133_2(KEEP=
               MPRID
               XCATCH    /*MER 11/03/12*/
               FIELDAGE  /*MJS 01/26/04*/
               XTNEXREG
               SERVAFF   /*KRR 04/09/04*/
               DBENCAT   /*JSO 04/26/2007, added for reservists logic*/
               USA
               ENBGSMPL
               SREDA
               XSEXA
               XBNFGRP
               STRATUM   /*KRR 04/03/2006, changed from ADJ_CELL*/
               XINS_COV
               XENR_PCM
```

```
                XOCONUS    /*JSO 08/24/2006, Overseas Region Indicator*/
                &WGT.
                /* Getting Needed Care */
                H13033
                H13029
                /* Getting Care Quickly */
                H13007
                H13010
                /* How Well Doctors Communicate */
                H13021
                H13022
                H13023
                H13024
                /* Customer Service */
                H13041
                H13042
                /* Claims Processing */
                H13046
                H13047  /***************************/
                H13065  /* Health Status           */
                H13018  /* Health Care Rating       */
                H13048  /* Health Plan Rating       */
                H13027  /* Personal Doctor Rating   */
                H13031  /* Specialist Rating        */
                H13003  /* Health Plan Used         *//*JSO 04/26/2007, added for reservists
logic*/
                H13004  /* How Long in Health Plan  */
                        /***************************/
            );
    FORMAT _ALL_;
    IF SERVAFF='A' THEN XSERVAFF=1;              *Army;
        ELSE IF SERVAFF='F' THEN XSERVAFF=2;     *Air Force;
        ELSE IF SERVAFF='N' THEN XSERVAFF=3;     *Navy;
        ELSE XSERVAFF=4;                          *Other;

    IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

    IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

    IF XTNEXREG = . THEN DELETE;  /* RSG 02/2005 USE CACSMPL TO DELETE MISSING FIELDS*/

    IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/  /*MER 07/12/11
Added 10,11*/

    NXNS_COV = XINS_COV;                 /*JSO 04/26/2007 added for reservists logic*/
                                         /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
    IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
    IF DBENCAT IN('GRD','IGR') AND H13003 = 3 THEN DO;
        NXNS_COV = 3;
        XENR_PCM = .;
    END;
                        /* Note:  use tmp_cell in step2q.sas */
    LENGTH TMP_CELL XSERVREG 8;
    TMP_CELL = STRATUM; /*KRR 04/03/2006, changed from ADJ_CELL*/

    IF XTNEXREG = 1 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 1;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
        ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
        ELSE XSERVREG = 5;
    END;

    IF XTNEXREG = 2 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 6;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
        ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
        ELSE XSERVREG = 10;
    END;

    IF XTNEXREG = 3 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 11;
```

```
            ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
            ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
            ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
            ELSE XSERVREG = 15;
        END;

     IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
        IF XOCONUS = 1 THEN DO;
            IF      XSERVAFF = 1 THEN XSERVREG = 16;
            ELSE IF XSERVAFF = 2 THEN XSERVREG = 17;
            ELSE IF XSERVAFF = 3 THEN XSERVREG = 18;
            ELSE IF XSERVAFF = 4 THEN XSERVREG = 19;
            ELSE                      XSERVREG = 20;
        END;
        IF XOCONUS = 2 THEN DO;
            IF      XSERVAFF = 1 THEN XSERVREG = 21;
            ELSE IF XSERVAFF = 2 THEN XSERVREG = 22;
            ELSE IF XSERVAFF = 3 THEN XSERVREG = 23;
            ELSE IF XSERVAFF = 4 THEN XSERVREG = 24;
            ELSE                      XSERVREG = 25;
        END;
        IF XOCONUS = 3 THEN DO;
            IF      XSERVAFF = 1 THEN XSERVREG = 26;
            ELSE IF XSERVAFF = 2 THEN XSERVREG = 27;
            ELSE IF XSERVAFF = 3 THEN XSERVREG = 28;
            ELSE IF XSERVAFF = 4 THEN XSERVREG = 29;
            ELSE                      XSERVREG = 30;
        END;
     END;

RUN;

****************************************************************************
* Create AGE, FEMALE and GROUP (Beneficiary/Enrollment)
* subsets. Create the region dummies.  Recode region 7 to region 8.
****************************************************************************;
DATA ENTIRE;
   SET ENTIRE;
   LENGTH DEFAULT = 4;
   IF FIELDAGE NE "  " THEN DO;   /*MJS 01/26/04*/
      AGE1824=0;
      AGE2534=0;
      AGE3544=0;
      AGE4554=0;
      AGE5564=0;
      AGE6574=0;
      AGE75UP=0;
      IF      ( '018' <= FIELDAGE <= '024' ) THEN AGE1824=1;   /*MJS 01/26/04*/
      ELSE IF ( '025' <= FIELDAGE <= '034' ) THEN AGE2534=1;
      ELSE IF ( '035' <= FIELDAGE <= '044' ) THEN AGE3544=1;
      ELSE IF ( '045' <= FIELDAGE <= '054' ) THEN AGE4554=1;
      ELSE IF ( '055' <= FIELDAGE <= '064' ) THEN AGE5564=1;
      ELSE IF ( '065' <= FIELDAGE <= '074' ) THEN AGE6574=1;
      ELSE IF (          FIELDAGE  > '074' ) THEN AGE75UP=1;
   END;

   ************************************************************************
   * Create the FEMALE dummy variable.
   ************************************************************************;
   IF XSEXA = 2 THEN
      FEMALE = 1;
   ELSE
      FEMALE = 0;

   ************************************************************************
   * Create the beneficiary group/enrollment group subsets.
   ************************************************************************;
   GROUP1 = 0;
   GROUP2 = 0;
   GROUP3 = 0;
   GROUP4 = 0;
   GROUP5 = 0;
   GROUP6 = 0;
```

```
   GROUP7 = 0;
   GROUP8 = 1;       * EVERYONE;

   IF (NXNS_COV IN (1,2,6)  AND H13004>=2) THEN GROUP1 = 1;
   IF (XENR_PCM IN (1,2,6)  AND H13004>=2) THEN GROUP2 = 1;
   /* JSO 04/05/2007 conditions to run RC type */
   IF "&RCTYPE" = 'ReportCards' AND (XENR_PCM IN (3,7) AND H13004>=2) THEN GROUP3 = 1;
   ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND ((XENR_PCM IN (3,7) AND H13004>=2) OR NXNS_COV
IN (3,9,10)) THEN GROUP3 = 1;
   IF NXNS_COV IN (3,9,10)     THEN GROUP4 = 1; /*JSO 08/24/2006, Deleted 4,5*//*JSO 07/30/2007,
Added 9*/ /*MER 07/12/11 Added 10*/
   IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN GROUP5 = 1;
                                        /*JSO 07/30/2007, added DBENCAT conditions*/
   IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN GROUP6 = 1;
                                        /*JSO 07/30/2007, added DBENCAT conditions*/
   IF XBNFGRP IN (3,4)       THEN GROUP7 = 1;

   **************************************************************************
   * Recode variables with Never, Sometimes, Usually and Always:
   *    Recode Never & Sometimes (1 & 2) to 1.
   *    Recode Usually (3) to 2.
   *    Recode Always (4) to 3.
   **************************************************************************;

   IF H13007 = 1      THEN R13007 = 1;
   ELSE IF H13007 = 2 THEN R13007 = 1;
   ELSE IF H13007 = 3 THEN R13007 = 2;
   ELSE IF H13007 = 4 THEN R13007 = 3;
   ELSE IF H13007 < 0 THEN R13007 = .;

   IF H13010 = 1      THEN R13010 = 1;
   ELSE IF H13010 = 2 THEN R13010 = 1;
   ELSE IF H13010 = 3 THEN R13010 = 2;
   ELSE IF H13010 = 4 THEN R13010 = 3;
   ELSE IF H13010 < 0 THEN R13010 = .;

   IF H13021 = 1      THEN R13021 = 1;
   ELSE IF H13021 = 2 THEN R13021 = 1;
   ELSE IF H13021 = 3 THEN R13021 = 2;
   ELSE IF H13021 = 4 THEN R13021 = 3;
   ELSE IF H13021 < 0 THEN R13021 = .;

   IF H13022 = 1      THEN R13022 = 1;
   ELSE IF H13022 = 2 THEN R13022 = 1;
   ELSE IF H13022 = 3 THEN R13022 = 2;
   ELSE IF H13022 = 4 THEN R13022 = 3;
   ELSE IF H13022 < 0 THEN R13022 = .;

   IF H13023 = 1      THEN R13023 = 1;
   ELSE IF H13023 = 2 THEN R13023 = 1;
   ELSE IF H13023 = 3 THEN R13023 = 2;
   ELSE IF H13023 = 4 THEN R13023 = 3;
   ELSE IF H13023 < 0 THEN R13023 = .;

   IF H13024 = 1      THEN R13024 = 1;
   ELSE IF H13024 = 2 THEN R13024 = 1;
   ELSE IF H13024 = 3 THEN R13024 = 2;
   ELSE IF H13024 = 4 THEN R13024 = 3;
   ELSE IF H13024 < 0 THEN R13024 = .;

   IF H13029 = 1      THEN R13029 = 1;
   ELSE IF H13029 = 2 THEN R13029 = 1;
   ELSE IF H13029 = 3 THEN R13029 = 2;
   ELSE IF H13029 = 4 THEN R13029 = 3;
   ELSE IF H13029 < 0 THEN R13029 = .;

   IF H13033 = 1      THEN R13033 = 1;
   ELSE IF H13033 = 2 THEN R13033 = 1;
   ELSE IF H13033 = 3 THEN R13033 = 2;
   ELSE IF H13033 = 4 THEN R13033 = 3;
   ELSE IF H13033 < 0 THEN R13033 = .;

   IF H13041 = 1      THEN R13041 = 1;
```

```
         ELSE IF H13041 = 2 THEN R13041 = 1;
         ELSE IF H13041 = 3 THEN R13041 = 2;
         ELSE IF H13041 = 4 THEN R13041 = 3;
         ELSE IF H13041 < 0 THEN R13041 = .;

         IF H13042 = 1      THEN R13042 = 1;
         ELSE IF H13042 = 2 THEN R13042 = 1;
         ELSE IF H13042 = 3 THEN R13042 = 2;
         ELSE IF H13042 = 4 THEN R13042 = 3;
         ELSE IF H13042 < 0 THEN R13042 = .;

         IF H13046 = 1      THEN R13046 = 1;
         ELSE IF H13046 = 2 THEN R13046 = 1;
         ELSE IF H13046 = 3 THEN R13046 = 2;
         ELSE IF H13046 = 4 THEN R13046 = 3;
         ELSE IF H13046 < 0 THEN R13046 = .;

         IF H13047 = 1      THEN R13047 = 1;
         ELSE IF H13047 = 2 THEN R13047 = 1;
         ELSE IF H13047 = 3 THEN R13047 = 2;
         ELSE IF H13047 = 4 THEN R13047 = 3;
         ELSE IF H13047 < 0 THEN R13047 = .;

         ***************************************************************************
         * Recode variables to one missing condition ".".
         * This also renames all the "Hyyxxx" to "Ryyxxx".
         ***************************************************************************;
         R13027 = H13027;  IF R13027 < 0 THEN R13027 = .;
         R13031 = H13031;  IF R13031 < 0 THEN R13031 = .;
         R13018 = H13018;  IF R13018 < 0 THEN R13018 = .;
         R13048 = H13048;  IF R13048 < 0 THEN R13048 = .;
         R13065 = H13065;  IF R13065 < 0 THEN R13065 = .;

         ***************************************************************************
         * Create region and service affiliation dummies.
         ***************************************************************************;
         IF XSERVREG NE . THEN DO;  /*JSO 08/24/2006, Changed 16 to 24*/ /*MER 11/03/2012, Changed 24
    to 30*/
             ARRAY REGDUMS (30) REG01 REG02 REG03 REG04 REG05 REG06
                                REG07 REG08 REG09 REG10 REG11 REG12
                                REG13 REG14 REG15 REG16 REG17 REG18
                                REG19 REG20 REG21 REG22 REG23 REG24
                                REG25 REG26 REG27 REG28 REG29 REG30;
             DO I = 1 TO 30;
                REGDUMS(I)=0;
             END;
             IF       XSERVREG= 1  THEN REG01  =1;
             ELSE IF  XSERVREG= 2  THEN REG02  =1;
             ELSE IF  XSERVREG= 3  THEN REG03  =1;
             ELSE IF  XSERVREG= 4  THEN REG04  =1;
             ELSE IF  XSERVREG= 5  THEN REG05  =1;
             ELSE IF  XSERVREG= 6  THEN REG06  =1;
             ELSE IF  XSERVREG= 7  THEN REG07  =1;
             ELSE IF  XSERVREG= 8  THEN REG08  =1;
             ELSE IF  XSERVREG= 9  THEN REG09  =1;
             ELSE IF  XSERVREG= 10 THEN REG10  =1;
             ELSE IF  XSERVREG= 11 THEN REG11  =1;
             ELSE IF  XSERVREG= 12 THEN REG12  =1;
             ELSE IF  XSERVREG= 13 THEN REG13  =1;
             ELSE IF  XSERVREG= 14 THEN REG14  =1;
             ELSE IF  XSERVREG= 15 THEN REG15  =1;
             ELSE IF  XSERVREG= 16 THEN REG16  =1;
             ELSE IF  XSERVREG= 17 THEN REG17  =1;
             ELSE IF  XSERVREG= 18 THEN REG18  =1;
             ELSE IF  XSERVREG= 19 THEN REG19  =1;
             ELSE IF  XSERVREG= 20 THEN REG20  =1;
             ELSE IF  XSERVREG= 21 THEN REG21  =1;
             ELSE IF  XSERVREG= 22 THEN REG22  =1;
             ELSE IF  XSERVREG= 23 THEN REG23  =1;
             ELSE IF  XSERVREG= 24 THEN REG24  =1;
             ELSE IF  XSERVREG= 25 THEN REG25  =1;
             ELSE IF  XSERVREG= 26 THEN REG26  =1;
             ELSE IF  XSERVREG= 27 THEN REG27  =1;
```

```
             ELSE IF  XSERVREG= 28 THEN REG28  =1;
             ELSE IF  XSERVREG= 29 THEN REG29  =1;
             ELSE IF  XSERVREG= 30 THEN REG30  =1;

             ARRAY SRVDUMS (5) SRV01 SRV02 SRV03 SRV04 SRV05; /*MER 11/03/2012 Changed from 4 to 5*/
             DO I = 1 TO 5;    /*Needed for consumer watch ONLY */
                SRVDUMS(I)=0;
             END;

             IF       XSERVAFF = 1 THEN SRV01 = 1;
             ELSE IF  XSERVAFF = 2 THEN SRV02 = 1;
             ELSE IF  XSERVAFF = 3 THEN SRV03 = 1;
             ELSE IF  XSERVAFF = 4 THEN SRV04 = 1;
             ELSE IF  XSERVAFF = 5 THEN SRV05 = 1;

          END;

      RUN;


      *****************************************************************************
      * Recode item responses to proportional values using CONVERT.SAS.
      *****************************************************************************;
      %INCLUDE "CONVERT.SAS";

      %CONT2(DSN=ENTIRE, NUM=4,  Y=R13018 R13048 R13027 R13031);
      %CONT3(DSN=ENTIRE, NUM=12, Y=R13007 R13010 R13029 R13033
                                   R13021 R13022 R13023 R13024
                                   R13041 R13042 R13046 R13047);

      *****************************************************************************
      * Sort the main file to reorder it by MPRID.
      *****************************************************************************;
      PROC SORT DATA=ENTIRE; BY MPRID; RUN;

      *****************************************************************************
      * Print the contents of ENTIRE dataset.
      *****************************************************************************;
      PROC CONTENTS DATA=ENTIRE;
         TITLE2 'Contents of ENTIRE';
      RUN;


      *****************************************************************************
      * Print some of the recoded records.
      *****************************************************************************;
      PROC PRINT DATA=ENTIRE(OBS=60);
         TITLE2 'Print of AGE and SEX dummies';
         VAR MPRID
             FIELDAGE   /*MJS 01/26/04*/
             XTNEXREG
             XSERVAFF
             XSERVREG
             USA
             ENBGSMPL
             XSEXA
             STRATUM    /*KRR 04/03/2006 Changed from ADJ_CELL*/
             XINS_COV
             NXNS_COV  /*JSO 04/26/2007, added for reservists logic*/
             DBENCAT   /*JSO 04/26/2007, added for reservists logic*/
             XENR_PCM
             &WGT.
           ;
      RUN;

      *****************************************************************************
      * Print some of the recoded records.
      *****************************************************************************;
      PROC PRINT DATA=ENTIRE(OBS=60);
         TITLE2 'Print of AGE and SEX dummies';
         VAR FIELDAGE   /*MJS 01/26/04*/
             AGE1824
             AGE2534
             AGE3544
```

```
              AGE4554
              AGE5564
              AGE6574
              AGE75UP

              XSEXA
              FEMALE

              ENBGSMPL
              XINS_COV
              NXNS_COV
              XENR_PCM
              XBNFGRP
              GROUP1
              GROUP2
              GROUP3
              GROUP4
              GROUP5
              GROUP6
              GROUP7
          ;
RUN;

PROC PRINT DATA=ENTIRE(OBS=60);
    TITLE2 'Print of recoded question variables';
    VAR H13007  R13007
        H13010  R13010
        H13021  R13021
        H13022  R13022
        H13023  R13023
        H13024  R13024
        H13029  R13029
        H13033  R13033
        H13041  R13041
        H13042  R13042
        H13046  R13046
        H13047  R13047
        H13018  R13018
        H13027  R13027
        H13031  R13031
        H13048  R13048
        H13065  R13065
        ;
RUN;


/*JSO 08/24/2006, Changed 16 to 24*/
/*MER 11/03/2012, Changed 24 to 30*/
PROC PRINT DATA=ENTIRE(OBS=60);
    TITLE2 'Print of recoded REGION variables';
    VAR XSERVREG
        REG01
        REG02
        REG03
        REG04
        REG05
        REG06
        REG07
        REG08
        REG09
        REG10
        REG11
        REG12
        REG13
        REG14
        REG15
        REG16
        REG17
        REG18
        REG19
        REG20
        REG21
        REG22
```

```
        REG23
        REG24
        REG25
        REG26
        REG27
        REG28
        REG29
        REG30;
RUN;

/*MER 11/03/2012 Changed 4 to 5*/
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded service affiliation variables';
   VAR XSERVREG
       XSERVAFF
       XOCONUS /*JSO 08/24/2006, Changed Overseas Regions*/
       SRV01
       SRV02
       SRV03
       SRV04
       SRV05
      ;
RUN;

****************************************************************************
* Create the 7 subgroups for processing by STEP2.SAS.
***************************************************************************;
DATA OUT.GROUP1
     OUT.GROUP2
     OUT.GROUP3
     OUT.GROUP4
     OUT.GROUP5
     OUT.GROUP6
     OUT.GROUP7
     OUT.GROUP8;

     SET ENTIRE;

     DROP
        H13007
        H13010
        H13021
        H13022
        H13023
        H13024
        H13029
        H13033
        H13041
        H13042
        H13046
        H13047
        H13018
        H13027
        H13031
        H13048
        H13065
         ;
      IF GROUP1 = 1 THEN OUTPUT OUT.GROUP1;
      IF GROUP2 = 1 THEN OUTPUT OUT.GROUP2;
      IF GROUP3 = 1 THEN OUTPUT OUT.GROUP3;
      IF GROUP4 = 1 THEN OUTPUT OUT.GROUP4;
      IF GROUP5 = 1 THEN OUTPUT OUT.GROUP5;
      IF GROUP6 = 1 THEN OUTPUT OUT.GROUP6;
      IF GROUP7 = 1 THEN OUTPUT OUT.GROUP7;
      OUTPUT OUT.GROUP8;
RUN;
```

G.1.B   Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\Convert.SAS - Convert Item Responses To Proportional Values.

```
****************************************************************************
*
* PROGRAM:  CONVERT.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (8687-330)
* PURPOSE:  CONVERT ITEM RESPONSES TO PROPORTIONAL VALUES FOR CONSISTENCY
*           WITH THE TOPS SURVEY.
* WRITTEN:  October 2000 BY ERIC SCHONE
*
* MODIFIED: October 2000 BY KEITH RATHBUN, Added PROLOG.  Also, added DSN
*           to argument lists.
*
* INPUTS:  1) User-specified SAS Dataset
*
* OUTPUTS: 1) User-specified SAS Dataset with recoded values
*
* NOTES:
*
* 1) Arguments for the CONT1-CONT3 macros are as follows:
*    a) SAS dataset name (dsn)
*    b) Number of variables to be converted (num)
*    c) List of variables to be converted (y)
* 2) These macros assume that the response items have already been
*    converted/recoded to CAHPS scales.
*
****************************************************************************
* CONT1 - Convert big problem, small problem, not a problem questions to
*         proportional values.
****************************************************************************;
%macro cont1(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i = 1 to &num;
      if vars(i) ne . and vars(i) ne 3 then vars(i) = 0;
      if vars(i) = 3 then vars(i) = 1;
   end;
run;
%mend cont1;


****************************************************************************
* CONT2 - Convert rating questions to proportional values.
****************************************************************************;
%macro cont2(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) < 8 then vars(i) = 0;
      if vars(i) in (8,9,10) then vars(i) = 1;
   end;
run;
%mend cont2;


****************************************************************************
* CONT3 - Convert Never, Sometimes, Usually, Always questions to
*         proportional values.
****************************************************************************;
%macro cont3(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) >= 2 then vars(i) = 2;
      vars(i) = vars(i) - 1;
   end;
run;
%mend cont3;
```

G.1.C Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\STEP2Q.SAS - Calculate CAHPS Adjusted Scores - Run Quarterly.

```
******************************************************************************
*
*  Project:  DoD - Quarterly Adult Report Cards
*  Program:  STEP2Q.SAS
*  Purpose:  Generate risk-adjusted CAHPS Scores for Adult Report Card.
*
*  Requires: Program STEP1Q.SAS must be run prior to running this program.
*
*  The adult report card contains a large number of risk-adjusted scores.
*  Some scores are calculated from responses to individual survey questions.
*  Composite scores are calculated by combining scores from individual
*  questions.  The scores then are compared with external civilian
*  benchmarks.  The programming tasks involved in building the report
*  card are:
*
*       1) Preparing data for analyses
*       2) Estimating risk adjustment models
*       3) Calculating risk-adjusted values and variances
*       4) Calculating benchmarks
*       5) Comparing risk-adjusted values to benchmarks
*          and hypothesis testing
*
*
*  Previous Program:  STEP1Q.SAS
*
*  Modified: 1) 04/10/02 By Mike Scott, Updated variable names for 2002
*               survey.
*            2) 07/11/02 By Mike Scott, Changed R00077 to R04075, since
*               H02077 (health status) is back and was recoded to R04075
*               in STEP1Q.
*            3) 03/21/03 By Mike Scott, Updated variable names for 2003
*               survey.
*            4) 03/24/04 By Mike Scott, Updated for 2004 survey.
*            5) 09/24/2004 By Regina Gramss, Updated to use XTNEXREG instead of XREGION
*               and to update for Q3 2004 data.
*            6) 01/25/2005 By Regina Gramss, Changed codes to use XSERVREG instead of
*               XTNEXREG to include service affiliation.
*            7) 04/2005 By Regina Gramss, Updated field names from 2004 to 2005
*            8) 07/2005 By Regina Gramss, Updated for Q2 2005
*            9) 10/2005 By Regina Gramss, Updated for Q3 2005
*           10) 12/2005 By Regina Gramss, Updated for Q4 2005
*           11) March 21, 2006 by Keith Rathbun, updated variable names
*               for Q2 FY 2006.
*           12) 07/2006 By Justin Oh, Updated for Q3 FY 2006
*           13) Aug 24, 2006 by Justin Oh, changed overseas to 3 regions.
*               Regions have been changed from 16 categories to 24.
*           14) April 7, 2009 by Mike Rudacille, changed variable names to reflect
*               modifications to beneficiary reports necessary for V4
*           15) June 22, 2009 By Keith Rathbun, Change weight variable from
*               FWRWT_V4 back to FWRWT.
*           16) December 17, 2009 by Emma Ernst, updated Variables names for
*               Q1FY2010.
*           17) December 1, 2010 by Mike Rudacille, updated Variable names for Q1FY2011
*           18) December 10, 2011 by Mike Rudacille, updated Variable names for Q1FY2012
*           19) November 3, 2012 by Mike Rudacille, updated for handling of
*               Joint Service facilities
*           20) December 27, 2012 by Aimee Valenzuela, updated variable names for Q1FY2013
*
******************************************************************************;
OPTIONS NOCENTER LS=132 PS=79 SOURCE NOOVP COMPRESS=YES;
LIBNAME IN1     "DATA";
LIBNAME OUT     "DATA";
LIBNAME OUT2    "DATA\ADULTTHATFILES";
LIBNAME LIBRARY "..\..\..\Data\Afinal\fmtlib";

/* RSG 02/2005 hard coded skelreg so data does not have to be copied from quarter to quarter*/
/* JSO 08/24/2006, Changed from 16 to 24 Regions */ /* MER 11/03/2012, Changed from 24 to 30
Regions */
```

```
                  DATA SKELREG (COMPRESS=NO);
                     INPUT XSERVREG;
                     DATALINES;
                        1
                        2
                        3
                        4
                        5
                        6
                        7
                        8
                        9
                        10
                        11
                        12
                        13
                        14
                        15
                        16
                        17
                        18
                        19
                        20
                        21
                        22
                        23
                        24
                        25
                        26
                        27
                        28
                        29
                        30
                  ;
                  RUN;


            *****************************************************************************
            *****************************************************************************
            * Set GLOBAL parameters here.
            *****************************************************************************
            *****************************************************************************;


            *****************************************************************************
            * Set the number of Dependent variables to process.
            * One does not need to start at 1, but the max must be >= min.
            *****************************************************************************;
            %LET MIN_VAR =  1;
            %LET MAX_VAR = 16;


            *****************************************************************************
            * Set the number of subgroups to process.
            *****************************************************************************;
            %LET MIN_GRP = 1;
            %LET MAX_GRP = 8;


            *****************************************************************************
            * These are expected to remain the same for a particular dependent
            * variable run.
            *****************************************************************************;
            %LET WGT      = FWRWT;
            %LET IND_VAR1 = R13065;
            %LET IND_VAR2 =  ;  * FEMALE;
            %LET IND_VAR3 =  ;  * SREDHIGH;
            %LET DEBUGFLG = 0;  * Set to 1 if you want extra printout;


            %LET TITL1 = Prime Enrollees;
            %LET TITL2 = Enrollees w/military PCM;
            %LET TITL3 = Enrollees w/civilian PCM;
            %LET TITL4 = Nonenrollees;
            %LET TITL5 = Active Duty;
            %LET TITL6 = Active Duty Dependents;
            %LET TITL7 = Retirees and Dependents;
```

```
%LET TITL8 = All Beneficiaries;


**************************************************************************
* GETTING NEEDED CARE.
**************************************************************************;
%LET DEPVAR1  = R13029;
%LET DEPVAR2  = R13033;


**************************************************************************
* GETTING NEEDED CARE QUICKLY.
**************************************************************************;
%LET DEPVAR3  = R13007;
%LET DEPVAR4  = R13010;


**************************************************************************
* HOW WELL DOCTORS COMMUNICATE.
**************************************************************************;
%LET DEPVAR5  = R13021;
%LET DEPVAR6  = R13022;
%LET DEPVAR7  = R13023;
%LET DEPVAR8  = R13024;


**************************************************************************
* CUSTOMER SERVICE.
**************************************************************************;
%LET DEPVAR9  = R13041;
%LET DEPVAR10 = R13042;


**************************************************************************
* CLAIMS PROCESSING.
**************************************************************************;
%LET DEPVAR11 = R13046;
%LET DEPVAR12 = R13047;


**************************************************************************
* RATING ALL HEALTH CARE: 0 - 10.
**************************************************************************;
%LET DEPVAR13 = R13018;


**************************************************************************
* RATING OF HEALTH PLAN: 0 - 10.
**************************************************************************;
%LET DEPVAR14 = R13048;


**************************************************************************
* RATING OF PERSONAL DR: 0 - 10.
**************************************************************************;
%LET DEPVAR15 = R13027;


**************************************************************************
* SPECIALITY CARE: 0 - 10.
**************************************************************************;
%LET DEPVAR16 = R13031;

%MACRO SCORE;
**************************************;
* use this macro for all groups;
* super region variables are to be used     ;
**************************************;
%PUT **************************************;
%PUT STARTING MACRO SCORE;
%PUT "GROUP    = " GROUP&IGRP;
%PUT "TITLE    = " &&DEPVAR&IVAR  &&TITL&IGRP;
%PUT "DEP_VAR  = " &&DEPVAR&IVAR;
%PUT "IND_VAR1 = " &IND_VAR1;
%PUT "IND_VAR2 = " &IND_VAR2;
%PUT "IND_VAR3 = " &IND_VAR3;
%PUT "WGT      = " &WGT;
%PUT **************************************;


*--------------------------------------------------;
* If the current group is 1 use the skeleton files;
```

```
* else used the previous groups output file;
* The mrgfile is added to by each subgroup;
*-------------------------------------------------;
%LET RMRGFILE = OUT.R_&&DEPVAR&IVAR;
%IF "&IGRP" = "1" %THEN %LET RMRGFILE = SKELREG;


* run regression using the region level variables;
* output a BETA file (1 record) and the subgroup;
* file with residuals attached (many records);
PROC REG DATA = GROUP&IGRP OUTEST=BETAS;
     TITLE2 "Regression Model for GROUP&igrp for regions";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
     WEIGHT &WGT;
     %INCLUDE 'REGRSREG.INC';
     OUTPUT OUT = OUT2.H&IGRP&&DEPVAR&IVAR(KEEP=MPRID &WGT TMP_CELL
                        PRED&IGRP RESID&IGRP XSERVREG &&DEPVAR&IVAR)
             P = PRED&IGRP
             R = RESID&IGRP;

RUN;


* print of HCSDB file with the residuals and predicted values;
%IF &DEBUGFLG > 0  %THEN %DO;
     PROC PRINT DATA=OUT2.H&IGRP&&DEPVAR&IVAR (OBS=70);
          TITLE2 "OUT2.H&IGRP&&DEPVAR&IVAR:  file with predicted values and the RESID&IGRP";
          TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
          VAR MPRID XSERVREG &&DEPVAR&IVAR RESID&IGRP PRED&IGRP;
     RUN;

     PROC PRINT DATA=BETAS;
          TITLE2 "BETAS:  file with coefficients";
          TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
     RUN;
%END;


*----------------------------------------;
*----- get the standard err/variance ----;
*----------------------------------------;
%LET DEP = &&DEPVAR&IVAR;
%R_SUDAAN(OUT2.H&IGRP&&DEPVAR&IVAR);



* calculate prelim adjusted scores for the risk-adjusters;
* merge adjuster means with the adjuster coefficients;
* then sum their products. Finally add in the intercept;
 DATA ADJUST;
    SET MEANFILE;
    IF _N_ = 1 THEN SET BETAS(DROP = _TYPE_);
    %INCLUDE 'RISKARRY.INC';
    %INCLUDE 'RISKMEAN.INC';
    DO I = 1 TO DIM(COEFFS);
       IF COEFFS(I) = . THEN COEFFS(I) = 0;
       IF MEANS(I) = .  THEN MEANS(I)  = 0;
       ADJUST + ( COEFFS(I) * MEANS(I) );
    END;
    ADJUST = ADJUST + INTERCEPT;
 RUN;


* add the region coefficients to the adjusted value from above;
* output one record per region with the region;
* level adjusted scores;
DATA COEFFREG(KEEP=XSERVREG NEWADJST);
    SET ADJUST;
    %INCLUDE 'REGARRAY.INC';
    LENGTH NAME $8;
    DO I=1 TO DIM(REGRHS);
       CALL VNAME(REGRHS(I),NAME);
       XSERVREG=INPUT(SUBSTR(NAME,4,2),2.);
       IF REGRHS(I) = . THEN REGRHS(I) = 0;
       NEWADJST=ADJUST + REGRHS(I);
```

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```
            OUTPUT;
        END;
RUN;


* sum of wgts for each region;
PROC MEANS DATA=GROUP&IGRP NWAY NOPRINT ;
  CLASS XSERVREG;
  VAR   &WGT;
  OUTPUT OUT=REG_WGTS (DROP = _TYPE_ _FREQ_ ) N=REGCNT&IGRP SUM=REGWGT&IGRP;
RUN;


* merge the COEFFREG file with the region;
* adjusted scores to the region level total weight;
* merge by the region.  Creates a region level;
* file with the total sample weight of the region;
DATA COEFFREG;
      MERGE COEFFREG(IN=IN1)
            REG_WGTS(IN=IN2   KEEP=XSERVREG REGCNT&IGRP REGWGT&IGRP);
      BY XSERVREG;
      IF IN1;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=MEANFILE;
        TITLE2 'Print of MEANFILE';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=ADJUST;
        TITLE2 'Print of ADJUST';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
        TITLE2 'Print of COEFFREG: Region Adjusted Scores';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=REG_WGTS;
        TITLE2 'Print of REG_WGTS: Region Area Sum of WGTS';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
        TITLE2 'Print of COEFFREG: Regions Adjusted Scores - with sum of wgts and region';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


* Calculate region level adjusted scores from the;
* region level adjusted scores in COEFFREG;
PROC MEANS DATA=COEFFREG NWAY NOPRINT;
  WEIGHT REGWGT&IGRP;
  CLASS  XSERVREG;
  VAR    NEWADJST;
  OUTPUT OUT=REGFILE1 (DROP = _TYPE_ _FREQ_) MEAN=ADJ&IGRP;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=REGFILE1;
        TITLE2 'Print of REGFILE1: Region Scores';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;

* merge the previous groups region results (if any);
* with the region level std errs and the region;
* level results from catchment results collapsed to region;
```

```
DATA OUT.R_&&DEPVAR&IVAR;
     MERGE &RMRGFILE(IN=INS)
           R&IGRP&&DEPVAR&IVAR
           REG_WGTS(KEEP = REGCNT&IGRP REGWGT&IGRP XSERVREG)
           REGFILE1(KEEP = ADJ&IGRP XSERVREG);
     BY XSERVREG;
     DEPENDNT = "&&DEPVAR&IVAR";
     IF INS;
RUN;

* merge the previous groups regional results (if any);
* with the region level std err and the region;
* level results from the current group/dependent var;
DATA OUT.R_&&DEPVAR&IVAR;
     MERGE OUT.R_&&DEPVAR&IVAR(IN=INS)
           R&IGRP&&DEPVAR&IVAR    /*KRR - removed perm dataset ref to OUT2 */
           REG_WGTS
           REGFILE1;
     BY XSERVREG;
     DEPENDNT = "&&DEPVAR&IVAR";
     IF INS;
RUN;

PROC PRINT DATA=OUT.R_&&DEPVAR&IVAR;
     TITLE2 "Print of XSERVREG variables in &&DEPVAR&IVAR";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
RUN;
%MEND SCORE;

%MACRO MAKE_INC;
***************************************;
* creates include files for later Procs;
* Needs to be run each time.  Called   ;
* in the outer (beneficiary loop).     ;
* I chose this method because it was   ;
* clearer(to me at least).            ;
* This macro needs to be run once per  ;
* Dep var per subgroup.               ;
***************************************;

* Drop records where the dependent var is missing;
* Drop records with missing catchment or region values;
  DATA GROUP&IGRP;
       SET IN1.GROUP&IGRP;
       IF &&DEPVAR&IVAR NOT = .;
  RUN;

 DATA _NULL_;
     SET GROUP&IGRP END = EOF;
     IF &&DEPVAR&IVAR NOT = .;

     ARRAY AGECNT(7) 8 aCNT1 - aCNT7;
     RETAIN AGECNT 0;
     RETAIN CNT 0;
     ARRAY AGENAM(7)  $8 AGENAM1 - AGENAM7;
     ARRAY AGENAMX(7) $8 AGENAMX1 - AGENAMX7;
     RETAIN AGENAM;
     RETAIN AGENAMX;
     ARRAY REGCNT(30)  8 REGCNT01- REGCNT30; /*JSO 08/24/2006, Changed from 16 to 24*/
                                             /*MER 11/03/2012, Changed from 24 to 30*/
     RETAIN CATCNT 0;
     RETAIN REGCNT 0;

     * create a name array for the parent age dummies;
     IF _N_ = 1 THEN DO;
        AGENAM(1) = "AGE1824";
        AGENAM(2) = "AGE2534";
        AGENAM(3) = "AGE3544";
        AGENAM(4) = "AGE4554";
        AGENAM(5) = "AGE5564";
        AGENAM(6) = "AGE6574";
        AGENAM(7) = "AGE75UP";
      END;
```

```
      * total record count;
      CNT + 1;

      * count records in each age group;
      * we will use only age groups with more;
      * than 2 obs;
      IF AGE1824  = 1 THEN AGECNT(1) + 1;
      IF AGE2534  = 1 THEN AGECNT(2) + 1;
      IF AGE3544  = 1 THEN AGECNT(3) + 1;
      IF AGE4554  = 1 THEN AGECNT(4) + 1;
      IF AGE5564  = 1 THEN AGECNT(5) + 1;
      IF AGE6574  = 1 THEN AGECNT(6) + 1;
      IF AGE75UP  = 1 THEN AGECNT(7) + 1;

      * count records in each XSERVREG group;
      * we will only use XSERVREGs with more than than 2 obs;
      * I am using the region value as the subscript;
      * to make the code simpler and more readable;
      IF 1<= XSERVREG <=30  THEN DO; /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24
to 30*/
          REGCNT(XSERVREG) = REGCNT(XSERVREG) + 1;
      END;

      IF EOF THEN GOTO ENDFILE;
      RETURN;

ENDFILE:
      * create a title common to all procs in the current group;
      TITLE  " &&DEPVAR&IVAR  &&TITL&IGRP";

      * display counts in the log;
      %IF &DEBUGFLG > 0  %THEN %DO;
          PUT ' ';
          PUT 'AT EOF:';
          PUT "TOTAL CNT = "     CNT;
          PUT AGENAM(1) "  " AGECNT(1)=;
          PUT AGENAM(2) "  " AGECNT(2)=;
          PUT AGENAM(3) "  " AGECNT(3)=;
          PUT AGENAM(4) "  " AGECNT(4)=;
          PUT AGENAM(5) "  " AGECNT(5)=;
          PUT AGENAM(6) "  " AGECNT(6)=;
          PUT AGENAM(7) "  " AGECNT(7)=;
          PUT " ";

          DO I = 1 TO 30;  /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to 30*/
             IF(REGCNT(I) > 0) THEN DO;
                 PUT  'REG' I Z2. REGCNT(I) 6.;
             END;
          END;
          PUT ' ';


       %END;    *** of debug test;

      *----------------------------------------------------------;
      * This include is for the regression using regions;
      * in this case we drop the last XSERVREG;
      FILE 'REGRSREG.INC';
      PUT @6  "MODEL  &&DEPVAR&IVAR = ";
      IF "&IND_VAR1" NE "" THEN PUT @12 "&IND_VAR1"; /* KRR - only output when present */
      IF "&IND_VAR2" NE "" THEN PUT @12 "&IND_VAR2"; /* KRR - only output when present */
      IF "&IND_VAR3" NE "" THEN PUT @12 "&IND_VAR3"; /* KRR - only output when present */

      CNT2 = 0;
      * setup an array of those age groups that have > 1 obs;
      DO I = 1 TO 7;
         IF AGECNT(I) > 1 THEN DO;
             CNT2 + 1;
             AGENAMX(CNT2) = AGENAM(I);
         END;
      END;
```

```
* now drop the last category to create;
* an omitted category which is required;
* to solve the regression properly;
DO I = 1 TO CNT2-1;
    PUT @12 AGENAMX(I);
END;


* ditto for the catchment areas with > 0 obs;
* in this case we drop the the first USABLE category;
* this is not consistent with the catchment area code;
* but this is the method that Portia used;
FIRST = 0;         /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to 30*/
DO I = 1 TO 30;    * skip the 1st region with 1+ obs;
    IF REGCNT(I) > 0 THEN DO;
        IF FIRST = 1 THEN PUT @12 'REG' I Z2.;
        FIRST = 1;
    END;
END;
PUT @11 ';';


*----------------------------------------------------------;
* now create the complete var statement;
* for the Proc MEANS used to replace the;
* independent variables missing values;
* we assume the age groups will always be used;
* These are also called the RISK FACTORS;
FILE 'RISKVARS.INC';
PUT @10  "VAR";
DO I = 1 TO CNT2;
    PUT @12 AGENAMX(I);
END;

* not all the other dependent variables will be used;
* only write them out if they are not null;
CNT3 = 0;
IF "&IND_VAR1" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR1";
END;

IF "&IND_VAR2" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR2";
END;

IF "&IND_VAR3" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR3";
END;
PUT @11 ';';


*----------------------------------------------------------;
* create an ARRAY statement of the desired risk factors;
* called adjusters in the specs and in the code;
FILE 'RISKARRY.INC';
PUT @10  "ARRAY COEFFS(*) $8";
DO I = 1 TO CNT2;
    PUT @12 AGENAMX(I);
END;

CNT3 = 0;
IF "&IND_VAR1" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR1";
END;

IF "&IND_VAR2" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR2";
END;
```

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```
        IF "&IND_VAR3" NE "" THEN DO;
            CNT3 + 1;
            PUT @12 "&IND_VAR3";
        END;
        PUT @11 ';';


        *-----------------------------------------------------------;
        * create an ARRAY of mean names for the output;
        * from a proc MEANS of the Risk Factors in RISKARRY;
        FILE 'RISKMEAN.INC';
        IND_CNT = CNT2 + CNT3;
        PUT @6 "ARRAY MEANS(*) $8";
        DO I = 1 TO IND_CNT;
            PUT @12 "MEAN" I Z2.;
        END;
        PUT @11 ';';

*   -----------------------------------------------------------;
*   create the equivalent of the following statement;
*   OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN=MEAN1-MEAN&MEAN_CNT;
        FILE 'MEANFILE.INC';
        PUT @6 "OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN = ";
        DO I = 1 TO IND_CNT;
            PUT @12 "MEAN" I Z2.;
        END;
        PUT @11 ';';


        *-----------------------------------------------------------;
        * create a super region area array;
        * with at least ONE obs;
        FILE 'REGARRAY.INC';
        PUT @10  "ARRAY REGRHS(*) $8";
        DO I = 1 TO 30;                /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to
30*/
            IF REGCNT(I) > 0 THEN DO; *** ems 7/12/00 changed "> 1" to "> 0";
                PUT  @16 'REG' I Z2.;
            END;
        END;
        PUT @11 ';';
 RUN;

 * Create the means of the adjuster variables;
 * They will be used to replace missing adjuster variables;
 * calculate weighted means;
 PROC MEANS DATA=GROUP&IGRP;
    WEIGHT &WGT;
    %INCLUDE 'RISKVARS.INC';
    %INCLUDE 'MEANFILE.INC';
 RUN;



%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=MEANFILE;
        TITLE2 "Print of MEANFILE for Risk Adjuster variables";
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;

DATA GROUP&IGRP;
     SET GROUP&IGRP;
     IF _N_ = 1 THEN SET MEANFILE;
     %INCLUDE 'RISKARRY.INC';
     %INCLUDE 'RISKMEAN.INC';
     DO I = 1 TO DIM(COEFFS);
        IF COEFFS(I) = . THEN DO;
            COEFFS(I) = MEANS(I);
        END;
     END;
RUN;
/* PROC MEANS DATA=out.group8;
    WEIGHT &WGT;
```

```
   %INCLUDE 'RISKVARS.INC';
   %INCLUDE 'MEANFILE.INC';
 RUN;*/
%MEND MAKE_INC;


%MACRO R_SUDAAN(INFILE);
*****************************************************
* Use this macro to create standard err (variances)
* for XSERVREGs.
****************************************************;
%PUT **************************************;
%PUT STARTING MACRO R_SUDAAN (XSERVREG);
%PUT **************************************;

DATA &INFILE;
   SET &INFILE;
   IF 1<= XSERVREG <= 30;  /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to 30*/
RUN;


* Sort data by TMP_CELL;
PROC SORT DATA=&INFILE;
   BY TMP_CELL;
RUN;

%IF &DEBUGFLG > 5  %THEN %DO;
   PROC PRINT DATA=&INFILE(OBS=5);
        TITLE2 'Print of the input file to SUDAAN (XSERVREG)';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;


* Calculate values for super regions;
PROC DESCRIPT DATA=&INFILE DESIGN=STRWR NOPRINT;
   WEIGHT &WGT;
   SETENV DECWIDTH=4;
   NEST TMP_CELL / missunit;
   VAR RESID&IGRP;
   TABLES XSERVREG;
   SUBGROUP XSERVREG;
   LEVELS 30;   /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to 30*/
   OUTPUT  SEMEAN
         / REPLACE TABLECELL=DEFAULT
           FILENAME=RS&DEP;
   RUN;

   DATA R&IGRP&&DEPVAR&IVAR;
        SET RS&DEP;
        KEEP XSERVREG SEMEAN;
        IF SEMEAN NE .;
        RENAME SEMEAN = SEMEAN&IGRP;
   RUN;


   PROC PRINT DATA=R&IGRP&&DEPVAR&IVAR;
      TITLE2 "Print XSERVREG DESCRIPT DATA=R&IGRP&&DEPVAR&IVAR";
      TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;

%MEND  R_SUDAAN;


%*********************************;
%*  call the macros;
%*********************************;

%MACRO MAINLOOP(MIN_VAR,MAX_VAR,MIN_GRP,MAX_GRP);
    %* loop over the set of dependent variables;
       %DO IVAR = &MIN_VAR %TO &MAX_VAR;
          %DO IGRP = &MIN_GRP %TO &MAX_GRP;
              %MAKE_INC;
              %SCORE;
```

```
        %END;
      %END;

%MEND;

%MAINLOOP(&MIN_VAR,&MAX_VAR,&MIN_GRP,&MAX_GRP);
```

G.1.D Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\REGRSREG.INC - Include file1 in step2q.sas.

```
MODEL  R13031 =
    R13065
    AGE1824
    AGE2534
    AGE3544
    AGE4554
    REG02
    REG03
    REG04
    REG05
    REG06
    REG07
    REG08
    REG09
    REG11
    REG12
    REG13
    REG14
    REG16
    REG17
    REG18
    REG19
    REG21
    REG22
    REG23
    REG24
    REG26
    REG28
    REG29
    ;
```

G.1.E   Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\RISKARRY.INC - Include file2 in step2q.sas.

```
ARRAY COEFFS(*) $8
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R13065
 ;
```

G.1.F   Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\RISKMEAN.INC - Include file3 in step2q.sas.

```
ARRAY MEANS(*) $8
        MEAN01
        MEAN02
        MEAN03
        MEAN04
        MEAN05
        MEAN06
      ;
```

G.1.G   Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\REGARRAY.INC - Include file4 in step2q.sas.

```
ARRAY REGRHS(*) $8
        REG01
        REG02
        REG03
        REG04
        REG05
        REG06
        REG07
        REG08
        REG09
        REG11
        REG12
        REG13
        REG14
        REG16
        REG17
        REG18
        REG19
        REG21
        REG22
        REG23
        REG24
        REG26
        REG28
        REG29
    ;
```

G.1.H   Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\RISKVARS.INC - Include file5 in step2q.sas.

```
VAR
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R13065
;
```

G.1.I   Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\MEANFILE.INC - Include file6 in step2q.sas.

```
OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN =
        MEAN01
        MEAN02
        MEAN03
        MEAN04
        MEAN05
        MEAN06
    ;
```

G.1.J   Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\COMPOSIT.SAS - Calculate CAHPS Composite Scores - Run Quarterly.

```
******************************************************************************
* Project:  DoD - Quarterly Adult Report Cards
* Program:  COMPOSIT.SAS
* Purpose:  Generate Quarterly Adult Report Card composite scores
* Requires: Programs STEP1Q.SAS and STEP2Q.SAS must be run prior
*           to this program.
*
* Modified: 1) 02/27/2001 By Keith Rathbun, Small changes to input DSNs to
*              accommodate the move of ALLSCORE.SAS functionality into the
*              STEP2Q.SAS program.
*           2) 01/08/2002 By Daniele Beahm, Changed versions in libname statements
*              so program can be run with SAS v8 and still produce SAS v612 datasets.
*           3) 04/10/2002 By Mike Scott, Updated variable names for 2002
*              survey.
*           4) 03/21/2003 By Mike Scott, Updated variable names for 2003
*              survey.
*           5) 03/24/2004 By Mike Scott, Updated for 2004.
*           6) 06/15/2004 By Regina Gramss, Update for Q2, added in
*              codes to compensate for any negative trend and to
*              print out the number of nonmissing data producing the
*              negative trend - those equal to or more than 30 nonmissing
*              data need to be further evaluated.
*           7) 09/2004 By Regina Gramss, Update for Q3, added in codes to
*              use XTNEXREG field instead of XREGION.
*           8) 01/2005 By Regina Gramss, Changed codes to use XSERVREG instead of
*              XTNEXREG, to incorporate service affliliation.
*           9) 04/2005 By Regina Gramss, Updated field names from 2004 to 2005.
*          10) 01/31/2006 By Regina Gramss, deleted following lines for "data r_&var1":
*              "%if &i~=8 %then %do" (keep set statement then delete the following:)
*              "%end
*               %else %do
*               set in2.h5&var1(rename=(resid5=r_&var1)) in2.h6&var1(rename=(resid6=r_&var1))
in2.h7&var1(rename=(resid7=r_&var1))
*               %end"
*          11) 03/21/2006 By Keith Rathbun, Updated variable names for 2003
*              survey.
*          12) 04/30/2008 By Justin Oh, Added Eric's upcase command to _name_ on line 204
*          13) April 7, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          14) June 22, 2009 By Keith Rathbun, Change weight variable from
*              FWRWT_V4 back to FWRWT.
*          15) December 17, 2009 By Emma Ernst, updated variable names for Q1FY2010
*          16) December 1, 2010 By Mike Rudacille, updated variable names for Q1FY2011
*          17) December 27, 2012 By Aimee Valenzuela, updated variable names for Q1FY2013
*
******************************************************************************;
OPTIONS NOCENTER LS=132 PS=78 SOURCE SOURCE2 MLOGIC MPRINT NOOVP COMPRESS=YES NOFMTERR;
libname in      "data";
libname in2     "data\adulthatfiles";
libname out     "data";
LIBNAME LIBRARY "..\..\..\DATA\AFINAL\FMTLIB";

%LET WGT = FWRWT;

 %MACRO COMPOSIT (TYPE=,COMPOS=,VAR1=,VAR2=,VAR3=,VAR4=,QCOUNT=);

  DATA _NULL_;
   %IF "&TYPE" = "R" %THEN %DO;
       CALL SYMPUT ('BYVAR','XSERVREG');
   %END; %ELSE
   %IF "&TYPE" = "C" %THEN %DO;
       CALL SYMPUT ('BYVAR','CACSMPL');
   %END;

 **************************************;
 *    Create a Composite Score        ;
 **************************************;
 DATA _NULL_;
     FILE 'FILES.INC';
```

```
          PUT @6 'SET';
          IF "&VAR1" NE '' THEN PUT @8 "IN.&TYPE._&VAR1";
          IF "&VAR2" NE '' THEN PUT @8 "IN.&TYPE._&VAR2";
          IF "&VAR3" NE '' THEN PUT @8 "IN.&TYPE._&VAR3";
          IF "&VAR4" NE '' THEN PUT @8 "IN.&TYPE._&VAR4";
          PUT @8 ';';
RUN;


DATA COMPOS&COMPOS;
     LENGTH DEPENDNT $ 8;
     %INCLUDE 'FILES.INC';
     DEPENDNT = "&TYPE.COMPOS&COMPOS";
RUN;

PROC SORT DATA=COMPOS&COMPOS;
     BY &BYVAR;
RUN;

PROC PRINT DATA=COMPOS&COMPOS(OBS=60);
     TITLE "Print of COMPOS&COMPOS after sort";
RUN;

DATA COMPOS&COMPOS;
     SET COMPOS&COMPOS;
     BY &BYVAR;
  %IF "&TYPE" = "R" %THEN %DO;
     ARRAY N(*) REGCNT1 - REGCNT8;
     ARRAY W(*) REGWGT1 - REGWGT8;
     ARRAY TN(*) TOTCNT1 - TOTCNT8;
     ARRAY TW(*) TOTWGT1 - TOTWGT8;
  %END; %ELSE
  %IF "&TYPE" = "C" %THEN %DO;
     ARRAY N(*) CATCNT1 - CATCNT8;
     ARRAY W(*) CATWGT1 - CATWGT8;
     ARRAY TN(*) TOTCNT1 - TOTCNT8;
     ARRAY TW(*) TOTWGT1 - TOTWGT8;
  %END;
     ARRAY ADJ(*)    ADJ1 - ADJ8;
     ARRAY TOTADJ(*) TOTADJ1 - TOTADJ8;
     ARRAY AVGADJ(*) AVJADJ1 - AVJADJ8;
     RETAIN TOTADJ TN TW;
     RETAIN AVGADJ;

     IF FIRST.&BYVAR THEN DO;
        DO I = 1 TO DIM(TOTADJ);
           TOTADJ(I) = 0; TN(I)=0; TW(I)=0;
        END;
     END; DROP I;

     PUT ' ';
     PUT ' --- STARTING LOOP1: ' &BYVAR=;
     DO I = 1 TO DIM(TOTADJ);
        PUT I= ADJ(I)=;
        IF ADJ(I) NE . THEN DO;
           TOTADJ(I) = TOTADJ(I) + ADJ(I);
           TN(I)=TN(I)+N(I);
           TW(I)=TW(I)+W(I);
        END;
        PUT I= ADJ(I)= TOTADJ(I)=;
     END;


     PUT ' ';
     PUT ' --- STARTING LOOP2: ' &BYVAR=;
     IF LAST.&BYVAR THEN DO;
        DO I = 1 TO DIM(TOTADJ);
           PUT I= ADJ(I)= TOTADJ(I)= AVGADJ(I)=;
           AVGADJ(I) = TOTADJ(I)/&QCOUNT;
           adj(i)=avgadj(i);
           N(I)=TN(I)/&QCOUNT;
           W(I)=TW(I)/&QCOUNT;
        END;
```

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```
         OUTPUT;
      END;

  RUN;


%do i=1 %to 8;
/* Collect Standard Errors and residuals from variables in composite */
%if &type=R|(&i=1|&i=2|&i>4) %then %do;
%if &var1~= %then %do;
%let n=r_&var1;
%let m=s_&var1;

data s_&var1(rename=(semean&i=s_&var1));
set in.&type._&var1(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var1;
set in2.h&i.&var1(rename=(resid&i=r_&var1));
proc sort data=r_&var1; by mprid;
%end;
%if &var2~= %then %do;
%let n=%str(&n r_&var2);
%let m=%str(&m s_&var2);
data s_&var2(rename=(semean&i=s_&var2));
set in.&type._&var2(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var2;
set in2.h&i.&var2(rename=(resid&i=r_&var2));
proc sort data=r_&var2; by mprid;
%end;
%if &var3~= %then %do;
%let n=%str(&n r_&var3);
data s_&var3(rename=(semean&i=s_&var3));
set in.&type._&var3(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var3;
set in2.h&i.&var3(rename=(resid&i=r_&var3));
proc sort data=r_&var3; by mprid;
%let m=%str(&m s_&var3); %end;

%if &var4~= %then %do;
%let n=%str(&n r_&var4);
data s_&var4(rename=(semean&i=s_&var4));
set in.&type._&var4(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var4;
set in2.h&i.&var4(rename=(resid&i=r_&var4));
%let m=%str(&m s_&var4);
proc sort data=r_&var4; by mprid;
%end;
/* Merge residual files and estimate correlations */
data infile;
merge &n; by mprid;
proc sort; by &byvar;
proc corr  outp=outf noprint;
by &byvar;
var &n;
weight &WGT.;
data outf;
set outf; by &byvar;
where _type_='CORR';
/*  sum standard error of a row variable times correlation times standard error of each column
variable, then sum sums and take square root, divide by number of variables */
data final;
merge &m outf; by &byvar;
data final;
set final; by &byvar;
array r_val &n;
array s_val &m;
sde=0;
do i=1 to dim(s_val);
%do j=1 %to &qcount;
if upcase(_name_)=upcase("R_&&var&j") then
sde=sum(sde,r_val(i)*s_&&var&j*s_val(i));
```

```
%end;
end;
data sefin&compos._&i ERROR;
set final;
by &byvar;
if first.&byvar then tv=0;
 tv+sde;
if last.&byvar then do;
 if tv >= 0 then sde&i=(tv**.5)/&qcount; /* RSG 06/22/2004 change to only do the power
calculation if the tv value is nonnegative*/
 else if tv < 0 then do;   /* RSG 06/22/2004 those with negative trend is set aside to print
out*/
       output error;         /*                    and determine whether it is from nonmissing
data of 30 or more*/
       sde&i=.;
 end;
 output sefin&compos._&i;
end;

run;
/* RSG 06/22/2004 - count how many nonmissing values are in the trend data
       to determine whether the negative trend in above datastep
       (tv < 0) is something to be concerned about */
proc means data=infile noprint;
by &byvar;
var &n;
output out=miss (drop=_type_ _freq_) n=;
data error2;
merge error(in=a drop=&n) miss(in=b);
by &byvar;
if a;
run;
proc print data=error2; /* RSG 06/22/2004  print out negative trend data and count of nonmissing
data*/
var &byvar tv &n;
title "ERROR - NEGAVTIVE TREND FOR &N IN GROUP=&I. AND COMPOSE=&COMPOS.";
run;
title ' '; /** RSG 06/22/2004 - BLANK OUT TITLE FOR NEXT LOOP **/

%if &i=1 %then %do;
data sefin&compos;
set sefin&compos._1(keep=&byvar sde&i); by &byvar;
rename sde&i=semean&i;
run;
%end;
%else %do;
data sefin&compos;
merge sefin&compos sefin&compos._&i(keep=&byvar sde&i); by &byvar;
rename sde&i=semean&i;
run;
%end;


%end;
%end;

data out.&type.compos&compos;
merge compos&compos sefin&compos; by &byvar;
run;
PROC PRINT DATA=OUT.&TYPE.COMPOS&COMPOS;
     TITLE1 COMPTITL;
 RUN;
%MEND COMPOSIT;

*------------------------------------;
*-        set the parameters here        -;
*------------------------------------;
**********************************;
* Call the macro for each composite ;
**********************************;
%COMPOSIT (type=R,compos=1,var1=R13029,var2=R13033,qcount=2);
%COMPOSIT (type=R,compos=2,var1=R13007,var2=R13010,qcount=2);
%COMPOSIT (type=R,compos=3,var1=R13021,var2=R13022,var3=R13023,var4=R13024,qcount=4);
```

```
%COMPOSIT (type=R,compos=4,var1=R13041,var2=R13042,qcount=2);
%COMPOSIT (type=R,compos=5,var1=R13046,var2=R13047,qcount=2);
```

G.1.K Q3FY2013\PROGRAMS\ReportCards\CAHPS_AdultQ3FY2013\FILES.INC - Include file in composit.sas.

```
SET
  IN.R_R13046
  IN.R_R13047
  ;
```

G.2.A   Q3FY2013\PROGRAMS\LOADWEB\CAHPS_AdultQ3FY2013\LOADCAHQ.SAS - Convert CAHPS Scores into WEB layout - Run Quarterly.

```
*****************************************************************************
*
* PROGRAM:  LOADCAHQ.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Convert the CAHPS Scores Database into the WEB layout
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.SAS.
*
* INPUTS:   1) CAHPS Individual and Composite data sets with adjusted scores
*
* OUTPUT:   1) LOADCAHQ.sas7bdat - Combined CAHPS Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1Q.SAS - Recode questions and generate group files
*    - STEP2Q.SAS - Calculate individual adjusted scores for group 1-7
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*
* 2) The output file (LOADCAHQ.sas7bdat) will be run through the
*    MAKEHTMQ.SAS program to generate the WEB pages.
*
* MODIFIED:
*
*  1) 04/10/2002 BY MIKE SCOTT, Updated variable names for 2002 survey.
*  2) 03/21/2003 BY MIKE SCOTT, Updated variable names for 2003 survey.
*  3) 06/25/2003 BY MIKE SCOTT, Updated for Q2 2003.
*  4) 07/03/2003 BY MIKE SCOTT, Added TIMEPD variable to be set to the period
*     or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*     setting to 'Composite'.
*  5) 10/21/2003 BY MIKE SCOTT, Updated for Q3 2003.
*  6) 01/07/2004 BY MIKE SCOTT, Updated for Q4 2003.
*  7) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*  8) 06/15/2004 BY REGINA GRAMSS, Updated for q2 2004.
*  9) 09/2004 BY REGINA GRAMSS, Updated for Q3 2004, changed all reference
*     to XREGION to XTNEXREG.
* 10) 01/2005 BY REGINA GRAMSS, Changed XTNEXREG to XSERVREG to include
*     service affiliation into regions.
* 11) 04/2005 BY REGINA GRAMSS, Updated 2004 field names for 2005.
* 12) 07/2005 BY REGINA GRAMSS, updated for Q2 2005.
* 13) 10/2005 BY REGINA GRAMSS, Updated for Q3 2005
* 14) 12/2005 BY REGINA GRAMSS, Updated for Q4 2005
* 15) 03/21/2006 BY KEITH RATHBUN, Updated variable names for 2006 survey.
* 16) 07/12/2006 by Justin Oh, updated for Q3 FY 2006
* 17) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3
*     Changed Libname IN for Q4FY2006.
* 18) 12/15/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q4
*     Changed Libname IN for Q1FY2007.
* 19) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1
*     Changed Libname IN for Q2FY2007.
* 20) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*     ReportCards OR PurchasedReportCards.
* 21) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3
*     Changed Libname IN for Q4FY2007.
* 22) 01/10/2008 BY KEITH RATHBUN, Updated variable names for 2008 survey.
* 23) 04/11/2008 by Justin Oh - Updated BENTYPE composite year to 2008 Q1
*     Changed Libname IN for Q2FY2008.
* 24) 06/13/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q2
*     Changed Libname IN for Q3FY2008.
* 25) 09/29/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q3
*     Changed Libname IN for Q4FY2008.
* 26) 04/11/2009 by Mike Rudacille - Changed variable names to reflect
*     modifications to beneficiary reports necessary for V4
* 27) 06/22/2009 by Keith Rathbun - Updated BENTYPE composite year to 2009 Q2
*     Changed Libname IN for Q3FY2009.
* 28) 09/30/2009 by Mike Rudacille - Updated BENTYPE composite year to 2009 Q3
```

```
*        Changed Libname IN for Q4FY2009.
* 29) 10/17/2009 by Emma Ernst- Updated variables for Q12010
*         Changed Libname IN for Q1FY2010.
* 30) 03/02/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q1
*        Changed Libname IN for Q2FY2010.
* 31) 06/19/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q2
*        Changed Libname IN for Q3FY2010.
* 32) 08/28/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q3
*        Changed Libname IN for Q4FY2010.
* 33) 12/01/2010 by Mike Rudacille - Updated variables for Q12011
*        Updated BENTYPE composite year to 2010 Q4
*        Changed Libname IN for Q1FY2011.
* 34) 02/24/2010 by Mike Rudacille - Updated BENTYPE composite year to 2011 Q1
*        Changed Libname IN for Q2FY2011.
* 35) 12/10/2011 by Mike Rudacille - Updated variables for Q12012
*        Updated BENTYPE composite year to 2011 Q4
*        Changed Libname IN for Q1FY2012
* 36) 3/5/2012 by Amanda Kudis - Changed libname IN and Year Marco Var for Q2.
* 37) 6/20/2012 by Amanda Kuis - Updated for Q3FY2012.
* 38) 8/23/2012 by Christine Cheu - Updated for Q4FY2012.
* 39) 12/27/2012 by Aimee Valenzuela - Updated for Q1FY2013.
* 40) 03/23/2013 by Mike Rudacille - Updated for Q2FY2013.
*
******************************************************************************
* Assign data libraries and options
******************************************************************************;
/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards            ***/
%LET RCTYPE = ReportCards;

LIBNAME IN    "..\..\&RCTYPE\CAHPS_ADULTQ3FY2013\DATA";
LIBNAME OUT  "DATA";
LIBNAME LIBRARY    "..\..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

******************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
******************************************************************************;
%INCLUDE "..\LOADCAHQ.INC";

******************************************************************************
******************************************************************************
*
* Process Macro Input Parameters:
*
* 1) QUESTION = Variable Question Name (DSN).
*    - For individual Questions it is the variable name
*    - For composite Questions it is called xCOMPOSn
*      where n = a predefined composite # and
*            x = R (Region) or C (Catchment)
* 2) TYPE = Type of Score (COMPOSITE or INDIVIDUAL)
* 3) REGCAT = Region/Catchment Area
*
******************************************************************************
******************************************************************************;
%MACRO PROCESS(QUESTION=,TYPE=);
******************************************************************************
* Assign value for BENTYPE composite year
******************************************************************************;
%LET YEAR = "2013 Q2"; * Note that this is based on Calendar Year here;

******************************************************************************
* Assign prefix for weighted/unweighted count variables.
* Unweighted counts is REGCNTn where n=group number.
* Weighted counts is REGWGTn where n=group number.
******************************************************************************;
%LET PREFIX = REG;

******************************************************************************
*
* Convert the CAHPS individual Scores Record into WEB layout.
* There are 8 logical records (adjusted scores) per physical record
*
```

```
******************************************************************************;
DATA &QUESTION;
   SET IN.&QUESTION;

   LENGTH MAJGRP  $30;
   LENGTH REGION  $30; **RSG 01/2005 - Changed format to be large enough to include service
affiliation;
   LENGTH REGCAT  $30; **MER 11/07/2012 - Changed REGION and REGCAT to be large enough for Joint
Services;
   LENGTH BENTYPE $50;
   LENGTH BENEFIT $34;
   LENGTH TIMEPD  $35; **MJS 07/03/03 Added line;

   **********************************************************************
   * Assign Region
   **********************************************************************;
   REGION  = PUT(XSERVREG,SERVREGF.);
   **********************************************************************
   * Assign benefit and benefit type
   **********************************************************************;
   IF "&TYPE" = "INDIVIDUAL" THEN DO;
      IF DEPENDNT IN("R13018","R13048","R13027","R13031") THEN
         BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
      ELSE
         BENTYPE = PUT(DEPENDNT,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
      TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added line;
   END;
   ELSE IF "&TYPE" = "COMPOSITE" THEN DO;
      BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
      TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added line;
   END;
   ELSE PUT "ERROR - Invalid TYPE = &TYPE";

   **********************************************************************
   * For now, Initialize Significance test to zero.
   **********************************************************************;
   SIG = 0;
   **********************************************************************
   * Assign Region
   **********************************************************************;
   REGCAT = PUT(XSERVREG,SERVREGF.);

   **********************************************************************
   * 1 = Prime Enrollees
   **********************************************************************;
   MAJGRP = PUT(1,MAJGRPF.);
   SCORE = ADJ1;
   SEMEAN = SEMEAN1;
   N_OBS = &PREFIX.CNT1;
   N_WGT = &PREFIX.WGT1;
   OUTPUT;

   **********************************************************************
   * 2 = Enrollees with Military PCM
   **********************************************************************;
   MAJGRP = PUT(2,MAJGRPF.);
   SCORE = ADJ2;
   SEMEAN = SEMEAN2;
   N_OBS = &PREFIX.CNT2;
   N_WGT = &PREFIX.WGT2;
   OUTPUT;

   **********************************************************************
   * 3 = Enrollees with Civilian PCM
   **********************************************************************;
   MAJGRP = PUT(3,MAJGRPF.);
   SCORE = ADJ3;
   SEMEAN = SEMEAN3;
   N_OBS = &PREFIX.CNT3;
   N_WGT = &PREFIX.WGT3;
   OUTPUT;
```

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```
      *********************************************************************
      * 4 = Non-enrolled Beneficiaries
      *********************************************************************;
      MAJGRP = PUT(4,MAJGRPF.);
      SCORE = ADJ4;
      SEMEAN = SEMEAN4;
      N_OBS = &PREFIX.CNT4;
      N_WGT = &PREFIX.WGT4;
      OUTPUT;

      *********************************************************************
      * 5 = Active Duty
      *********************************************************************;
      MAJGRP = PUT(5,MAJGRPF.);
      SCORE = ADJ5;
      SEMEAN = SEMEAN5;
      N_OBS = &PREFIX.CNT5;
      N_WGT = &PREFIX.WGT5;
      OUTPUT;

      *********************************************************************
      * 6 = Active Duty Dependents
      *********************************************************************;
      MAJGRP = PUT(6,MAJGRPF.);
      SCORE = ADJ6;
      SEMEAN = SEMEAN6;
      N_OBS = &PREFIX.CNT6;
      N_WGT = &PREFIX.WGT6;
      OUTPUT;

      *********************************************************************
      * 7 = Retirees and Dependents
      *********************************************************************;
      MAJGRP = PUT(7,MAJGRPF.);
      SCORE = ADJ7;
      SEMEAN = SEMEAN7;
      N_OBS = &PREFIX.CNT7;
      N_WGT = &PREFIX.WGT7;
      OUTPUT;

      *********************************************************************
      * 8 = All Beneficiaries              ALL Beneficiaries
      *********************************************************************;
      MAJGRP = PUT(8,MAJGRPF.);
      SCORE  = ADJ8;
      SEMEAN = SEMEAN8;
      N_OBS = &PREFIX.CNT8;
      N_WGT = &PREFIX.WGT8;
      OUTPUT;

  KEEP MAJGRP
       REGION
       REGCAT
       BENTYPE
       BENEFIT
       TIMEPD   /*MJS 07/03/03 Added*/
       SCORE
       SEMEAN
       N_OBS
       N_WGT
       SIG
     ;
  RUN;

  %MEND;

  ***************************************************************************
  * COMPOSITE # 1.
  * GETTING NEEDED CARE VARIABLES.
  ***************************************************************************;
  %PROCESS(QUESTION=RCOMPOS1,TYPE=COMPOSITE );
  %PROCESS(QUESTION=R_R13029,TYPE=INDIVIDUAL);
```

```
%PROCESS(QUESTION=R_R13033,TYPE=INDIVIDUAL);

******************************************************************************
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****************************************************************************;
%PROCESS(QUESTION=RCOMPOS2,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R13007,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13010,TYPE=INDIVIDUAL);

******************************************************************************
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****************************************************************************;
%PROCESS(QUESTION=RCOMPOS3,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R13021,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13022,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13023,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13024,TYPE=INDIVIDUAL);

******************************************************************************
* COMPOSITE # 4.
* CUSTOMER SERVICE.
*****************************************************************************;
%PROCESS(QUESTION=RCOMPOS4,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R13041,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13042,TYPE=INDIVIDUAL);

******************************************************************************
* COMPOSITE # 5.
* CLAIMS PROCESSING.
*****************************************************************************;
%PROCESS(QUESTION=RCOMPOS5,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R13046,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13047,TYPE=INDIVIDUAL);

******************************************************************************
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****************************************************************************;
%PROCESS(QUESTION=R_R13018,TYPE=INDIVIDUAL);

******************************************************************************
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****************************************************************************;
%PROCESS(QUESTION=R_R13048,TYPE=INDIVIDUAL);

******************************************************************************
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****************************************************************************;
%PROCESS(QUESTION=R_R13027,TYPE=INDIVIDUAL);

******************************************************************************
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****************************************************************************;
%PROCESS(QUESTION=R_R13031,TYPE=INDIVIDUAL);

******************************************************************************
******************************************************************************
* STACK up all of the files into one final output dataset.
******************************************************************************
*****************************************************************************;
DATA OUT.LOADCAHQ;
    SET R_R13029
        R_R13033
        R_R13007
        R_R13010
        R_R13021
        R_R13022
        R_R13023
```

```
            R_R13024
            R_R13041
            R_R13042
            R_R13046
            R_R13047
            R_R13018
            R_R13048
            R_R13027
            R_R13031
            RCOMPOS1
            RCOMPOS2
            RCOMPOS3
            RCOMPOS4
            RCOMPOS5
        ;
        IF SCORE = . THEN DELETE;
RUN;


TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6663-410)";
TITLE2 "Program Name: LOADCAHQ.SAS By Keith Rathbun";
TITLE3 "Program Inputs: CAHPS Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: LOADCAHQ.SAS7BDAT - Combined CAHPS Scores Database in WEB layout";

PROC FREQ;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

G.2.B Q3FY2013\PROGRAMS\LOADWEB\LOADCAHQ.INC - Format definitions for converting the Scores Database into the WEB layout - Run Quarterly.

```
***************************************************************************
*
* PROGRAM:  LOADCAHQ.INC
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Format definitions for converting the CAHPS Scores Database
*           into the WEB layout.
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.INC.
*
* MODIFIED: 1) 08/13/2001 BY KEITH RATHBUN, Added XSERVAFF format to
*              accommodate the short reports.
*           2) 01/24/2002 BY KEITH RATHBUN, Added BENTYPF = 1998,1999,2000
*              added catchment composites.
*           3) 04/10/2002 BY KEITH RATHBUN, Added parameters for 2002 survey.
*           4) 04/03/2003 BY MIKE SCOTT, Added parameters for 2003 survey.
*           5) 07/08/2003 BY MIKE SCOTT, Added formats GETNCARE, GETCAREQ,
*              CRTSHELP, HOWWELL, CUSTSERV, CLMSPROC, and PREVCARE.
*           6) 03/22/2004 BY KEITH RATHBUN, Added parameters for 2004 survey.
*              Changed R04031 to be "Wait Less than 15 Minutes For Appointment".
*           7) 05/06/2004 BY MIKE SCOTT, Changed R04031 back to 2003 version of
*              the label ("Wait More than 15 Minutes Past Appointment") so that
*              the Q1 2004 version of the question is consistent with past
*              versions.  The label will be changed to the new version ("Waiting
*              in the Doctor's Office") in Makehtmq.sas.
*           8) 02/2006 BY REGINA GRAMSS, Changed date format to fielding dates.
*           9) 03/21/2006 BY KEITH RATHBUN, Added parameters for 2006 survey.
*           10) 08/22/2006 BY JUSTIN OH, Changed SERVREGF format for Overseas.
*           11) 12/15/2006 BY JUSTIN OH, Added parameters for 2007 survey.
*           12) 02/02/2007 BY JUSTIN OH, Added "s" in Healthy Behaviors in VALUE BEN.
*           13) 01/10/2008 BY KEITH RATHBUN, Added parameters for 2008 survey.
*           14) 01/09/2009 BY MIKE RUDACILLE, Added parameters for 2009 survey.
*           14) 01/16/2009 BY MIKE RUDACILLE, Changed CONUS to USA.
*           15) 04/11/2009 by Mike Rudacille - Changed formats to reflect
*              modifications to beneficiary reports necessary for V4
*           16) 12/17/09 by Emma Ernst, Added parameters for 2010 survey.
*           17) 12/02/10 by Mike Rudacille, Added parameters for 2011 survey.
*              Also removed 2000 parameters for space considerations.
*           18) 12/10/11 by Mike Rudacille, Added parameters for 2012 survey.
*              Also removed 2002 parameters for space considerations.
*           19) 11/03/12 by Mike Rudacille, Updated for handling of
*              Joint Service facilities
*           20) 12/27/12 by Aimee Valenzuela, Added parameters for 2013 survey.
*
*
* INPUTS:   No direct input
*
* OUTPUT:   No direct output
*
* NOTES:    1) Under the new contract (8860), the survey year was changed
*              to be based on the year the survey is administered (2002)
*              as opposed to the questioning reference frame (2001).  This
*              include file contains variable names for both the 2001
*              survey administration year and the the 2002 administration
*              year surveys.
*
***************************************************************************
;
***************************************************************************
* FORMAT Definitions
***************************************************************************;
PROC FORMAT;
   VALUE MAJGRPF
      1 = "Prime Enrollees         "
      2 = "Enrollees with Military PCM"
      3 = "Enrollees with Civilian PCM"
      4 = "Non-enrolled Beneficiaries "
      5 = "Active Duty             "
      6 = "Active Duty Dependents   "
      7 = "Retirees and Dependents    "
```

```
      8 = "All Beneficiaries         "
   ;
   VALUE XSERVAFF
      1 = "ARMY"
      2 = "AIR FORCE"
      3 = "NAVY"
      4 = "OTHER"
      5 = "JOINT SERVICE"
   ;
   VALUE REGIONF
      0 = "USA MHS "
      1 = "North"
      2 = "South"
      3 = "West"
      4 = "Overseas"
   ;

/*JSO 08/24/2006, Changed Overseas to Service for Europe,Pacific,Latin*/
   VALUE SERVREGF
       1 = "North Army"
       2 = "North Air Force"
       3 = "North Navy"
       4 = "North Other"
       5 = "North Joint Service"
       6 = "South Army"
       7 = "South Air Force"
       8 = "South Navy"
       9 = "South Other"
      10 = "South Joint Service"
      11 = "West Army"
      12 = "West Air Force"
      13 = "West Navy"
      14 = "West Other"
      15 = "West Joint Service"
      16 = "Europe Army"
      17 = "Europe Air Force"
      18 = "Europe Navy"
      19 = "Europe Other"
      20 = "Europe Joint Service"
      21 = "Pacific Army"
      22 = "Pacific Air Force"
      23 = "Pacific Navy"
      24 = "Pacific Other"
      25 = "Pacific Joint Service"
      26 = "Latin America Army"
      27 = "Latin America Air Force"
      28 = "Latin America Navy"
      29 = "Latin America Other"
      30 = "Latin America Joint Service"
      31 = "USA ARMY"
      32 = "USA AIR FORCE"
      33 = "USA NAVY"
      34 = "USA OTHER";

/*JSO 08/24/2006, Changed Overseas to Europe,Pacific,Latin*/
   VALUE SERVREGO
       1 = "North Army"
       2 = "North Air Force"
       3 = "North Navy"
       4 = "North Other"
       5 = "North Joint Service"
       6 = "South Army"
       7 = "South Air Force"
       8 = "South Navy"
       9 = "South Other"
      10 = "South Joint Service"
      11 = "West Army"
      12 = "West Air Force"
      13 = "West Navy"
      14 = "West Other"
      15 = "West Joint Service"
      16 = "Overseas Europe"
      17 = "Overseas Pacific"
```

```
        18 = "Overseas Latin America";

     VALUE $BENTYPF
      "2004 Q2 " = "April, 2003 to March, 2004                    "
      "2004 Q3 " = "Quarter 3, CY 2004                            "
      "2004 Q4 " = "Quarter 4, CY 2004                            "
      "2005 Q1 " = "January, 2005                                 "
      "2005 Q2 " = "April, 2005                                   "
      "2005 Q3 " = "July, 2005                                    "
      "2005 Q4 " = "October, 2005                                 "
      "2006 Q1 " = "January, 2006                                 "
      "2006 Q2 " = "April, 2006                                   "
      "2006 Q3 " = "July, 2006                                    "
      "2006 Q4 " = "October, 2006                                 "
      "2007 Q1 " = "January, 2007                                 "
      "2007 Q2 " = "April, 2007                                   "
      "2007 Q3 " = "July, 2007                                    "
      "2007 Q4 " = "October, 2007                                 "
      "2008 Q1 " = "January, 2008                                 "
      "2008 Q2 " = "April, 2008                                   "
      "2008 Q3 " = "July, 2008                                    "
      "2008 Q4 " = "October, 2008                                 "
      "2009 Q1 " = "January, 2009                                 "
      "2009 Q2 " = "April, 2009                                   "
      "2009 Q3 " = "July, 2009                                    "
      "2009 Q4 " = "October, 2009                                 "
      "2010 Q1 " = "January, 2010                                 "
      "2010 Q2 " = "April, 2010                                   "
      "2010 Q3 " = "July, 2010                                    "
      "2010 Q4 " = "October, 2010                                 "
      "2011 Q1 " = "January, 2011                                 "
      "2011 Q2 " = "April, 2011                                   "
      "2011 Q3 " = "July, 2011                                    "
      "2011 Q4 " = "October, 2011                                 "
      "2012 Q1 " = "January, 2012                                 "
      "2012 Q2 " = "April, 2012                                   "
      "2012 Q3 " = "July, 2012                                    "
      "2012 Q4 " = "October, 2012                                 "
      "2013 Q1 " = "January, 2013                                 "
      "2013 Q2 " = "April, 2013                                   "
      "2013 Q3 " = "July, 2013                                    "
      "2013 Q4 " = "October, 2013                                 "

/************************************************************************************************
********/
    /* Admin. Year Defn.
*/
    /* 2004       2005       2006       2007       2008       2009       2010       2011       2012
2013        */

/************************************************************************************************
*********/
    "R04013", "R05013", "R06013", "R07013", "R08013", "R09029", "R10029", "R11029", "R12029",
"R13029" = "Getting to See a Specialist        "
    "R04028", "R05027", "R06027", "R07027", "R08027", "R09033", "R10033", "R11033", "R12033",
"R13033" = "Getting Treatment                  "
    "R04020", "R05019", "R06019", "R07019", "R08019", "R09007", "R10007", "R11007", "R12007",
"R13007" = "Wait for Urgent Care               "
    "R04023", "R05022", "R06022", "R07022", "R08022", "R09010", "R10010", "R11010", "R12010",
"R13010" = "Wait for Routine Visit             "
    "R04034", "R05033", "R06033", "R07033", "R08033", "R09021", "R10021", "R11021", "R12021",
"R13021" = "Listens Carefully                  "
    "R04035", "R05034", "R06034", "R07034", "R08034", "R09022", "R10022", "R11022", "R12022",
"R13022" = "Explains so You Can Understand      "
    "R04036", "R05035", "R06035", "R07035", "R08035", "R09023", "R10023", "R11023", "R12023",
"R13023" = "Shows Respect                      "
    "R04037", "R05036", "R06036", "R07036", "R08036", "R09024", "R10024", "R11024", "R12024",
"R13024" = "Spends Time with You               "
    "R04045", "R05043", "R06043", "R07043", "R08043", "R09040", "R10040", "R11041", "R12041",
"R13041" = "Getting Information                "
    "R04047", "R05045", "R06045", "R07045", "R08045", "R09041", "R10041", "R11042", "R12042",
"R13042" = "Courteous Customer Service         "
```

```
        "R04041", "R05040", "R06040", "R07040", "R08040", "R09045", "R10045", "R11046", "R12046",
"R13046" = "Claims Handled in a Reasonable Time"
        "R04042", "R05041", "R06041", "R07041", "R08041", "R09046", "R10046", "R11047", "R12047",
"R13047" = "Claims Handled Correctly            "
        "R04038", "R05037", "R06037", "R07037", "R08037", "R09018", "R10018", "R11018", "R12018",
"R13018" = "Health Care                         "
        "R04054", "R05048", "R06048", "R07048", "R08048", "R09047", "R10047", "R11048", "R12048",
"R13048" = "Health Plan                         "
        "R04009", "R05009", "R06009", "R07009", "R08009", "R09027", "R10027", "R11027", "R12027",
"R13027" = "Primary Care Manager                "
        "R04015", "R05015", "R06015", "R07015", "R08015", "R09031", "R10031", "R11031", "R12031",
"R13031" = "Specialty Care                      "
                                "PHYSIC  " = "Physical                                "
                                "MENTAL  " = "Mental                                  "
    ;
    VALUE $BENEF
    "RCOMPOS1","CCOMPOS1","R04013","R04028",
                        "R05013","R05027",
                        "R06013","R06027",
                        "R07013","R07027",
                        "R08013","R08027",
                        "R09029","R09033",
                        "R10029","R10033",
                        "R11029","R11033",
                        "R12029","R12033",
                        "R13029","R13033"
    = "Getting Needed Care  "

    "RCOMPOS2","CCOMPOS2","R04020","R04023",
                        "R05019","R05022",
                        "R06019","R06022",
                        "R07019","R07022",
                        "R08019","R08022",
                        "R09007","R09010",
                        "R10007","R10010",
                        "R11007","R11010",
                        "R12007","R12010",
                        "R13007","R13010"
    = "Getting Care Quickly "

    "RCOMPOS3","CCOMPOS3","R04034","R04035","R04036","R04037",
                        "R05033","R05034","R05035","R05036",
                        "R06033","R06034","R06035","R06036",
                        "R07033","R07034","R07035","R07036",
                        "R08033","R08034","R08035","R08036",
                        "R09021","R09022","R09023","R09024",
                        "R10021","R10022","R10023","R10024",
                        "R11021","R11022","R11023","R11024",
                        "R12021","R12022","R12023","R12024",
                        "R13021","R13022","R13023","R13024"
    = "How Well Doctors Communicate "

    "RCOMPOS4","CCOMPOS4","R04045","R04047",
                        "R05043","R05045",
                        "R06043","R06045",
                        "R07043","R07045",
                        "R08043","R08045",
                        "R09040","R09041",
                        "R10040","R10041",
                        "R11041","R11042",
                        "R12041","R12042",
                        "R13041","R13042"
    = "Customer Service        "

    "RCOMPOS5","CCOMPOS5","R04041","R04042",
                        "R05040","R05041",
                        "R06040","R06041",
                        "R07040","R07041",
                        "R08040","R08041",
                        "R09045","R09046",
                        "R10045","R10046",
                        "R11046","R11047",
                        "R12046","R12047",
```

```
                            "R13046","R13047"
    = "Claims Processing
            "
    "RCOMPOS11","COMPOS11","MENTAL","PHYS"
    = "Health Status                     "

/**************************************************************************************************
***/
    /* Admin. Year Defn.
*/
    /* 2004        2005        2006        2007        2008        2009        2010        2011        2012
2013  */

/**************************************************************************************************
***/
    "R04038", "R05037", "R06037", "R07037", "R08037", "R09018", "R10018", "R11018", "R12018",
"R13018" = "Health Care                                        "
    "R04054", "R05048", "R06048", "R07048", "R08048", "R09047", "R10047", "R11048", "R12048",
"R13048" = "Health Plan                                        "
    "R04009", "R05009", "R06009", "R07009", "R08009", "R09027", "R10027", "R11027", "R12027",
"R13027" = "Primary Care Manager                               "
    "R04015", "R05015", "R06015", "R07015", "R08015", "R09031", "R10031", "R11031", "R12031",
"R13031" = "Specialty Care                                     "
    ;
VALUE BEN
/*  0 = 'Total'  deleted no longer calculating total 04/2005 RSG ***/
  1 = 'Getting Needed Care'
  2 = 'Getting Care Quickly'
  3 = 'How Well Doctors Communicate'
  4 = 'Customer Service'
  5 = 'Claims Processing'
  6 = 'Health Plan'
  7 = 'Health Care'
  8 = 'Primary Care Manager'
  9 = 'Specialty Care'
 10 = 'Preventive Care'
 11 = 'Healthy Behaviors';

  VALUE MAJOR
  1 = "Prime Enrollees           "
  2 = "Enrollees with Military PCM"
  3 = "Enrollees with Civilian PCM"
  4 = "Non-enrolled Beneficiaries "
  5 = "Active Duty               "
  6 = "Active Duty Dependents    "
  7 = "Retirees and Dependents   "
  8 = "All Beneficiaries         ";

  VALUE GETNCARE
  1 = "Getting to See a Specialist"
  2 = "Getting Treatment"
  3 = "Composite";

  VALUE GETCAREQ
  1 = "Wait for Routine Visit"
  2 = "Wait for Urgent Care"
  3 = "Composite";

  VALUE HOWWELL
  1 = "Listens Carefully"
  2 = "Explains so You Can Understand"
  3 = "Shows Respect"
  4 = "Spends Time with You"
  5 = "Composite";

  VALUE CUSTSERV
  1 = "Getting Information"
  2 = "Courteous Customer Service"
  3 = "Composite";

  VALUE CLMSPROC
  1 = "Claims Handled in a Reasonable Time"
  2 = "Claims Handled Correctly"
```

```
        3 = "Composite";

     VALUE PREVCARE
     1 = "Mammography"
     2 = "Pap Smear"
     3 = "Hypertension"
     4 = "Prenatal Care"
     5 = "Composite";

     VALUE SMOKEF
     1 = "Non-Smoking Rate"
     2 = "Counselled To Quit"
     3 = "Percent Not Obese"
     4 = "Composite";
RUN;
```

G.3.A Q1FY2013\PROGRAMS\BENCHMARK\BENCHA01.SAS - Extract Adult CAHPS Questions from NCBD - Run Quarterly.

```
*****************************************************************************
*
* PROGRAM:   BENCHA01.SAS
* TASK:      Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:   Extract Adult CAHPS Questions
*
* WRITTEN:   06/02/2000 BY KEITH RATHBUN
*
* INPUTS:    1) AC2009DB.sas7bdat - 2009 Adult CAHPS Questions
*
* OUTPUT:    1) BENCHA01.sas7bdat - 2009 Adult CAHPS Questions Renamed to be
*               consistent with the 2009 MPR DOD Survey.
*
* MODIFIED: 1) 12/19/2000 BY KEITH RATHBUN for Q1 2000 Survey.
*           2) 04/11/2002 BY MIKE SCOTT, Updated variable names for 2002
*              Survey.
*           3) 07/30/2002 BY MIKE SCOTT, Updated to use 2001 NCBD.
*           4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*           5) 05/06/2003 BY MIKE SCOTT, Updated for 2002 benchmarks.
*           6) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*           7) 04/16/2004 BY KEITH RATHBUN, Updated to use 2003 NCBD.
*           8) 05/17/2005 BY REGINA GRAMSS, Updated for Q1 2005.
*           9) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*              Changed variable names to match the 2006 HCSDB survey.
*              Changed CAHPS variable names to match those in 2005 NCBD.
*          10) 02/21/2007 BY JUSTIN OH, Updated for Q1 FY 2007.
*              Changed variable names to match the 2006 HCSDB survey.
*              Changed CAHPS variable names to match those in 2006 NCBD.
*              Changed SREDHIGH varible AC60_05 to AC58_06
*          11) 01/10/2008 BY KEITH RATHBUN, Updated for Q1 FY 2008.
*              Changed variable names to match the 2008 HCSDB survey.
*          12) 01/05/2009 BY MIKE RUDACILLE, Updated for Q1 FY 2009.
*              Changed variable names to match the 2009 HCSDB survey.
*          13) April 7, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          14) May 5, 2009 by Mike Rudacille, Updated for 2008 benchmarks.
*          15) December 21, 2009 by Emma Ernst for Q1FY2010
*          16) March 30, 2010 by Mike Rudacille, Updated for 2009 benchmarks
*          17) December 2, 2010 by Mike Rudacille, Updated for Q1 FY 2011.
*              Changed variable names to match the 2011 HCSDB survey.
*          18) March 31, 2011 by Mike Rudacille, Updated for 2010 benchmarks
*          19) December 10, 2011 by Mike Rudacille, Updated for Q1 FY 2012.
*              Changed variable names to match the 2012 HCSDB survey.
*          20) April 4, 2012 by Amanda Kudis, updated for 2011 benchmarks.
*          21) January 10, 2013 by Aimee Valenzuela, updated for 2013, commented out
*              lines 119-124, and removed model from keep statement.
*
* NOTES:
*
* 1) This program will generate the input for BENCHA02.SAS.
*
*****************************************************************************
* Assign data libraries and options
*****************************************************************************;
LIBNAME IN   "..\..\..\2011AdultNCBD";
LIBNAME OUT "data";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHA01;
   SET IN.AC2011DB (RENAME=(BIRTHYY=YOB));
   FORMAT _ALL_;
   H13019 = AC13_11;
   ******************************************
   * Getting Needed Care
   ******************************************;
   H13029  = AC23_11;
   H13033  = AC27_11;
   ******************************************
   * Getting Care Quickly
```

```
      *****************************************;
   H13007  = AC04_11;
   H13010  = AC06_11;
      *****************************************
   * How Well Doctors Communicate
      *****************************************;
   H13021  = AC16_11;
   H13022  = AC15_11;
   H13023  = AC17_11;
   H13024  = AC18_11;
      *****************************************
   * Customer Service
      *****************************************;
   H13035  = AC29_11;
   H13041  = AC35_11;
   H13042  = AC36_11;
      *****************************************
   * Claims Processing
      *****************************************;
   H13046  = AC40_11;
   H13047  = AC41_11;
      *****************************************
   * Health Care Rating
      *****************************************;
   H13018  = AC12_11;
      *****************************************
   * Health Plan Rating
      *****************************************;
   H13048  = AC42_11;
      *****************************************
   * Personal Doctor Rating
      *****************************************;
   H13027  = AC21_11;
      *****************************************
   * Specialist Rating
      *****************************************;
   H13031  = AC25_11;
      *****************************************
   * Health Status
      *****************************************;
   H13065   = AC43_11;
   AGEGROUP = AGE;   *NEED TO USE USE THIS DIRECTLY (already grouped);
   XSEXA    = GENDER;
   SREDHIGH = AC60_11; /* MER 03/31/11 changed AC55_09 to AC60_10 */
   SRRACEA=AC62A_11;   /* MER 03/31/11 changed AC57A_09 thru AC57E_09 to AC62A_10 thru AC62E_10
*/
   SRRACEB=AC62B_11;
   SRRACEC=AC62E_11;
   SRRACED=AC62C_11;
   SRRACEE=AC62D_11;
   H13073=AC61_11;      /* MER 03/31/11 chaned AC56_09 to AC61_10 */
   *if product in (7,9) then model=4;            /*MJS 05/06/03 product now numeric*/
   *if product=3 then model=2;                   /*coded according to AC FORMATS.SAS*/
   *if product=1 then model=1;
   *if product=4 then model=6;
   *if product=8 then model=5;
   *if product=2 then model=3;
   nproduct=planid+0;                            /*MJS 05/06/03 was plnid now planid*/

  LABEL  H13029     = "AC23_11 - Got appointment with a specialist"
         H13033     = "AC27_11 - Got necessary care"
         H13007     = "AC04_11 - Got urgent care quickly"
         H13010     = "AC06_11 - Got routine care quickly"
         H13021     = "AC16_11 - Doctors/providers listened carefully"
         H13022     = "AC15_11 - Doctors/providers explained things"
         H13023     = "AC17_11 - Doctors/providers showed respect"
         H13024     = "AC18_11 - Doctors/providers spent enough time"
         H13041     = "AC35_11 - Customer service provided needed info"
         H13042     = "AC36_11 - Customer services was courteous"
         H13046     = "AC40_11 - Claims handled quickly"
         H13047     = "AC41_11 - Claims handled correctly"
         H13018     = "AC12_11 - Rating of health care"
         H13048     = "AC42_11 - Rating of health plan"
```

```
            H13027    = "AC21_11 - Rating of personal doctor or nurse"
            H13031    = "AC25_11 - Rating of specialist seen most often"
            H13065    = "AC43_11 - Rating of overall health"
            AGEGROUP  = "AGE - Imputed adult age"
            XSEXA     = "GENDER - Gender (equal to AC59_10 or SEX)"
            SREDHIGH  = "AC60_11 - Highest grade finished"   /*JSO 02/21/06 chged AC60_05 to AC58_06
*/
              ;
 KEEP    H13029
         H13033
         H13007
         H13010
         H13021
         H13022
         H13023
         H13024
         H13041
         H13042
         H13046
         H13047
         H13018
         H13048
         H13027
         H13031
         H13065
         H13035
         AGEGROUP
         XSEXA
         SREDHIGH
         NPRODUCT
         DISP
         YOB
         SRRACEA--SRRACEE
         H13073
         H13019
        ;
RUN;

TITLE1 "Extract Adult CAHPS Questions (DoD)";
TITLE2 "Program Name: BENCHA01.SAS By Keith Rathbun";
TITLE3 "Program Input: AC2011DB.sas7bdat";
TITLE4 "Program Output: BENCHA01.sas7bdat";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES _ALL_ /MISSING LIST;
RUN;
```

G.3.B Q1FY2013\PROGRAMS\BENCHMARK\BENCHA02.SAS - Recode Adult CAHPS Questions from NCBD to be consistent with the HCSDB - Run Quarterly.

```
****************************************************************************
*
* PROGRAM:  BENCHA02.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Recode Adult CAHPS Questions
*
* WRITTEN:  06/02/2000 BY KEITH RATHBUN
*
* INPUT:    1) BENCHA01.sas7bdat - Adult CAHPS Questions Renamed to be
*              consistent with the MPR DOD Survey.
*
* OUTPUT:   1) BENCHA02.sas7bdat - Recoded Adult CAHPS Questions Renamed
*              to be consistent with the MPR DOD Survey.
*
* MODIFIED: 1) 12/19/2000 BY KEITH RATHBUN for Q1 2000 Survey.
*           2) 04/11/2002 BY MIKE SCOTT, Updated variable names for 2002
*              Survey.
*           3) 07/30/2002 BY MIKE SCOTT, Updated to use 2001 NCBD.
*           4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*           5) 05/06/2003 BY MIKE SCOTT, Changed labels from _01 to _02.
*           6) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*           7) April 2004 By Keith Rathbun, Removed reverse coding for
*              H04031.  2004 survey question wording is 'Within 15 minutes'
*              instead of "More than 15 Minutes".  Updated CAHPS variable
*              labels to be consistent with 2003 NCBD.
*           8) 06/2005 By Regina Gramss, Updated codes with 2005 variable
*              names/labels.
*           9) 03/24/2006 BY KEITH RATHBUN, Updated for 2006 survey.
*              Changed CAHPS variable names to match those in 2005 NCBD.
*          10) 01/10/2008 BY KEITH RATHBUN, Updated for 2008 survey.
*          11) 01/05/2009 BY MIKE RUDACILLE, Updated for 2009 survey.
*          12) April 10, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          13) December 21, 2009 by Emma Ernst, updated for Q1FY2010
*          14) March 30, 2010 by Mike Rudacille, updated for Q2FY2010
*              using 2009 NCBD benchmark data.
*          15) December 2, 2010 by Mike Rudacille, Updated for 2011 survey.
*          16) March 31, 2011 by Mike Rudacille, updated for Q2FY2011
*              using 2010 NCBD benchmark data.
*          17) December 10, 2011 by Mike Rudacille, Updated for 2011 survey.
*          18) April 4, 2011 by Amanda Kudis, update for Q2FY2012 using 2011
*              NCBD benchmark data.
*          19) January 10, 2013 by Aimee Valenzuela, update for Q1FY2013
*
* NOTES:
*
* 1) Run this program after BENCHA01.SAS.
* 2) This program will generate the input for BENCHA03.SAS.
*
****************************************************************************
* Assign data libraries and options
****************************************************************************;
LIBNAME IN      "data";
LIBNAME OUT     "data";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHA02(rename=(nproduct=product));
   SET IN.BENCHA01;

   ************************************************************************
   * Recode variables with Never, Sometimes, Usually and Always.
   * Recode Never & Sometimes (1 & 2) to 1.
   * Recode Usually (3) to 2.
   * Recode Always (4) to 3.
   ************************************************************************;

   IF H13007 = 1      THEN R13007 = 1;
   ELSE IF H13007 = 2 THEN R13007 = 1;
   ELSE IF H13007 = 3 THEN R13007 = 2;
```

```
ELSE IF H13007 = 4 THEN R13007 = 3;
ELSE IF H13007 < 0 THEN R13007 = .;

IF H13010 = 1      THEN R13010 = 1;
ELSE IF H13010 = 2 THEN R13010 = 1;
ELSE IF H13010 = 3 THEN R13010 = 2;
ELSE IF H13010 = 4 THEN R13010 = 3;
ELSE IF H13010 < 0 THEN R13010 = .;

IF H13021 = 1      THEN R13021 = 1;
ELSE IF H13021 = 2 THEN R13021 = 1;
ELSE IF H13021 = 3 THEN R13021 = 2;
ELSE IF H13021 = 4 THEN R13021 = 3;
ELSE IF H13021 < 0 THEN R13021 = .;

IF H13022 = 1      THEN R13022 = 1;
ELSE IF H13022 = 2 THEN R13022 = 1;
ELSE IF H13022 = 3 THEN R13022 = 2;
ELSE IF H13022 = 4 THEN R13022 = 3;
ELSE IF H13022 < 0 THEN R13022 = .;

IF H13023 = 1      THEN R13023 = 1;
ELSE IF H13023 = 2 THEN R13023 = 1;
ELSE IF H13023 = 3 THEN R13023 = 2;
ELSE IF H13023 = 4 THEN R13023 = 3;
ELSE IF H13023 < 0 THEN R13023 = .;

IF H13024 = 1      THEN R13024 = 1;
ELSE IF H13024 = 2 THEN R13024 = 1;
ELSE IF H13024 = 3 THEN R13024 = 2;
ELSE IF H13024 = 4 THEN R13024 = 3;
ELSE IF H13024 < 0 THEN R13024 = .;

IF H13029 = 1      THEN R13029 = 1;
ELSE IF H13029 = 2 THEN R13029 = 1;
ELSE IF H13029 = 3 THEN R13029 = 2;
ELSE IF H13029 = 4 THEN R13029 = 3;
ELSE IF H13029 < 0 THEN R13029 = .;

IF H13033 = 1      THEN R13033 = 1;
ELSE IF H13033 = 2 THEN R13033 = 1;
ELSE IF H13033 = 3 THEN R13033 = 2;
ELSE IF H13033 = 4 THEN R13033 = 3;
ELSE IF H13033 < 0 THEN R13033 = .;

IF H13035 = 1      THEN R13035 = 1;
ELSE IF H13035 = 2 THEN R13035 = 1;
ELSE IF H13035 = 3 THEN R13035 = 2;
ELSE IF H13035 = 4 THEN R13035 = 3;
ELSE IF H13035 < 0 THEN R13035 = .;

IF H13041 = 1      THEN R13041 = 1;
ELSE IF H13041 = 2 THEN R13041 = 1;
ELSE IF H13041 = 3 THEN R13041 = 2;
ELSE IF H13041 = 4 THEN R13041 = 3;
ELSE IF H13041 < 0 THEN R13041 = .;

IF H13042 = 1      THEN R13042 = 1;
ELSE IF H13042 = 2 THEN R13042 = 1;
ELSE IF H13042 = 3 THEN R13042 = 2;
ELSE IF H13042 = 4 THEN R13042 = 3;
ELSE IF H13042 < 0 THEN R13042 = .;

IF H13046 = 1      THEN R13046 = 1;
ELSE IF H13046 = 2 THEN R13046 = 1;
ELSE IF H13046 = 3 THEN R13046 = 2;
ELSE IF H13046 = 4 THEN R13046 = 3;
ELSE IF H13046 < 0 THEN R13046 = .;

IF H13047 = 1      THEN R13047 = 1;
ELSE IF H13047 = 2 THEN R13047 = 1;
ELSE IF H13047 = 3 THEN R13047 = 2;
ELSE IF H13047 = 4 THEN R13047 = 3;
```

```
   ELSE IF H13047 < 0 THEN R13047 = .;

   IF H13065 = 1          THEN R13065 = 5;
   ELSE IF H13065 = 2     THEN R13065 = 4;
   ELSE IF H13065 = 3     THEN R13065 = 3;
   ELSE IF H13065 = 4     THEN R13065 = 2;
   ELSE IF H13065 = 5     THEN R13065 = 1;
   ELSE IF H13065>5|H13065<1 THEN R13065 = .;

   ***************************************************************************
   * Recode variables to one missing condition "."
   * This also makes all the "H000xx" to "R000xx".
   ***************************************************************************;
   R13027 = H13027;  IF R13027 < 0|R13027>10 THEN R13027 = .;
   R13031 = H13031;  IF R13031 < 0|R13031>10 THEN R13031 = .;
   R13018 = H13018;  IF R13018 < 0|R13018>10 THEN R13018 = .;
   R13048 = H13048;  IF R13048 < 0|R13048>10 THEN R13048 = .;
   R13073 = H13073;  IF R13073<0 THEN R13073 = .;

   LABEL R13007  = "AC04_11 - Got urgent care quickly"
         R13010  = "AC06_11 - Got routine care quickly"
         R13021  = "AC16_11 - Doctors/providers listened carefully"
         R13022  = "AC15_11 - Doctors/providers explained things"
         R13023  = "AC17_11 - Doctors/providers showed respect"
         R13024  = "AC18_11 - Doctors/providers spent enough time"
         R13029  = "AC23_11 - Got appointment with a specialist"
         R13033  = "AC27_11 - Got necessary care"
         R13041  = "AC35_11 - Customer service provided needed info"
         R13042  = "AC36_11 - Customer services was courteous"
         R13046  = "AC40_11 - Claims handled quickly"
         R13047  = "AC41_11 - Claims handled correctly"
         R13018  = "AC12_11 - Rating of health care"
         R13027  = "AC21_11 - Rating of personal doctor or nurse"
         R13031  = "AC25_11 - Rating of specialist seen most often"
         R13048  = "AC42_11 - Rating of health plan"
         R13065  = "AC43_11 - Rating of overall health"

         nPRODUCT  = "Product ID - Unique plan ID";
       ;
       drop product;
RUN;

TITLE1 "Recode Adult CAHPS Questions (6244-410)";
TITLE2 "Program Name: BENCHA02.SAS By Keith Rathbun";
TITLE3 "Program Input: BENCHA01.SAS7BDAT";
TITLE4 "Program Output: BENCHA02.SAS7BDAT";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES  AGEGROUP
        XSEXA
        SREDHIGH
        R13007 * H13007
        R13010 * H13010
        R13021 * H13021
        R13022 * H13022
        R13023 * H13023
        R13024 * H13024
        R13029 * H13029
        R13033 * H13033
        R13041 * H13041
        R13042 * H13042
        R13046 * H13046
        R13047 * H13047
        R13018 * H13018
        R13027 * H13027
        R13031 * H13031
        R13048 * H13048
        R13065 * H13065
   /MISSING LIST;
RUN;
```

G.3.C Q3FY2013\PROGRAMS\BENCHMARK\BENCHA03.SAS - Calculate CAHPS Benchmark data for HCSDB - Run Quarterly.

```
***************************************************************************
*
* PROGRAM:  BENCHA03.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Adjust Adult CAHPS Benchmarks
*
* WRITTEN:  June 2000 BY ERIC SCHONE
*
* INPUTS:   1) BENCHA02.sas7bdat - 2010 Adult CAHPS Questions Renamed to be
*              consistent with the 2011 MPR DOD Survey.
*           2) GROUP8.sas7bdat - CAHPS Group8 (all beneficiaries) Dataset
*
* OUTPUTS:  1) Benchmark Composite Scores Data Sets
*
* MODIFIED: 1) Nov 2000 BY ERIC SCHONE - Output permanent datasets with
*              scores and standard errors and process the rest of the
*              composites and ratings.
*           2) Dec 2000 BY KEITH RATHBUN - Update variable names for
*              Q1 2000 Survey.
*           3) Jan 2002 BY KEITH RATHBUN - Updated to run under SAS
*              version 8 (changed INTERCEP to INTERCEPT).
*           4) Apr 2002 BY MIKE SCOTT - Updated variable names for Q1
*              2002 Survey.
*           5) Jul 2002 BY MIKE SCOTT - Changed R00077 to R04075, since
*              H02077 (health status) is back and was renamed to R04075
*              in HSC022_1.sd2.
*           6) Mar 2003 BY MIKE SCOTT - Updated for 2003 survey.
*           7) May 2003 BY MIKE SCOTT - Changed ac03_01 to ac03_02.
*           8) Jun 2003 BY MIKE SCOTT - Updated for Q2 2003.
*           9) Oct 2003 BY MIKE SCOTT - Updated for Q3 2003.
*          10) Mar 2004 BY MIKE SCOTT - Updated for Q1 2004.
*          11) April 2004 BY KEITH RATHBUN - Updated to use the CAHPS 2003
*              variable ac03_03.
*           12) June 2004 BY REGINA GRAMSS - Updated to use for Q2 2004
*          13) Sept 2004 BY REGINA GRAMSS - Update for Q3 2004
*          14) May 2005 BY REGINA GRAMSS - Updated for Q1 2005
*          15) Jul 2005 BY REGINA GRAMSS - Updated for Q2 2005
*          16) Oct 2005 BY REGINA GRAMSS - Updated for Q3 2005
*          17) Dec 2005 BY REGINA GRAMSS - Updated for Q4 2005
*          18) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*              Changed variable names to match the 2006 HCSDB survey.
*          19) 07/12/2006 by Justin Oh - Updated for Q3 FY 2006.
*          20) 10/03/2006 by Justin Oh - Changed libname in2 for Q4FY2006.
*              Change the INCLUDE path to CONVERT.sas file.
*          21) 12/18/2006 by Justin Oh - Changed libname in2 for Q1FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          22) 04/05/2007 by Justin Oh - Changed libname in2 for Q2FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          23) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*              ReportCards OR PurchasedReportCards.
*          24) 04/05/2007 by Keith Rathbun - Changed libname in2 for Q3FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          25) 09/04/2007 by Justin Oh - Changed libname in2 for Q4FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          26) 01/10/2008 BY KEITH RATHBUN, Updated for Q1 FY 2008.
*              Changed variable names to match the 2008 HCSDB survey.
*          27) 04/11/2008 by Justin Oh - Changed libname in2 for Q2FY2008.
*              Change the INCLUDE path to CONVERT.sas file.
*          28) 06/13/2008 by Keith Rathbun - Changed libname in2 for Q3FY2008.
*              Change the INCLUDE path to CONVERT.sas file.
*          29) April 10, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          30) Sept 30, 2009 by Mike Rudacille - Changed libname in2 for Q4FY2009.
*              Change the INCLUDE path to CONVERT.sas file.
*          31) December 17, 2009 by Emma Ernst- Changed libname in2 for Q1FY2010 and
*              changed variable names.
*          32) March 2, 2010 by Mike Rudacille - Changed libname in2 for Q2FY2010.
*              Change the INCLUDE path to CONVERT.sas file.
*          33) March 30, 2010 by Mike Rudacille - Changed libname in to get
```

```
*           benchmark data from Q2FY2010 (2009 NCBD benchmark data).
*           34) June 19, 2010 by Mike Rudacille - Changed libname in2 for Q3FY2010.
*           35) August 28, 2010 by Mike Rudacille - Changed libname in2 for Q4FY2010.
*           36) December 2, 2010 by Mike Rudacille- Changed libname in2 for Q1FY2011 and
*               changed variable names.
*           37) February 24, 2011 by Mike Rudacille - Changed libname in2 for Q2FY2011.
*           38) December 10, 2011 by Mike Rudacille - Changed libname in2 for Q1FY2012.
*           39) March 5, 2012 by Amanda Kudis - Changed libname in2 and include Convert.sas for
Q2FY2012.
*           40) June 20, 2012 by Amanda Kudis - Updated for Q3FY2012.
*           41) August 23, 2012 by Christine Cheu - Updated for Q4FY2012.
*           42) December 27,2012 by Aimee Valenzuela - Changed libname in in2 for Q1FY2013
*               and changed variable names.
*           43) March 23, 2013 by Mike Rudacille - Changed libname in2 and include Convert.sas for
Q2FY2013.
*
* NOTES:
*
* 1) Run this program after BENCHA01.SAS and BENCHA02.SAS.
* 2) This program will generate the input for BENCHA04.SAS.
*
****************************************************************************
* Assign data libraries and options
****************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards          ***/
%LET RCTYPE = ReportCards;

libname in       "..\..\..\Q1FY2013\Programs\Benchmark\Data"; /*Use BENCHA02.sas7bdat from
Q1fy2013*/
libname in2      "..\&RCTYPE\CAHPS_AdultQ3FY2013\Data";
libname out      "Data";
LIBNAME LIBRARY "..\..\DATA\AFINAL\FMTLIB";

%let wgt=FWRWT;

OPTIONS MLOGIC MPRINT NOCENTER MERGENOBY=WARN LS=132 PS=79;


%macro comb(f,t,q,l);

proc summary data=&f;
 var &t;
 where &q~=.;
 weight &wgt;
 output out=temp mean=&t;
run;

data temp;
 set temp;
 array old &t;
 call symput('z',left(dim(old)));
run;

data temp(drop=_type_ &t);
 set temp;
 array old &t;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
   end;
run;

data &q._&l;
 merge temp c_&q;
 array coeffs &t;
 array means var1-var&z;
  DO I = 1 TO DIM(COEFFS);
   IF COEFFS(I) = . THEN COEFFS(I) = 0;
   IF MEANS(I) = . THEN MEANS(I) = 0;
   ADJUST + ( COEFFS(I) * MEANS(I) );
   END;
```

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```
 ADJUST = ADJUST + intercept;
 &q._&l=adjust;

run;

%mend comb;

%macro adjust(x,y);



proc summary data=setup;
where &x>.;
 class product;

 output out=count;
run;

data count count2(rename=(_freq_=denom));
 set count;
 if _type_=0 then output count2;
 else output count;
run;

data count(keep=pweight product);
 if _n_=1 then set count2;
 set count;
 pweight=denom/_freq_;
run;

data temp;
 merge count  setup; by product;


run;
proc summary data=temp;
where &x>.;
weight pweight;
var &y;
output out=temp2 mean=&y;
data temp2;
 set temp2;
 array old &y;
 call symput('z',left(dim(old)));
run;
data temp2(keep=var1-var&z);
 set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;
data temp;
set temp;
if _n_=1 then set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
  if old(i)=. then
   old(i)=new(i);
  end;
run;
proc reg data=temp outest=c_&x noprint;
 model &x=&y;
 weight pweight;
 output out=r_&x r=r_&x;
run;

proc sort data=r_&x; by product;
run;

PROC DESCRIPT DATA=r_&x DESIGN=STRWR NOPRINT;
 WEIGHT pweight;
```

```
 SETENV DECWIDTH=4;
 NEST product / missunit;
 VAR R_&x;
 OUTPUT  SEMEAN / TABLECELL=DEFAULT
 FILENAME=s_&x;
RUN;


data s_&x(rename=(semean=s_&x));
 set s_&x(keep=semean);
 %do i=1 %to 8;
  %if &i=8 %then %do;

   data group8;
    set in2.group5 in2.group6 in2.group7;
   run;
   %comb(group8,&y,&x,8);
  %end;
  %else %do;
   %comb(in2.group&i,&y,&x,&i);
  %end;
 %end;


%mend adjust;

/* adjust all the variables */

%macro comp(compno,a,b,c,d);
 %if &a~= %then %do;
  %let n=r_&a;
  %let m=s_&a;
  %do i=1 %to 8;
   %let p&i=&a._&i;
  %end;
  %let grpnum=1;
   proc sort data=r_&a;
    by mpid;
   run;
 %end;
 %if &b~= %then %do;
  %let n=%str(&n r_&b);
  %let m=%str(&m s_&b);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &b._&i);
  %end;
  %let grpnum=2;
   proc sort data=r_&b;
    by mpid;
   run;
 %end;
 %if &c~= %then %do;
  proc sort data=r_&c;
   by mpid;
  run;
  %let grpnum=3;
  %let n=%str(&n r_&c);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &c._&i);
  %end;
  %let m=%str(&m s_&c); %end;

  %if &d~= %then %do;
   proc sort data=r_&d;
    by mpid;
   run;
   %let grpnum=4;
   %let n=%str(&n r_&d);
    %do i=1 %to 8;
     %let p&i=%str(&&p&i &d._&i);
    %end;

    %let m=%str(&m s_&d);
  %end;
```

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```
data infile;
 merge &n;
 by mpid;
run;

proc corr outp=outf noprint;
 var &n;
 weight pweight;
run;

data final;
 if _n_=1 then do;
  %if &a~= %then %do;
   set s_&a;
  %end;
  %if &b~= %then %do;
   set s_&b;
  %end;
  %if &c~= %then %do;
   set s_&c;
  %end;
  %if &d~= %then %do;
   set s_&d;
  %end;
 end;
 set  outf;
 call symput('s'||compress(_n_),substr(_name_,3));
 where _type_='CORR';
run;

data final;
 set final;
 array r_val &n;
 array s_val &m;
 sde=0;
 do i=1 to dim(s_val);
  %do i=1 %to &grpnum;
   if _name_="r_&&s&i" then
   sde=sde+r_val(i)*s_&&s&i*s_val(i);
  %end;
 end;
run;

data sefin&compno;
 set final end=last;
 tv+sde;
 if last then do;
 sde=(tv**.5)/&grpnum;
 output;
end;

%do i=1 %to 8;
 data temp(keep=&&p&i);
  merge &&p&i;
 run;

data output;
 set &&p&i;
 totadj+adjust;
run;

data output(keep=totadj);
 set output end=last;
 if last then do;
  totadj=totadj/&grpnum;
  output;
 end;
run;

data out&compno._&i;
 merge output temp;
run;
```

G-59

```
data out.comp&compno._&i;
   merge out&compno._&i
         sefin&compno;
run;

%end;

%mend comp;

/* create composites */
proc sort data=in.bencha02 out=setup;
 by product;
run;
data setup;
set setup;
/*if ^(model in (2,4)); */ **AMK 4/06/12 removed;
if disp in ('M10','I10')  ;   ***KRR 04/19/04 Changed _02 to _03;
data setup;
 set setup; by product;
 mpid=_n_;
 if agegroup ne . then do;
 age1824=0; age2534=0; age3544=0; age4554=0; age5564=0; age6574=0;

      if agegroup=1 then age1824=1;
 else if agegroup=2 then age2534=1;
 else if agegroup=3 then age3544=1;
 else if agegroup=4 then age4554=1;
 else if agegroup=5 then age5564=1;
 else if agegroup=6 then age6574=1;
 end;
 if agegroup<6;
run;
%INCLUDE "..\REPORTCARDS\CAHPS_AdultQ3FY2013\CONVERT.SAS";

%CONT2(DSN=SETUP, NUM=4,  Y=R13018 R13048 R13027 R13031);
%CONT3(DSN=SETUP, NUM=12, Y=R13007 R13010 R13029 R13033
                            R13021 R13022 R13023 R13024
                            R13041 R13042 R13046 R13047);
/* GETTING NEEDED CARE */
%adjust(R13029,age1824 age2534 age3544 age4554  R13065);
%adjust(R13033,age1824 age2534 age3544 age4554  R13065);
%comp(1,R13029,R13033);

/* GETTING NEEDED CARE QUICKLY */
%adjust(R13007,age1824 age2534 age3544 age4554  R13065);
%adjust(R13010,age1824 age2534 age3544 age4554  R13065);
%comp(2,R13007,R13010);

/* HOW WELL DOCTORS COMMUNICATE */
%adjust(R13021,age1824 age2534 age3544 age4554  R13065);
%adjust(R13022,age1824 age2534 age3544 age4554  R13065);
%adjust(R13023,age1824 age2534 age3544 age4554  R13065);
%adjust(R13024,age1824 age2534 age3544 age4554  R13065);
%comp(3,R13021,R13022,R13023,R13024);

/* CUSTOMER SERVICE */
%adjust(R13041,age1824 age2534 age3544 age4554  R13065);
%adjust(R13042,age1824 age2534 age3544 age4554  R13065);
%comp(4,R13041,R13042);

/* CLAIMS PROCESSING */
%adjust(R13046,age1824 age2534 age3544 age4554  R13065);
%adjust(R13047,age1824 age2534 age3544 age4554  R13065);
%comp(5,R13046,R13047);

/* RATING ALL HEALTH CARE: 0 - 10 */
%adjust(R13018,age1824 age2534 age3544 age4554  R13065);
%comp(6,R13018);

/* RATING OF HEALTH PLAN: 0 - 10 */
%adjust(R13048,age1824 age2534 age3544 age4554  R13065);
%comp(7,R13048);
```

```
/* RATING OF PERSONAL DR: 0 - 10 */
%adjust(R13027,age1824 age2534 age3544 age4554  R13065);
%comp(8,R13027);

/* SPECIALTY CARE */
%adjust(R13031,age1824 age2534 age3544 age4554  R13065);
%comp(9,R13031);
```

G.3.D.1 Q3FY2013\PROGRAMS\BENCHMARK\QPREDTEST\SAS2STATA_Grps.sas - Converts the groups datasets from SAS to STATA - Run Quarterly.

```
***************************************************************************
*
* PROGRAM:   SAS2STATA_Grps.SAS
* TASK:      Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6401-904)
* PURPOSE:   Convert the CAHPS BENCHA02 and GROUP1-8 Files to STATA format
*
* WRITTEN:   01/11/2008 BY KEITH RATHBUN
*
* INPUTS:    1) BENCHA02.sas7bdat - CAHPS Benchmark Scores Database
*               GROUPi.sas7bdat - Group Files created by STEP1.SAS
*                        (where i = 1 -8 = group number)
*
* OUTPUTS:   1) BENCHA02.dta - CAHPS Benchmark Scores Database - STATA format
*               GROUPi.dta - Group Files created by STEP1.SAS - STATA format
*                        (where i = 1 -8 = group number)
*
* MODIFIED:
*
* NOTES:
*
***************************************************************************
* Assign data libraries and options
**************************************************************************;
%LET QUARTER = Q3FY2013;
LIBNAME INBENCH "..\..\..\..\Q1FY2013\Programs\Benchmark\Data"; /*Use BENCHA02.sas7bdat from
Q1fy2013*/
LIBNAME INGROUP "..\..\ReportCards\cahps_adult&QUARTER.\data";

***************************************************************************
* Convert CAHPS BENCHA02 to STATA format.
**************************************************************************;
PROC EXPORT
    DATA = INBENCH.BENCHA02
    OUTFILE = "BENCHA02.DTA"
    DBMS = DTA
    REPLACE;
RUN;

***************************************************************************
* Convert SAS Group files to STATA format.
**************************************************************************;
%MACRO CONVERT2STATA;
    %DO I = 1 %TO 8;
        PROC EXPORT
            DATA = INGROUP.GROUP&I
            OUTFILE = "GROUP&I..DTA"
            DBMS = DTA
            REPLACE;
        RUN;
    %END;
%MEND CONVERT2STATA;

%CONVERT2STATA;
```

G.3.D.2 Q3FY2013\PROGRAMS\BENCHMARK\QPREDTEST\vartest.do - Calculates Predicted Errors - Run Quarterly.

```
/*
   Program: vartest.do
   Author:  Eric Schone
   Modified: 1) 11/15/2006 Justin Oh, Added global variable "path"
                    for assigning folder directory.
              2) 06/22/2009 Keith Rathbun, Changed fwrwt_v4 back to fwrwt
                 and updated path for q3fy2009.
              3) 12/02/2010 Mike Rudacille, updated vars for 2011
              4) 12/10/2011 Mike Rudacille, updated vars for 2012
              5) 12/28/2012 Aimee Valenzuela,updated vars for 2013

   WARNING - MUST EDIT THE GLOBAL PATH FOR EACH REPORTING PERIOD
*/


global path "L:\Q3FY2013\Programs\Benchmark"


program define initial
version 7.0

local i=1
while `i'<9{

gen str8 var=" "
gen se=.
saveold "$path\qpredtest\projerr`i'",replace
clear
 local i=`i'+1
}
end
program define stdlist1
version 7.0
local varlist required existing
parse "`*'"
while "`1'"~=""{

use "$path\qpredtest\bencha02",clear
keep if disp=="M10"|disp=="T10"




 gen ageund18=0 if agegroup~=.
gen age1824=0 if agegroup~=.
gen age2534=0 if agegroup~=.
gen age3544=0 if agegroup~=.
gen age4554=0 if agegroup~=.
 gen age5564=0 if agegroup~=.
gen age6574=0 if agegroup~=.

replace ageund18 = 1      if agegroup==0
replace age1824  = 1 if agegroup==1
replace age2534  = 1 if agegroup==2
replace age3544  = 1 if agegroup==3
replace age4554  = 1 if agegroup==4
replace age5564  = 1 if agegroup==5
replace age6574  = 1 if agegroup==6
keep if agegroup<6
replace `1'=10  if 8<=`1' & `1'<=10
replace `1'=0 if `1'~=. & `1'<8
replace `1'=`1'/10
egen coun=count(`1'), by(product)
gen wt=1/coun
svyset strata product
svyset pweight coun
```

```
egen ct=count(`1'*age1824*r13065), by(product)
keep if ct>1
drop ct


svyreg `1' age1824 age2534 age3544 age4554 age5564 r13065

local i=1
while `i'<9{
use "$path\qpredtest\group`i'",clear
collapse (mean) age1824 age2534 age3544 age4554 age5564 r13065 [aw=fwrwt]
predict se, stdp
keep se
gen str8 var="`1'"
append using "$path\qpredtest\projerr`i'"
saveold "$path\qpredtest\projerr`i'",replace
local i=`i'+1
}
macro shift
}
end
program define stdlist2
version 7.0
local varlist required existing
parse "`*'"

while "`1'"~=""{

use "$path\qpredtest\bencha02",clear
keep if disp=="M10"|disp=="T10"




 gen ageund18=0 if agegroup~=.
gen age1824=0 if agegroup~=.
gen age2534=0 if agegroup~=.
gen age3544=0 if agegroup~=.
gen age4554=0 if agegroup~=.
 gen age5564=0 if agegroup~=.
gen age6574=0 if agegroup~=.

replace ageund18 = 1      if agegroup==0
replace age1824  = 1 if agegroup==1
replace age2534  = 1 if agegroup==2
replace age3544  = 1 if agegroup==3
replace age4554  = 1 if agegroup==4
replace age5564  = 1 if agegroup==5
replace age6574  = 1 if agegroup==6
keep if agegroup<6
replace `1'=0 if `1'~=. & `1'<3
replace `1'=1 if `1'>=2
egen coun=count(`1'), by(product)
gen wt=1/coun
svyset strata product
svyset pweight coun

egen ct=count(`1'*age1824*r13065), by(product)
keep if ct>1
drop ct


svyreg `1' age1824 age2534 age3544 age4554 age5564 r13065
local i=1
while `i'<9{
use "$path\qpredtest\group`i'",clear
collapse (mean) age1824 age2534 age3544 age4554 age5564 r13065 [aw=fwrwt]
predict se, stdp
keep se
```

```
gen str8 var="`1'"
append using "$path\qpredtest\projerr`i'"
saveold "$path\qpredtest\projerr`i'",replace
local i=`i'+1
}
macro shift
}
end


set more 1

set mem 100m

log using "$path\qpredtest\varlog",replace
initial

use "$path\qpredtest\bencha02",clear
stdlist1 r13018 r13048 r13027 r13031
use "$path\qpredtest\bencha02",clear
stdlist2 r13029 r13033 r13041 r13042 r13007 r13010 r13021 r13022 r13023 r13024 r13046 r13047

log close
```

G.3.D.3 Q3FY2013\PROGRAMS\BENCHMARK\QPREDTEST\STATA2SAS_Proj.sas - Converts the Predicted Errors from STATA to SAS - Run Quarterly.

```
****************************************************************************
*
* PROGRAM:  STATA2SAS_Proj.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6401-904)
* PURPOSE:  Convert the PROJERR1-8 Files to SAS format
*
* WRITTEN:  01/11/2008 BY KEITH RATHBUN
*
* INPUTS:   1) PROJERRi.DTA - PROJERR Files created by VARTEST.DO
*                             (where i = 1 -8 = group number)
*
* OUTPUTS:  1) PROJERRi.sas7bdat - PROJERR Files created by VARTEST.DO - SAS format
*                             (where i = 1 -8 = group number)
*
* MODIFIED:
*
* NOTES:
*
****************************************************************************
* Assign data libraries and options
****************************************************************************;
LIBNAME OUT ".";

****************************************************************************
* Convert the PROJERR1-8 Files to SAS format
****************************************************************************;
%MACRO CONVERT2SAS;
   %DO I = 1 %TO 8;
       PROC IMPORT
          DATAFILE="projerr&i..dta"
          OUT=OUT.projerr&i
          DBMS=dta
          REPLACE;
       RUN;
   %END;
%MEND CONVERT2SAS;

%CONVERT2SAS;
```

G.3.D.4 Q3FY2013\PROGRAMS\BENCHMARK\QPREDTEST\PREDCOMP.SAS - Compiles Predicted Composite Errors - Run Quarterly.

```
/*****************************************************************
/*
/*  Project:  HCSDB Adult Report Cards
/*  Program:  PREDCOMP.SAS
/*  Purpose:  Adult Report Card
/*  Requires programs STEP1Q and STEP2Q.SAS
/*
/*****************************************************************/
OPTIONS NOCENTER LS=132 PS=78 SOURCE SOURCE2 MLOGIC MPRINT NOOVP COMPRESS=NO;
libname in   ".";


 %MACRO COMPOSIT (TYPE=,COMPOS=,VAR1=,VAR2=,VAR3=,VAR4=,VAR5=,QCOUNT=);
 %do i=1 %to 8;
  data temp&i(keep=x se);
       set in.projerr&i end=last;
       variance=se**2;
       %do j=1 %to &qcount;
        if upcase(var)="&&var&j" then t_var+variance;
       %end;
       if last then do;
        se=t_var**.5/&qcount;
        x=&i;
         output;
       end;
  %end;
  data in.comp&compos;
    set temp1 temp2 temp3 temp4 temp5 temp6 temp7 temp8;
  run;


%MEND COMPOSIT;

*------------------------------------;
*-        set the parameters here    -;
*------------------------------------;
***********************************;
*  call the macro for each composite;
***********************************;
%COMPOSIT (type=R,compos=1,var1=R13029,var2=R13033,qcount=2);
%COMPOSIT (type=R,compos=2,var1=R13007,var2=R13010,qcount=2);
%COMPOSIT (type=R,compos=3,var1=R13021,var2=R13022,var3=R13023,var4=R13024,qcount=4);
%COMPOSIT (type=R,compos=4,var1=R13041,var2=R13042,qcount=2);
%COMPOSIT (type=R,compos=5,var1=R13046,var2=R13047,qcount=2);
```

G.3.E Q3FY2013\PROGRAMS\BENCHMARK\BENCHA04.SAS - Convert the Benchmark Scores Database into the WEB layout - Run Quarterly.

```
****************************************************************************
*
* PROGRAM:  BENCHA04.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6401-904)
* PURPOSE:  Convert the Benchmark Scores Database into the WEB layout
*
* WRITTEN:  06/01/2000 BY KEITH RATHBUN
*
* INPUTS:   1) Benchmark data sets with adjusted scores
*              (COMPn_i.sas7bdat where n = composite number and i = group number)
*
* OUTPUT:   1) BENCHA04.sas7bdat - Combined Benchmark Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* MODIFIED: 1) Dec 2000 bY Keith Rathbun: Updated variable names for
*              Q1 2000 Survey.  For the quarterly survey group 8 (all benes)
*              is being used as the benchmark for all groups (1-8).  Thus,
*              this group is copied and output to each of the other 7 groups.
*           2) 01/23/2002 by Mike Scott: Updated variable names to be consistent
*              with 2000 survey.
*           4) 04/15/2002 by Mike Scott - Updated variable names for
*              Q1 2002 Survey.
*           5) 03/21/2003 by Mike Scott - Updated for 2003 survey.
*           6) 06/26/2003 by Mike Scott - Updated for Q2 2003.
*           7) 07/03/2003 by Mike Scott - Added TIMEPD variable to be set to the period
*              or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*              setting to 'Composite'.
*           8) 07/18/2003 by Mike Scott - Added TIMEPD to FREQ.
*           9) 10/21/2003 by Mike Scott - Updated for Q3 2003.
*          10) 03/23/2004 by Mike Scott - Updated for Q1 2004.
*          11) 06/15/2004 by Regina Gramss - Updated for Q2 2004.
*          12) 09/2004    by Regina Gramss - Updated for Q3 2004.
*          13) 05/2005    by Regina Gramss - Updated for Q1 2005.
*          14) 10/2005    by Regina Gramss - Updated for Q3 2005.
*          15) 03/24/2006 by Keith Rathbun - Updated for Q2 FY 2006.
*              Added MACRO loop to process the 8 groups.
*          16) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3.
*          17) 12/18/2007 by Justin Oh - Updated BENTYPE composite year to 2006 Q4.
*          18) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1.
*          19) 04/05/2007 by Justin Oh - Updated LIBNAME IN2 to be used for purchase RC programs.
*          20) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3.
*          21) 01/10/2008 by Keith Rathbun - Updated for Q1 FY 2008.
*          22) 04/11/2008 by Justin Oh - Updated BENTYPE composite year to 2008 Q1.
*          23) 06/13/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q2.
*          24) 09/29/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q3.
*          25) 04/10/2009 by Mike Rudacille - Changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          26) 09/30/2009 by Mike Rudacille - Updated BENTYPE composite year to 2009 Q3.
*          27) 12/17/2009 by Emma Ernst - Updated for Q1 2010
*          28) 03/02/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q1.
*          29) 06/19/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q2.
*          30) 08/28/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q3.
*          31) 12/02/2010 by Mike Rudacille - Updated for Q1 FY 2011.
*          32) 02/24/2011 by Mike Rudacille - Updated BENTYPE composite year to 2011 Q1.
*          33) 12/10/2011 by Mike Rudacille - Updated for Q1 FY 2012.
*          34) 3/5/2012 by Amanda Kudis - Updated for Q2 FY 2012.
*          35) 6/20/2012 by Amanda Kudis - Updated for Q3 FY 2012.
*          36) 8/23/2012 by Christine Cheu- Updated for Q4 FY 2012.
*          37) 12/28/2012 by Aimee Valenzuela - Updated for Q1 FY 2013.
*          38) 03/23/2013 by Mike Rudacille - Updated for Q2 FY 2013.
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*     - BENCHA01.SAS - Extract Benchmark variables
*     - BENCHA02.SAS - Recode Benchmark variables
*     - BENCHA03.SAS - Construct Scores and SEMEAN datasets
```

```
*
* 2) The output file (BENCHA04.SAS7BDAT) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;
LIBNAME IN  "DATA";
LIBNAME IN2 "qpredtest";
LIBNAME OUT "DATA";
LIBNAME LIBRARY  "..\..\DATA\AFINAL\FMTLIB";


OPTIONS PS=79 LS=132 COMPRESS=NO NOCENTER;

*******************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*******************************************************************************;
%INCLUDE "..\LOADWEB\LOADCAHQ.INC";


*******************************************************************************
*******************************************************************************
*
* Process Macro Input Parameters:
*
* 1) CNUM = Composite or rating variable number (1-10)
* 2) GNUM = Group number (1-8)
* 3) NVAR = Number of variables in the composite
* 4) VARS = List of individual variables for composite
* 5) SE   = List of individual standard error variables
*******************************************************************************;
%MACRO PROCESS(CNUM=, GNUM=, NVAR=, VARS=, SE=);
*******************************************************************************
* Assign value for BENTYPE composite year
*******************************************************************************;
%LET YEAR = "2013 Q2"; * Note that this is based on Calendar Year here;

*******************************************************************************
* Convert benchmark scores datasets into WEB layout.
*******************************************************************************;
%IF &CNUM<6 %THEN %DO;

  DATA INP;
    SET IN2.COMP&CNUM;
     WHERE X=&GNUM;




   DATA INP;
    SET INP  IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;
%ELSE %DO;

   DATA INP;
    SET IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;


   DATA COMP&CNUM._&Gnum;
     SET INP;
     IF _N_=1 THEN
     SET IN.COMP&CNUM._&GNUM;
      LENGTH MAJGRP  $30;
      LENGTH REGION  $25;
      LENGTH REGCAT  $26;
      LENGTH BENTYPE $50;
      LENGTH BENEFIT $34;
      LENGTH TIMEPD  $35;   ***MJS 07/03/03 Added line;
```

```
     *********************************************************************
     * For now, assign SIG = 0
     *********************************************************************;
     SIG = 0;

     *********************************************************************
     * Assign major group
     *********************************************************************;
     MAJGRP  = PUT(&Gnum,MAJGRPF.);

     *********************************************************************
     * Assign Region and Regcat
     *********************************************************************;
     REGION  = "Benchmark";
     REGCAT  = "Benchmark";

     *********************************************************************
     * Assign benefit and benefit type
     *********************************************************************;
     IF      &CNUM = 1  THEN BENEFIT = "Getting Needed Care";
     ELSE IF &CNUM = 2  THEN BENEFIT = "Getting Care Quickly";
     ELSE IF &CNUM = 3  THEN BENEFIT = "How Well Doctors Communicate";
     ELSE IF &CNUM = 4  THEN BENEFIT = "Customer Service";
     ELSE IF &CNUM = 5  THEN BENEFIT = "Claims Processing";
     ELSE IF &CNUM = 6  THEN BENEFIT = "Health Care";
     ELSE IF &CNUM = 7  THEN BENEFIT = "Health Plan";
     ELSE IF &CNUM = 8  THEN BENEFIT = "Primary Care Manager";
     ELSE IF &CNUM = 9  THEN BENEFIT = "Specialty Care";

     BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
     TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
      IF &CNUM<6 THEN DO;
         IF X=&GNUM THEN DO;
     *********************************************************************
     * Assign composite score and SEMEAN
     *********************************************************************;
            SCORE = TOTADJ;
            SEMEAN = SQRT(SDE**2+SESX**2);

     *********************************************************************
     * Output composite score record for each REGION
     *********************************************************************;
            OUTPUT;
          END;
      END;
     *********************************************************************
     * Now, output the individual score records
     *********************************************************************;
     IF &NVAR GT 1|&CNUM>5 THEN DO;
        ARRAY ITEMS &VARS;
        ARRAY SE    &SE;
        LENGTH NAME $8;
        DO I = 1 TO DIM(ITEMS); DROP I;
           CALL VNAME(ITEMS(I),NAME);
           NAME = SUBSTR(NAME,1,6);
           SCORE  = ITEMS(I);
           SEMEAN = SQRT(SE(I)**2+SESX**2);
           IF &NVAR GT 1 THEN
           BENTYPE = PUT(NAME,$BENTYPF.);
           TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
          IF COMPRESS(UPCASE(NAME))=COMPRESS(UPCASE(VAR)) THEN OUTPUT;
        END;
     END;

 KEEP MAJGRP
      REGION
      REGCAT
      BENTYPE
      BENEFIT
      TIMEPD  /*MJS 07/03/03 Added*/
      SEMEAN
      SCORE
```

```
          SIG
       ;
    RUN;

%MEND;

*****************************************************************************
*****************************************************************************
* Process each of the 8 Groups.
*****************************************************************************
*****************************************************************************;
%MACRO DOIT;
%DO I = 1 %TO 8;
    *****************************************************************************
    * COMPOSITE # 1.
    * GETTING NEEDED CARE VARIABLES.
    *****************************************************************************;
    %PROCESS(CNUM=1, GNUM=&I, NVAR=2, VARS=R13029_&I R13033_&I,
          SE=S_R13029 S_R13033);


    *****************************************************************************
    * COMPOSITE # 2.
    * GETTING CARE QUICKLY VARIABLES.
    *****************************************************************************;
    %PROCESS(CNUM=2, GNUM=&I, NVAR=2, VARS=R13007_&I R13010_&I,
          SE=S_R13007 S_R13010);


    *****************************************************************************
    * COMPOSITE # 3.
    * HOW WELL DOCTORS COMMUNICATE.
    *****************************************************************************;
    %PROCESS(CNUM=3, GNUM=&I, NVAR=4, VARS=R13021_&I R13022_&I R13023_&I R13024_&I,
          SE=S_R13021 S_R13022 S_R13023 S_R13024);


    *****************************************************************************
    * COMPOSITE # 4.
    * CUSTOMER SERVICE.
    *****************************************************************************;
    %PROCESS(CNUM=4, GNUM=&I, NVAR=2, VARS=R13041_&I R13042_&I,
          SE=S_R13041 S_R13042);


    *****************************************************************************
    * COMPOSITE # 5.
    * CLAIMS PROCESSING.
    *****************************************************************************;
    %PROCESS(CNUM=5, GNUM=&I, NVAR=2, VARS=R13046_&I R13047_&I,
          SE=S_R13046 S_R13047);


    *****************************************************************************
    * INDIVIDUAL # 1.
    * RATING OF ALL HEALTH CARE: 0 - 10.
    *****************************************************************************;
    %PROCESS(CNUM=6, GNUM=&I, NVAR=1, VARS=R13018_&I, SE=S_R13018);


    *****************************************************************************
    * INDIVIDUAL # 2.
    * RATING OF HEALTH PLAN: 0 - 10.
    *****************************************************************************;
    %PROCESS(CNUM=7, GNUM=&I, NVAR=1, VARS=R13048_&I, SE=S_R13048);


    *****************************************************************************
    * INDIVIDUAL # 3.
    * RATING OF PERSONAL DOCTOR: 0 - 10.
    *****************************************************************************;
    %PROCESS(CNUM=8, GNUM=&I, NVAR=1, VARS=R13027_&I, SE=S_R13027);


    *****************************************************************************
    * INDIVIDUAL # 4.
    * SPECIALTY CARE: 0 - 10.
    *****************************************************************************;
    %PROCESS(CNUM=9, GNUM=&I, NVAR=1, VARS=R13031_&I, SE=S_R13031);
%END;
%MEND DOIT;
```

```
%DOIT;


*****************************************************************************
*****************************************************************************
* STACK up all of the files into one final output dataset.
*****************************************************************************
*****************************************************************************;
DATA OUT.BENCHA04;
    SET COMP1_1  COMP1_2  COMP1_3  COMP1_4  COMP1_5  COMP1_6  COMP1_7  COMP1_8
        COMP2_1  COMP2_2  COMP2_3  COMP2_4  COMP2_5  COMP2_6  COMP2_7  COMP2_8
        COMP3_1  COMP3_2  COMP3_3  COMP3_4  COMP3_5  COMP3_6  COMP3_7  COMP3_8
        COMP4_1  COMP4_2  COMP4_3  COMP4_4  COMP4_5  COMP4_6  COMP4_7  COMP4_8
        COMP5_1  COMP5_2  COMP5_3  COMP5_4  COMP5_5  COMP5_6  COMP5_7  COMP5_8
        COMP6_1  COMP6_2  COMP6_3  COMP6_4  COMP6_5  COMP6_6  COMP6_7  COMP6_8
        COMP7_1  COMP7_2  COMP7_3  COMP7_4  COMP7_5  COMP7_6  COMP7_7  COMP7_8
        COMP8_1  COMP8_2  COMP8_3  COMP8_4  COMP8_5  COMP8_6  COMP8_7  COMP8_8
        COMP9_1  COMP9_2  COMP9_3  COMP9_4  COMP9_5  COMP9_6  COMP9_7  COMP9_8
    ;
    IF SCORE = . THEN DELETE;
RUN;


TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6663-410)";
TITLE2 "Program Name: BENCHA04.SAS By Keith Rathbun";
TITLE3 "Program Inputs: Benchmark Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: BENCHA04.SAS7BDAT - Combined Benchmark Scores Database in WEB layout";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES TIMEPD BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
       /MISSING LIST;
RUN;
```

G.4.A   Q3FY2013\PROGRAMS\REPORTCARDS\MPR_ADULTQ3FY2013\PRVCOMPQ.SAS - Calculate Preventive Care Composite Scores - Run Quarterly.

```
*****************************************************************
* Project:   DoD Reporting and Analysis 6077-410
* Program:   PRVCOMPQ.SAS
* Author:    Chris Rankin
* Date:      12/22/2000
* Modified:  4/19/2001 By Keith Rathbun: Restrict population to
*            xins_cov in(1,2,3,6).  Use POSTSTR instead of
*            adj_cell.
* Modified:  10/25/01 By Daniele Beahm: Because no poststratification
*            was done for q3 2000, changed POSTSTR back to ADJ_CELL
*            04/09/02 modified macros the first three macros to create
*            temporary datasets (instead of writing permanent datasets)
*            07/15/02 By Mike Scott: Changed HCS021 to HCS022 for Q2 2002.
*            01/12/03 By Mike Scott: Changed ADJ_CELL to COM_SAMP.
*            03/21/03 By Mike Scott: Changed HCS024 to HCS031 for Q2 2002.
*            04/01/03 By Mike Scott: Replaced HP_FLU with HP_CHOL.
*            04/30/03 By Mike Scott: Changed COM_SAMP to ADJ_CELL.  Changed
*            CMPNUM1 from 4 to 5 and CMPNUM2 from 4 to 3.
*            06/13/03 By Eric Schone.  Changed composite mean & std err calculations
*            to use weights from 2000 input data.
*            07/23/03 By Mike Scott: Removed ..\PROGRAMS\ from INCLUDE.
*            10/21/03 By Mike Scott: Updated for Q3 2003.
*            01/07/04 By Mike Scott: Updated for Q4 2003.
*            02/02/04 By Mike Scott: Set PRVVAR6, PRVVAR7, and PRVVAR8 in DATA NORMDATA
*            to H04023, H04020, and H04031.
*            03/24/04 By Mike Scott: Updated for Q1 2004.
*            04/09/04 By Keith Rathbun: Added Service Affiliation variables to
*            accomodate the consumer watch.
*            06/22/04 By Regina Gramss: Updated for Q2 2004.
*            09/2004  By Regina Gramss: Updated for Q3 2004, to use XTNEXREG
*                             vs. XREGION
*            01/2005 By Regina Gramss: Updated to create "Last conus_q" for
*                   Q4 2004, replace XTNEXREG with XSERVREG
*            04/2005 By Regina Gramss: Updated for Q1 2005 (update 2004 field names)
*            07/2005 By Regina Gramss: updated for Q2 2005
*            10/2005 By Regina Gramss: Updated for Q3 2005
*            12/2005 By Regina Gramss: Updated for Q4 2005
*            03/24/2006 By Keith Rathbun: Updated for Q2 FY 2006.  Changed reference
*            to ADJ_CELL in 2006 data to be STRATUM.
*            07/2006 By Justin Oh: updated for Q2 FY 2006
*            08/22/2006 By Justin Oh
*                    Changed XSERVREG for Overseas
*                    Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                        IF XINS_COV IN (3)     THEN GROUP4 = 1
*                        Since only XINS_COV IN (1,2,3,6) is kept.
*                    Create XOCONUS for 2005 data.
*                    Added XREGION in the keep statement for NORMDATA.
*            10/04/2006 By Justin Oh Updated %LET INDATA and YRDATA.
*            11/15/2006 By Justin Oh Added FIELDAGE in 4 keep statements
*            12/22/2006 By Justin Oh Updated %LET INDATA and YRDATA HCS071_1.
*            04/05/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS072_1.
*            04/05/2007 By Justin Oh Added conditions for RC types
*                    ReportCards OR PurchasedReportCards.
*            05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*                    both Norm and Quarter datasets.
*            05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*                    Groups 1,3, and 4 for new reservists logic.
*            07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*                    Groups All, 4, 5, and 6.
*            09/04/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS074_1.
*            01/10/2008 By Keith Rathbun, Updated %LET INDATA and YRDATA HCS081_1.
*                    Also changed H07 variable names to be H08 to match 2008 survey
*            04/11/2008 By Justin Oh Updated %LET INDATA and YRDATA HCS082_1.
*            06/13/2008 By Keith Rathbun Updated %LET INDATA and YRDATA HCS083_1.
*            04/20/2009 By Mike Rudacille Changed RCTYPE and certain variable names for
*                    transition to V4 questionnaire.
*            06/22/2009 By Keith Rathbun Updated %LET INDATA and YRDATA HCS093_1.
*            09/30/2009 By Mike Rudacille Updated %LET INDATA and YRDATA HCS094_1.
*            12/17/2009 By Emma Ernst Updated %LET INDATA and YRDATA HCS101_1.
```

```
*                        Also changed H09 variables names to be H10 to match 2010 survey
*           03/02/2010 By Mike Rudacille Updated %LET INDATA and YRDATA HCS102_1.
*           03/25/2010 By Mike Rudacille Changed HCS102_1 to HCS102_2.
*                        Changed because HCS102_1 no longer contains FIELDAGE.
*           06/19/2010 By Mike Rudacille Updated %LET INDATA and YRDATA HCS103_2.
*           08/28/2010 By Mike Rudacille Updated %LET INDATA and YRDATA HCS104_2.
*           12/02/2010 By Mike Rudacille Updated %LET INDATA and YRDATA HCS111_2.
*                        Also changed variable names for 2011 survey.
*           02/24/2011 By Mike Rudacille Updated %LET INDATA and YRDATA HCS112_2.
*           03/31/2011 By Mike Rudacille Updated benchmarks for HP 2020.
*           12/10/2011 By Mike Rudacille Updated %LET INDATA and YRDATA HCS121_2.
*                        Also changed variable names for 2012 survey.
*           12/21/2011 By Mike Rudacille Updated norm data from 2005 to 2011.
*           03/05/2012 By Amanda Kudis Updated %LET INDATA and YRDATA HCS122_2.
*           06/20/2012 By Amanda Kudis Updated for Q3FY2012.
*           08/23/2012 By Christine Cheu Updated for Q4FY2012.
*           11/03/2012 By Mike Rudacille Updated for handling of
*                        Joint Service facilities
*           12/28/2012 By Aimee Valenzuela Updated for Q1FY2013
*           03/23/2013 By Mike Rudacille Updated %LET INDATA and YRDATA HCS132_2.
*           05/17/2013 By Mike Rudacille Modified coded to address SUDAAN V11 handling
*                        of PROC DESCRIPT without LEVELS. Now invoking PROC DESCRIPT
*                        for TABLEVAR=USA (i.e. CONUS cases) similarly to the other cases,
*                        except using LEVELS 1.
*
*  Purpose:   Calculate MPR Preventive Care Composites
*  Input:     HCSyyq_2.sas7bdat
*  Output:    RFINAL.sas7bdat
*             CFINAL.sas7bdat
*             MFINAL.sas7bdat
*             SFINAL.sas7bdat
*
*  Include
*   Files:    LOADCAHPQ.INC
*   Notes:    Next program is Loadmprq.sas
*
*             ***CHECK PARAMETER ASSIGNMENTS***
*****************************************************************;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 MLOGIC MPRINT
        NOFMTERR COMPRESS=YES;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards           ***/
%LET RCTYPE = ReportCards;

LIBNAME IN            "..\..\..\DATA\AFINAL";
LIBNAME INNORM        "..\..\..\..\2011\DATA";
LIBNAME OUT           ".";
LIBNAME LIBRARY       "..\..\..\DATA\AFINAL\FMTLIB";

%LET WGT=FWRWT;
%LET NORMWGT = CFWT;
%LET NORMDAT = HCS11A_2;

%LET DEBUG=Y;       /** Set to Y for Debug print of datasets **/
%LET INDATA=HCS133_2;

%LET YRDATA=HCS133_2;

/****** The following parameters are used in the Variance ****/
/****** calcuation macro for region and catchment area    ****/

%LET GRPNUM=8;      /** number of groups       **/
%LET COMPNUM=6;     /** number of variables    **/  /* RSG - 04/2005 changed from 8 to 7
(eliminate cholesterol)*/
                                                    /* MER - 12/21/11 changed from 7 to 6
(eliminate 15 min access var)*/
%LET REGNUM=18;     /** number of regions      **/  /* RSG - 01/2005 CHANGED TO FIT THE 16
CATEGORIES OF XSERVREG */
                                                    /* JSO 08/24/2006 (16 TO 15) Changed
Overseas Regions*/
                                                    /* MER 11/03/2012 (15 TO 18) Joint Service
*/
```

```
%LET CATCHNUM=9999; /** number of catchment areas **/

%LET CMPNUM1=4;    /** number of variables in first composite  **/    /*RSG 04/2005 Changed
CMPNUM1 from 5 to 4*/
%LET CMPNUM2=2;    /** number of variables in second composite **/    /*MJS 04/30/03 Changed
CMPNUM2 from 4 to 3*/
                                                        /*MER 12/27/11 Changed
CMPNUM2 from 3 to 2*/

%LET COMPCNT=2;    /** number of composites                 **/

**** set up benchmarks for preventive services ;
**** note -- these are the hp 2000 goals        ;
**** MER 3/31/11 - updated to hp 2020 goals    ;

%LET GOALVAR1= .78;   /** HP Goal for prenatal care      **/
%LET GOALVAR2= .81;   /** HP Goal for Mammography        **/
%LET GOALVAR3= .93;   /** HP Goal for Papsmear           **/
%LET GOALVAR4= .95;   /** HP Goal for Blood Pressure check **/
%LET GOALVAR5= .90;   /** access goals                 **/ /*04/2005 - RSG: DELETED
CHOLESTEROLE GOAL*/
%LET GOALVAR6= .90;

%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";

/**** note -- output all data to a single dataset for macro */
/**** call                                               */
/**** MACROS are no longer called for catchment areas     */

/* 08/24/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\..\..\2011\Data\fmtlib';

DATA NORMDATA(KEEP=XTNEXREG XSERVREG &WGT PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
                 DENV1-DENV&COMPNUM XSERVAFF FIELDAGE);
                 /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

  set INNORM.&NORMDAT(KEEP=MPRID XINS_COV HP_BP HP_MAMOG HP_PAP HP_PRNTL XTNEXREG
                       XENR_PCM XBNFGRP ENBGSMPL &NORMWGT DBENCAT
                       H11010 H11007 H11003 SERVAFF XREGION FIELDAGE XCATCH);
                 /* 08/24/2006 JSO Added XREGION in the keep statement to get XOCONUS */
                 /* 11/15/2006 JSO Added FIELDAGE in the keep statement */
                 /* 05/10/2007 JSO Added H05006, DBENCAT in the keep statement */
                 /* 12/21/2011 MER For switch to 2011 norm data mapped the following vars:
*/
                 /* H05006 -> H11003                                            */
                 /* H05007 -> H11004 (subsequently taken out due to not being necessary */
                 /* H05019 -> H11007                                            */
                 /* H05022 -> H11010                                            */
                 /* H05030 and ADJ_CELL were dropped                            */

******************************************************************************
* For quarterly reports, catchment level reporting is not done
* so the value of cellp is set to 1.
* For annual reporting purposes, cellp will need to be assigned
* to geocell
******************************************************************************;

/*RSG 02/2005 Added codes to define XTNEXREG & XSERVAFF*/

  IF SERVAFF = 'A' THEN XSERVAFF = 1;         *Army;
  ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
  ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
  ELSE XSERVAFF = 4;                          *Other/unknown;

  IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

  IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

  IF XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11
added 10, 11*/
```

```
   NXNS_COV = XINS_COV;                    /*JSO 04/26/2007 added for reservists logic*/
                                           /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
   IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
   IF DBENCAT IN('GRD','IGR') AND H11003 = 3 THEN DO;
      NXNS_COV = 3;
      XENR_PCM = .;
   END;

   PRVVAR1=HP_PRNTL;         /** prenatal care  **/
   PRVVAR2=HP_MAMOG;         /** mammography    **/
   PRVVAR3=HP_PAP;           /** papsmear       **/
   PRVVAR4=HP_BP;            /** blood pressure **/
   PRVVAR5=H11010;           /** access var 1   **/
   PRVVAR6=H11007;           /** access var 2   **/

/**** set up numerator and denominator for proportions ****/

   ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
   ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
   ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

   DO I = 1 TO &COMPNUM;
      IF I LE  &CMPNUM1 THEN DO;
         IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
         ELSE NUMER(I)=0;
         IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
      END;
      ELSE IF I GT &CMPNUM1 THEN DO;
         IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
         ELSE NUMER(I)=0;
         IF PRVVAR(I) > 0 THEN DENOM(I)=1;
      END;
   END;
   DROP I;
   DENV4=1;

 /* 08/22/2006, JSO Create XOCONUS for 2005 data */
    IF      XREGION=13 THEN XOCONUS=1;
    ELSE IF XREGION=14 THEN XOCONUS=2;
    ELSE IF XREGION=15 THEN XOCONUS=3;

 /*RSG 02/2005 Added codes to define XSERVREG CACSMPL*/

    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
       ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
       ELSE XSERVREG = 5;
    END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 6;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
       ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
       ELSE XSERVREG = 10;
    END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 11;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
       ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
       ELSE XSERVREG = 15;
    END;

    IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
       IF      XOCONUS = 1 THEN XSERVREG = 16;
       ELSE IF XOCONUS = 2 THEN XSERVREG = 17;
       ELSE IF XOCONUS = 3 THEN XSERVREG = 18;
    END;
```

```
    RENAME &NORMWGT = &WGT;
run;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY  "..\..\..\Data\Afinal\fmtlib";

DATA &YRDATA(KEEP=BGROUP MHS USA XSERVAFF CACSMPL &WGT TMP_CELL
                 PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
                 DENV1-DENV&COMPNUM XTNEXREG XSERVREG FIELDAGE);
                 /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

   SET IN.&INDATA(KEEP=XINS_COV HP_BP XTNEXREG HP_MAMOG HP_PAP HP_PRNTL   /*RSG 04/2005 DELETE
HP_CHOL*/
                      XREGION SERVAFF XENR_PCM XBNFGRP ENBGSMPL &WGT CACSMPL XCATCH
                      STRATUM H13010 H13007 H13004 H13003 D_HEALTH FIELDAGE DBENCAT);
                      /* 11/15/2006 JSO Added FIELDAGE in the keep statement */
                      /* 05/10/2007 JSO Added H07006, DBENCAT in the keep statement */

 ****************************************************************************
 * For quarterly reports, catchment level reporting is not done
 * so the value of cellp is set to 1.
 * For annual reporting purposes, cellp will need to be assigned
 * to geocell
 ****************************************************************************;
  IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
  ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
  ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
  ELSE XSERVAFF = 4;                         *Other/unknown;

  IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

  CELLP = 1;
  LENGTH TMP_CELL 8;
  TMP_CELL = STRATUM;   /* Make STRATUM a numeric variable */

  IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

  IF XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11
Added 10,11 */

  NXNS_COV = XINS_COV;   /*JSO 05/14/2007 added for reservists logic*/
                         /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
  IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
  IF DBENCAT IN('GRD','IGR') AND H13003 = 3 THEN DO;
     NXNS_COV = 3;
     XENR_PCM = .;
  END;

  PRVVAR1=HP_PRNTL;          /** prenatal care  **/
  PRVVAR2=HP_MAMOG;          /** mammography    **/
  PRVVAR3=HP_PAP;            /** papsmear       **/
  PRVVAR4=HP_BP;             /** blood pressure **/
  /*RSG 04/2005 - delete cholesterol, renumber PRVVAR below*/
  PRVVAR5=H13010;            /** access var 1   **/
  PRVVAR6=H13007;            /** access var 2   **/


/**** set up numerator and denominator for proportions ****/

  ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
  ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
  ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

  DO I = 1 TO &COMPNUM;
     IF I LE  &CMPNUM1 THEN DO;
        IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
     END;
     ELSE IF I GT &CMPNUM1 THEN DO;
        IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
```

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```
        ELSE NUMER(I)=0;
        IF PRVVAR(I) > 0 THEN DENOM(I)=1;
     END;
  END;
  DROP I;
  DENV4=1;

  MHS= 1;    /* set up dummy for MHS-- include all observations */

 /* 08/22/2006, JSO Create XOCONUS for 2005 data */
  IF     XREGION=13 THEN XOCONUS=1;
  ELSE IF XREGION=14 THEN XOCONUS=2;
  ELSE IF XREGION=15 THEN XOCONUS=3;

  IF XTNEXREG = 1 THEN DO;
     IF XSERVAFF = 1 THEN XSERVREG = 1;
     ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
     ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
     ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
     ELSE XSERVREG = 5;
  END;

  IF XTNEXREG = 2 THEN DO;
     IF XSERVAFF = 1 THEN XSERVREG = 6;
     ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
     ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
     ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
     ELSE XSERVREG = 10;
  END;

  IF XTNEXREG = 3 THEN DO;
     IF XSERVAFF = 1 THEN XSERVREG = 11;
     ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
     ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
     ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
     ELSE XSERVREG = 15;
  END;

  IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
     IF      XOCONUS = 1 THEN XSERVREG = 16;
     ELSE IF XOCONUS = 2 THEN XSERVREG = 17;
     ELSE IF XOCONUS = 3 THEN XSERVREG = 18;
  END;

*****************************************************************************
* Assign indicator of CONUS based on XTNEXREG.  CONUS stands for
* Contential United States it but includes both Alaska and Hawaii.
* 1/16/09 Changed CONUS to USA.
****************************************************************************;
  IF XTNEXREG IN (1,2,3) THEN USA=1;                              /*RSG 01/2005 OVERALL CONUS*/

  ELSE IF XTNEXREG = 4 THEN USA=2;

* Prime enrollees      *;

  IF (NXNS_COV IN (1,2,6) AND H13004>=2) THEN DO;
     BGROUP=1;
     OUTPUT;
  END;

* Enrollees with military PCMs *; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
     (XENR_PCM IN (1,2,6) AND H13004>=2) THEN DO;
     BGROUP=2;
     OUTPUT;
  END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
     (XENR_PCM IN (1,2) AND H13004>=2) THEN DO;
     BGROUP=2;
     OUTPUT;
  END;

* Enrollees with civilian PCMs *; /*JSO 04/05/2007, added conditions for RC type*/
```

```
IF "&RCTYPE" = 'ReportCards' AND
     (XENR_PCM IN (3,7) AND H13004>=2) THEN DO;
     BGROUP=3;
     OUTPUT;
  END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
     ((XENR_PCM IN (3) AND H13004>=2) OR NXNS_COV IN (3,9,10)) THEN DO;  /*JSO 07/30/2007, Added
9*/
     BGROUP=3;                                                          /*MER 07/12/11 Added
10*/
     OUTPUT;
  END;

* Nonenrollees *;

  IF NXNS_COV IN (3,9,10) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
     BGROUP=4;                          /*JSO 07/30/2007, Added 9*/  /*MER 07/12/11 Added 10*/
     OUTPUT;
  END;

* Active duty       *;

  IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
     BGROUP=5;          /*JSO 07/30/2007, added DBENCAT conditions*/
     OUTPUT;
  END;

* Active duty dependents  *;

  IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
     BGROUP=6;          /*JSO 07/30/2007, added DBENCAT conditions*/
     OUTPUT;
  END;

* Retirees  *;

  IF XBNFGRP IN (3,4) THEN DO;
     BGROUP=7;
     OUTPUT;
  END;

* All beneficiaries *;

  BGROUP=8;
  OUTPUT;
RUN;


DATA HCSDB;
SET &YRDATA;
RUN;

*******************************************************
*** First, calculate standard errors and create    ***
*** a file for each analytical unit                 ***
*******************************************************;

PROC SORT DATA=HCSDB; BY TMP_CELL;
RUN;

*******************************************************
***** Sudaan macro to calculate standard errors   *****
***** there are three output datasets created      *****
***** (XTNEXREG, XSERVREG, MHS, XSERVAFF)                    *****
***** Note:  7/10/2000 use CONUS for MHS           *****
***** Note:   there are 8 variables and 8 groups   *****
***** Note: 1/16/09 Changed CONUS to USA           *****
*******************************************************;

%MACRO A_SUDAAN(TABLEVAR);

*** set the number of levels in the proc descript ***;
*** for region or catchment                       ***;
```

```
   %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
       %LET ENDNUM=4;
       %LET PREF=S;           /** dataset prefix for service affiliation data    **/
   %END;
   %IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
       %LET ENDNUM=&REGNUM;
       %LET PREF=R;           /** dataset prefix for region data    **/
   %END;
   %ELSE %IF %UPCASE(&TABLEVAR)=USA %THEN %DO;
       %LET ENDNUM=1;
       %LET PREF=C;           /** dataset prefix for CONUS data **/
   %END;
   %ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
       %LET ENDNUM=5;      /** MER 11/03/2012 Change from 4 to 5 for Joint Service **/
       %LET PREF=M;
   %END;

   %DO I=1 %TO &GRPNUM;     /** 8 groups     **/

       %DO J=1 %TO &COMPNUM;   /** 6 variables **/

           DATA INDATA&I.&J(KEEP=&WGT MHS USA XSERVAFF XTNEXREG XSERVREG CACSMPL
                                 XSERVAFF NUMV&J DENV&J TMP_CELL);
               SET HCSDB;
               WHERE XSERVREG > 0 AND BGROUP=&I AND DENV&J > 0;
               %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
                   IF XSERVAFF > 5 OR XSERVAFF = . THEN DELETE;  /*MER 11/03/2012 Changed from 4 to 5
for Joint Service */
               %END;
                       %IF %UPCASE(&TABLEVAR)=USA %THEN %DO;
                           IF USA NE 1 THEN DELETE;
                       %END;
                       %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
                           IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
                       %END;
           RUN;

*** Calculate values for regions, catchment areas ****;

           PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
               WEIGHT &WGT;
               SETENV DECWIDTH=4;
               NEST TMP_CELL / MISSUNIT;
               VAR NUMV&J;
               TABLES &TABLEVAR;
               SUBGROUP &TABLEVAR;
               LEVELS &ENDNUM;
               OUTPUT SEMEAN/ TABLECELL=DEFAULT
               FILENAME=&PREF.GRP&I.V&J;
           RUN;


***** first, put all variables into one dataset for each group *****;

           DATA &PREF.GRP&I.V&J;
               SET &PREF.GRP&I.V&J;
               IF SEMEAN NE .;
               MHS=1;
           RUN;

           %IF &J=1 %THEN %DO;
               DATA &PREF.SEGRP&I;
                   SET &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
                   GROUP=&I;
                   IF SEMEAN NE .;
                   RENAME SEMEAN = SERRV&J;
               RUN;
           %END;
           %ELSE %DO;
               DATA &PREF.SEGRP&I;
                   MERGE &PREF.SEGRP&I &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
                   BY &TABLEVAR;
```

```
                GROUP=&I;
                RENAME SEMEAN = SERRV&J;
            RUN;
        %END;
    %END;

***** Put all data into one dataset  *****
***** Note:  changed output dataset  *****
***** to include group               *****;

    %IF &I=1 %THEN %DO;

        DATA &PREF.SERR;
            SET &PREF.SEGRP&I;
            KEEP GROUP &TABLEVAR SERRV1-SERRV&COMPNUM;
        RUN;
    %END;
    %ELSE %DO;

        DATA &PREF.SERR;
            SET &PREF.SERR
            &PREF.SEGRP&I;
        RUN;
    %END;

******** DEBUG PRINT   *******;

    %IF &DEBUG=Y %THEN %DO;
        %IF &I=&GRPNUM AND &PREF=R %THEN %DO;
            PROC PRINT DATA=&PREF.SERR;
                VAR &TABLEVAR GROUP SERRV1-SERRV&COMPNUM;
            RUN;
        %END;
    %END;

 %END;

%MEND A_SUDAAN;

%A_SUDAAN (USA);
%A_SUDAAN (XSERVAFF);
%A_SUDAAN (XSERVREG);
%A_SUDAAN (XTNEXREG);

*********************************************************
*** Next, calculate correlation coefficients       ***
*** and create a file for each analytical unit      ***
*********************************************************;

%MACRO GETCORR(BYVAR);

 %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=USA %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;

 PROC SORT DATA=HCSDB; BY &BYVAR;
 RUN;

 %DO I = 1 %TO &GRPNUM;

    PROC CORR NOPRINT DATA=HCSDB OUTP=&PREF.CORRC&I;
        %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %DO;
           WHERE BGROUP=&I AND 1 <= XSERVAFF <= 5;     /** MER 11/03/2012 Changed 4 to 5 for Joint
Service **/
        %END;
        %IF %UPCASE(&BYVAR)=USA %THEN %DO;
            WHERE BGROUP=&I AND USA = 1;
        %END;
        %ELSE %DO;
           WHERE BGROUP=&I;
        %END;
        BY &BYVAR;
```

```
             VAR PRVVAR1-PRVVAR&COMPNUM;
             WITH PRVVAR1-PRVVAR&COMPNUM;
             WEIGHT &WGT;
        RUN;

        DATA &PREF.CORRC&I;
          SET &PREF.CORRC&I;
          WHERE _TYPE_="CORR";
          GROUP=&I;
          ARRAY OLD PRVVAR1-PRVVAR&COMPNUM;
          ARRAY NEW CORV1-CORV&COMPNUM;
          DO J = 1 TO &COMPNUM;
             NEW(J)=OLD(J);
          END;
          DROP J PRVVAR1-PRVVAR&COMPNUM;
        RUN;

        %IF &I=1 %THEN %DO;

           DATA &PREF.CORRC;
             SET &PREF.CORRC&I;
           RUN;

        %END;
        %ELSE %DO;

           DATA &PREF.CORRC;
             SET &PREF.CORRC
             &PREF.CORRC&I;
           RUN;

        %END;
        %IF &DEBUG=Y %THEN %DO;
           %IF &I=&COMPNUM AND &PREF=R %THEN %DO;
              PROC PRINT DATA=&PREF.CORRC;
                 WHERE GROUP=1;
              RUN;
           %END;
        %END;
     %END;
  %END;

*** Flatten dataset(for each region, condense matrix to one row) ***;

  %DO K=1 %TO &COMPNUM;

     DATA &PREF.CORR&K;
       SET &PREF.CORRC;
       WHERE _NAME_ = "PRVVAR&K";
       ARRAY CORR   (&COMPNUM) CORV1-CORV&COMPNUM;
       ARRAY CORR&K (&COMPNUM) CORV&K.1-CORV&K.&COMPNUM;
       DO L=1 TO &COMPNUM;
          CORR&K(L)=CORR(L);
       END;
       KEEP GROUP &BYVAR CORV&K.1-CORV&K.&COMPNUM;
     RUN;
     %IF &K=1 %THEN %DO;
         DATA &PREF.CORR;
           SET &PREF.CORR&K;
         RUN;
     %END;
     %ELSE %DO;
        DATA &PREF.CORR;
          MERGE &PREF.CORR(IN=IN_1) &PREF.CORR&K(IN=IN_2);
           BY GROUP &BYVAR;
        RUN;
     %END;
     %IF &DEBUG=Y %THEN %DO;
        %IF &PREF=R %THEN %DO;
           PROC PRINT DATA=&PREF.CORR;
               WHERE GROUP=1;
           RUN;
        %END;
      %END;
```

```
 %END;

%MEND GETCORR;

%GETCORR(USA);
%GETCORR(XSERVAFF);
%GETCORR(XSERVREG);
%GETCORR(XTNEXREG);

*********************************************************
***  Macro to derive composites for each        *******
***  beneficiary group, level                   *******
***  output one dataset for each group          *******
*********************************************************;

%MACRO GETPROP(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);

 %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=USA %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;


 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR NUMV1-NUMV&COMPNUM
        DENV1-DENV&COMPNUM;
    WEIGHT &WGT;
    OUTPUT OUT= &PREF.CMPSUM(DROP = _TYPE_)
    SUM =  ;
 RUN;
 PROC MEANS NWAY NOPRINT DATA=normdata;
 *   CLASS &BYVAR;
    VAR
        DENV1-DENV&COMPNUM;
    WEIGHT &wgt.;
    OUTPUT OUT= &PREF.norms(DROP = _TYPE_)
    SUM =  nrmv1-nrmv&compnum;
 RUN;

 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR DENV1-DENV&COMPNUM;
    OUTPUT OUT=&PREF.DGFR(DROP=_TYPE_ _FREQ_)
    SUM= NOBSV1-NOBSV&COMPNUM;
 RUN;

data &pref.cmpsum;

if _n_=1 then set &pref.norms;
set &pref.cmpsum;
proc sort data=&pref.cmpsum; by bgroup &byvar;
 DATA &PREF.CMPSUM;
    MERGE &PREF.CMPSUM(RENAME=(_FREQ_=N_OBS))
          &PREF.DGFR;
    BY BGROUP &BYVAR;
    %IF &PREF=M %THEN %DO;  /** added 7/10/2000 **/
        WHERE 1 <= XSERVAFF <= 5;  /** MER 11/03/2012 Changed 4 to 5 for Joint Service **/
    %END;
    %ELSE %IF &PREF=C %THEN %DO;
        WHERE USA = 1;
    %END;

   **** set up group variable  **;

    RENAME BGROUP=GROUP;;

   **** set up proportions, and composites **;

    ARRAY PROPORT PROPV1-PROPV&COMPNUM;
    ARRAY NUMER   NUMV1-NUMV&COMPNUM;
```

```
   ARRAY DENOM    DENV1-DENV&COMPNUM;
   array norm     nrmv1-nrmv&compnum;

   DO J=1 TO DIM(PROPORT);
      PROPORT(J) = NUMER(J)/DENOM(J);
   END;
   DROP J;

 **** composites **;


** added goalvars to datastep, 5/30/2000              ;
** taken out of temporary array for variance calculations;
** and used, kept as variables                        ;

 GOALVAR1=&GOALVAR1;
 GOALVAR2=&GOALVAR2;
 GOALVAR3=&GOALVAR3;
 GOALVAR4=&GOALVAR4;
 GOALVAR5=&GOALVAR5;
 GOALVAR6=&GOALVAR6;
/*RSG 04/2005 - delete goal8 since chol eliminated*/

** the weight for preventive service is defined as the       ;
** proportion of the denominator for that service to the     ;
;
** composite denominator                                     ;
** healthy people 2000 goals -- used as benchmarks           ;

  ARRAY   SVCWGT(&COMPNUM) WGTV1-WGTV&COMPNUM;
  ARRAY    BMARK(&COMPNUM) GOALVAR1-GOALVAR&COMPNUM;
  ARRAY WGTBMARK(&COMPNUM) WTDV1-WTDV&COMPNUM;
  array comp(&compnum) cmpv1-cmpv&compnum;
cpden1=sum(of nrmv1-nrmv&cmpnum1);
cpden2=sum(of nrmv&start-nrmv&compnum);
  DO K = 1 TO &COMPNUM;
      IF K < &START THEN SVCWGT(K)= norm(K)/CPDEN1;
      ELSE SVCWGT(K) = norm(K)/CPDEN2;
      WGTBMARK(K) = SVCWGT(K)*BMARK(K);
      comp(k)=svcwgt(k)*proport(k);
  END;
  DROP K;
  CPBMK1=SUM(OF WTDV1-WTDV&CMPNUM1);
  CPBMK2=SUM(OF WTDV&START-WTDV&COMPNUM);
  comp1=sum(of cmpv1-cmpv&cmpnum1);
comp2=sum(of cmpv&start-cmpv&compnum);
 DROP WGTV1-WGTV&COMPNUM WTDV1-WTDV&COMPNUM
      NUMV1-NUMV&COMPNUM;
 RUN;

 %IF &DEBUG=Y AND &PREF=R %THEN %DO;
     PROC PRINT DATA=&PREF.CMPSUM;  /* print out final dataset */
     RUN;                            /* for region to check     */
 %END;

%MEND GETPROP;

%GETPROP(USA);
%GETPROP(XSERVAFF);
%GETprop(XSERVREG);
%GETPROP(XTNEXREG);

********************************************************
** since MHS benchmarks will be displayed        ****
** set up adjustment factor to apply to          ****
** each analytical unit's composite benchmarks   ****
********************************************************;


********************************************************
***  Macro to merge 3 datasets for each        *******
***  called by analytical unit                 *******
***  output final dataset for                  *******
```

```
*** XSERVAFF, XSERVREG, XTNEXREG, MHS (USA)    *******
*******************************************************;

PROC FORMAT;  /*RSG 02/2005 - hardcoded in prog to have caps vs format in loadcahq.inc*/
   VALUE REGIONF
      0 = "USA MHS "
      1 = "NORTH"
      2 = "SOUTH"
      3 = "WEST"
      4 = "OVERSEAS"
   ;
%MACRO GETSIG(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);
 %LET NEXT  = %EVAL(&CMPNUM1+2);


 %IF &BYVAR=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF &BYVAR=USA %THEN %LET PREF=C;
 %ELSE %IF &BYVAR=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF &BYVAR=XTNEXREG %THEN %LET PREF=S;


 DATA OUT.&PREF.FINAL(KEEP= MAJGRP REGION REGCAT GOALVAR1-GOALVAR&COMPNUM
                 SIGV1-SIGV&COMPNUM SCORV1-SCORV&COMPNUM
                 CPSIG1-CPSIG&COMPCNT CP1SE CP2SE
                 CSCOR1-CSCOR&COMPCNT CPBMK1-CPBMK&COMPCNT
                 SERRV1-SERRV&COMPNUM CP1SE CP2SE
                 COMP1 COMP2 PROPV1-PROPV&COMPNUM
                 DFSCR1-DFSCR&COMPNUM DF_CP1 DF_CP2
                 NOBSV1-NOBSV&COMPNUM CPOBS1-CPOBS&COMPCNT
                 DENV1-DENV&COMPNUM CPDEN1-CPDEN&COMPCNT);

    FORMAT MAJGRP $30. REGION $30. REGCAT $30.; /* MER 11/11/12 - Updated REGION/REGCAT for Joint
Service facilities */
        MERGE &PREF.CMPSUM(IN=IN_PROP) &PREF.CORR
        &PREF.SERR;
        BY GROUP &BYVAR;
        IF IN_PROP;
 %DO Z=1 %TO &COMPCNT;

           CSCOR&Z=COMP&Z.*100;

    %END;
  ** MAJGRP -- text field for group   **;
    IF      GROUP=1 THEN MAJGRP="Prime Enrollees              ";
    ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
    ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
    ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
    ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
    ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
    ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
    ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";

  **** REGION AND REGCAT SETUP        **;
    %IF &PREF=S %THEN %DO;
        REGCAT=PUT(XTNEXREG,REGIONF.);
        REGION=PUT(XTNEXREG,REGIONF.);
    %END;
    %else %IF &PREF=C %THEN %DO;
        REGION="USA MHS";
        REGCAT="USA MHS";
    %END;
    %ELSE %IF &PREF=R %THEN %DO;
        REGION=PUT(XSERVREG, SERVREGO.);
        REGCAT=PUT(XSERVREG, SERVREGO.);
    %END;
    %ELSE %IF &PREF=M %THEN %DO;                /** RSG 1/2005 Add codes for service
grouping **/
        REGION=PUT(XSERVAFF,XSERVAFF.);
        REGCAT=PUT(XSERVAFF,XSERVAFF.);
    %END;

   **** setup t statistics, degreees of freedom   **;
```

```
   ARRAY     TSTAT{&COMPNUM} T_V1-T_V&COMPNUM;
   ARRAY     BMARK{&COMPNUM} GOALVAR1-GOALVAR&COMPNUM;
   ARRAY  STNDERR{&COMPNUM} SERRV1-SERRV&COMPNUM;
   ARRAY  SERRSQR{&COMPNUM} SESQV1-SESQV&COMPNUM;
   ARRAY     DEGF{&COMPNUM} DFSCR1-DFSCR&COMPNUM;
   ARRAY    DENOM{&COMPNUM} DENV1-DENV&COMPNUM;
   ARRAY  PROPORT{&COMPNUM} PROPV1-PROPV&COMPNUM;
   ARRAY    SCORE{&COMPNUM} SCORV1-SCORV&COMPNUM;
   ARRAY   PVALUE{&COMPNUM} PVALV1-PVALV&COMPNUM;
   ARRAY      SIG{&COMPNUM} SIGV1-SIGV&COMPNUM;
   ARRAY     NOBS{&COMPNUM} NOBSV1-NOBSV&COMPNUM;
   array     norm{&compnum} nrmv1-nrmv&compnum;

  ** get the item variance, t-statistics, df, p-values **;
  ** and whether significant                         **;
   DO I=1 TO &COMPNUM;
        SERRSQR{I}=STNDERR{I}**2;  /* Item variance */
        SCORE{I}=PROPORT{I}*100;   /* Score (prop. * 100) */
        IF STNDERR{I} > 0 THEN TSTAT{I}=(PROPORT{I}-BMARK{I})/STNDERR{I};
        ELSE TSTAT{I}=.;
        DEGF{I}=NOBS{I}-1;
        PVALUE{I}=(1-PROBT(ABS(TSTAT{I}),DEGF{I}))*2;
        IF PVALUE{I} GE .05 THEN SIG{I}=0;
        ELSE IF PVALUE{I} < .05 THEN DO;
            IF PROPORT{I} > BMARK{I} THEN SIG{I}=1;
            IF PROPORT{I} < BMARK{I} THEN SIG{I}=-1;
        END;
   END;
   DROP I;

  ** multiply each item pair std. errors and correlation coefficients **;
  ** preventive care composite                                        **;
ARRAY SEwC1{&CMPNUM1} SEwV1-SEwV&CMPNUM1;

   ARRAY SERRC1{&CMPNUM1} SERRV1-SERRV&CMPNUM1;
   %DO J = 1 %TO &CMPNUM1;
        ARRAY   SMEAN&J{&CMPNUM1} SEMV&J.1-SEMV&J.&CMPNUM1;
        ARRAY CORVAR&J{&CMPNUM1} CORV&J.1-CORV&J.&CMPNUM1;
        DO K=1 TO &CMPNUM1;
            SMEAN&J{K}=SERRV&J*SERRC1{K}*CORVAR&J{K}*norm{K}*nrmV&J;
        END;
        SEMV&J.&J=0;
         sewv&j= (nrmV&j**2)*SESQV&j;/** don't count in final standard error calculation **/
   %END;
   DROP K;
  ** multiply each item pair std. errors and correlation coefficients **;
  ** access to care composite                                         **;

   ARRAY SERRC2{&CMPNUM2} SERRV&START-SERRV&COMPNUM;
   %DO L = &START %TO &COMPNUM;
        ARRAY   SMEAN&L{&CMPNUM2} SEMV&L.&START-SEMV&L.&COMPNUM;
        ARRAY CORVAR&L{&CMPNUM2} CORV&L.&START-CORV&L.&COMPNUM;
        DO M=1 TO &CMPNUM2;
            SMEAN&L{M}=SERRV&L*SERRC2{M}*CORVAR&L{M};
        END;
        SEMV&L.&L=0;  /** don't coun't in final standard error calculation **/
   %END;
   DROP M;
  ** calculate composite t-statistic, pvalue, and whether significant **;
  ** for composites                                                   **;
%DO P=1 %TO &COMPCNT;
     %IF &P=1 %THEN %DO;
     ** composite standard error comprised of two parts **;
         CP&P.SE1=SUM(OF SEwV1-SEwV&CMPNUM1);
         CP&P.SE2=SUM(OF SEMV11-SEMV&CMPNUM1.&CMPNUM1.);
         cpobs&p=sum(of nobsv1-nobsv&cmpnum1);
     %END;
     %ELSE %DO;
         CP&P.SE1=SUM(OF SESQV&START-SESQV&COMPNUM);
         CP&P.SE2=SUM(OF SEMV&START.&START.-SEMV&COMPNUM.&COMPNUM.);
         cpobs&p=sum(of nobsv&start-nobsv&compnum);
     %END;
  ** add the two parts of the composite standard error  **;
```

```
      ** calculate the composite t statistics and p-values  **;
      ** determine whether differences are sigificant        **;

          CP&P.SE=SQRT(CP&P.SE2+CP&P.SE1)/CPden&P;
          IF CP&P.SE > 0 THEN CP_T&P.=(COMP&P.-CPBMK&P.)/CP&P.SE;
          ELSE CP_T&P.= .;
          DF_CP&P.=CPOBS&P. - 1;
          CP_P&P.=(1-PROBT(ABS(CP_T&P.),DF_CP&P.))*2;
          IF CP_P&P GE .05 THEN CPSIG&P=0;
          ELSE IF CP_P&P < .05 THEN DO;
              IF COMP&P. > CPBMK&P THEN CPSIG&P= 1;
              ELSE IF COMP&P. < CPBMK&P THEN CPSIG&P=-1;
          END;
      %END;

      OUTPUT OUT.&PREF.FINAL;
 RUN;

%MEND GETSIG;

%GETSIG(USA);
%GETSIG(XTNEXREG);
%GETSIG(XSERVREG);
%GETSIG(XSERVAFF);
```

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**G.4.B Q3FY2013\PROGRAMS\REPORTCARDS\MPR_ADULTQ3FY2013\SMOKING_BMI.sas -
Calculates Healthy Behavior Composite Scores - Run Quarterly.**

```
*****************************************************************************
*
*  Project:    DoD Reporting and Analysis 6077-410
*  Program:    SMOKING_BMI.SAS
*  Purpose:    Calculate Smoking Rate and Smoking Cessation
*              for each region-service affiliation and
*              conus-service affiliation groups.
*
*  Date:       1/31/2005
*  Author:     Regina Gramss
*
*  Modified:  1) 04/2005 By Regina Gramss, Updated for Q1 2005.
*             2) 12/2005 By Regina Gramss, Updated for Q4 2005.
*             3) 01/2006 By Regina Gramss - Updated for 2005 annual data.  Normalize
*                with 2005 data and not 2000.  Standardize using age/sex and MPCSMPL
*                (military personnel category).  Update smoking cessation
*                calculation with new formula to correspond more to HEDIS.  Use new
*                weight (CFWT) and use STRATUM as TMP_CELL.
*             4) 03/24/2006 By Keith Rathbun, Updated for Q2 FY 2006.
*             5) 07/12/2006 By Justin Oh, Updated for Q3 FY 2006.
*             6) 08/24/2006 By Justin Oh, REGNUM changed from 16 to 24.
*                Changed XSERVREG for Overseas
*                Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                        IF XINS_COV IN (3)     THEN GROUP4 = 1
*                Since only XINS_COV IN (1,2,3,6) is kept.
*                Create XOCONUS for 2005 data.
*                Added/Moved LIBRARY Libname to use both Quarter/Annual Formats.
*             7) 10/04/2006 By Justin Oh, Updated %LET DSN and CURRENT.
*             8) 12/22/2006 By Justin Oh, Updated %LET DSN HCS071_1 and CURRENT October, 2006.
*             9) 02/02/2007 By Justin Oh, Added "s" to Healthy Behaviors
*            10) 04/05/2007 By Justin Oh, Updated %LET DSN HCS072_1 and CURRENT January, 2007.
*            11) 04/05/2007 By Justin Oh, Added conditions for RC types
*                        ReportCards OR PurchasedReportCards.
*            12) 05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*                        both Norm and Quarter datasets.
*            13) 05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*                        Groups 1,3, and 4 for new reservists logic.
*            14) 07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*                        Groups All, 4, 5, and 6.
*            15) 09/04/2007 By Justin Oh, Updated %LET DSN HCS074_1 and CURRENT July, 2007.
*            16) 01/10/2008 By Keith Rathbun, Updated %LET DSN HCS081_1 and CURRENT October,
2007.
*                        Also changed H07 variable names to be H08 to match 2008 survey.
*            17) 04/11/2008 By Justin Oh, Updated %LET DSN HCS082_1 and CURRENT January, 2008.
*            18) 06/13/2008 By Keith Rathbun, Updated %LET DSN HCS083_1 and CURRENT April, 2008.
*            19) 03/11/2009 By Keith Rathbun, Updated %LET DSN HCS092_1 and CURRENT January,
2009.
*            20) 04/20/2009 By Mike Rudacille, Switched from 2005 to 2007 benchmark data for
transition to
*                V4 questionnaire.
*            21) 05/05/2009 By Mike Rudacille, Updated for 2008 benchmark data.
*            22) 06/22/2009 By Keith Rathbun, Updated %LET DSN HCS093_1 and CURRENT April, 2009.
*                Changed weight variable from FWRWT_V4 back to FWRWT.
*            23) 09/30/2009 By Mike Rudacille, Updated %LET DSN HCS094_1 and CURRENT July, 2009.
*            24) 12/17/2009 by Emma Ernst, Updated %LET DSN HCS101_1 and CURRENT October, 2009.
*                        Also changed H09 variables names to be H10 to match 2010 survey.
*            25) 03/02/2010 By Mike Rudacille, Updated %LET DSN HCS102_1 and CURRENT January,
2010.
*            26) 03/25/2010 By Mike Rudacille, Changed HCS102_1 to HCS102_2.
*                        Changed because HCS102_1 no longer contains FIELDAGE.
*            27) 03/30/2010 By Mike Rudaiclle, Updated for 2009 benchmark data.
*            28) 06/19/2010 By Mike Rudacille, Updated %LET DSN HCS103_2 and CURRENT April, 2010.
*            29) 08/28/2010 By Mike Rudacille, Updated %LET DSN HCS104_2 and CURRENT July, 2010.
*            30) 12/02/2010 By Mike Rudacille, Updated %LET DSN HCS111_2 and CURRENT October,
2010.
*                        Also updated Hyy variable names to match 2011 survey.
*            31) 02/24/2011 By Mike Rudacille, Updated %LET DSN HCS112_2 and Current January,
2011.
*            32) 03/31/2011 By Mike Rudacille, Updated for 2010 benchmarks and to include new
```

```
*                         definition of smoker, HP_SMKH3. Also utilizes HP_CESH3 rather than
*                         re-creating work already done in convarq.
*        33) 12/10/2011 By Mike Rudacille, Updated %LET DSN HCS121_2 and CURRENT October,
2011.
*                         Also updated Hyy variable names to match 2012 survey.
*        34) 12/21/2011 By Mike Rudacille Updated norm data from 2005 to 2011.
*        35) 03/05/2012 By Amanda Kudis, Updated %LET DSN HCS122_2 and CURRENT January, 2012.
*        36) 06/20/2012 By Amanda Kudis, Updated for Q3FY2012.
*        37) 08/23/2012 By Christine Cheu, Updated for Q4FY2012.
*        38) 11/03/2012 By Mike Rudacille Updated for handling of Joint Service facilities
*        39) 12/28/2012 By Aimee Valenzuela Updated for Q1FY2013
*        40) 03/23/2013 By Mike Rudacille, Updated %LET DSN HCS132_2 and CURRENT January,
2013.
*
*   Inputs:   1) HCS11A_2.sas7bdat - Annual 2011 Survey data
*             2) HCS132_2.sas7bdat - Q2 fy 2013 Survey data
*             3) AC2011DB.sas7bdat - 2011 CAHPS Benchmark Data
*
*   Output:   1) SMOKE.sas7bdat
*
*
***************************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards         ***/
%LET RCTYPE = ReportCards;

LIBNAME BENCH        "..\..\..\..\2011AdultNCBD";
LIBNAME INDAT        "..\..\..\Data\afinal";
LIBNAME INNORM       "..\..\..\..\2011\Data";
LIBNAME OUT          ".";

%LET DSN=HCS133_2;
%LET DSN_NORM=HCS11A_2;                      /*JSO 08/24/2006, Changed Regions, 16 to 15*/ /* MER
11/03/12 15 to 18 */
%LET REGNUM = 18;                            /*RSG 01/2005 Number of Regions (with serv affiliation)*/
%LET CONNUM = 4;                             /*RSG 01/2005 Number of Conus level (with serv
affiliation)*/
%LET SRVNUM = 5;                             /*MER 11/03/2012 Number of service affiliations,
including Joint Service */
%LET CURRENT = April, 2013;
%LET WGT = FWRWT;
%LET NORMWGT = CFWT;
%LET CATCHNUM=9999;                          /*RSG 02/2005 number of catchment areas **/

DATA BENCHA01;
   SET BENCH.AC2011DB (RENAME=(BIRTHYY=YOB));
   if product in (7,9) then model=4;
   if product=3 then model=2;                        /*coded according to AC FORMATS.SAS*/
   if product=1 then model=1;
   if product=4 then model=6;
   if product=8 then model=5;
   if product=2 then model=3;
   product=planid;
/*if ^(model in (2,4)); */ **AMK 5/02/12 removed;
if disp in ('M10','I10')  ;
if ac45_11 in (1,2) & ac46_11>=1 & ac46_11<=4;  /*02/2006 RSG - REMOVED REQUIREMENT FOR
ADDITIONAL VISIT (ACC22 FIELD)*/
cessbnch=0;
if ac46_11>1 then cessbnch=1;


proc summary nway; class product;
var cessbnch;
output out=tbench mean=;
proc print;
proc summary;
var cessbnch;
output out=tbench mean=;
proc print;
data _null_;
set tbench;
```

```
call symput('CNSLGOAL',cessbnch);
run;

%LET NSMKGOAL = 0.88;

%LET BMIGOAL  = 0.69;

%INCLUDE "..\..\LoadWeb\LOADCAHQ.INC";

PROC FORMAT;
VALUE AGEF
LOW - 34 = 1
 35 - 49 = 2
 50 - 64 = 3
 65 - HIGH = 4;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\..\2011\Data\fmtlib';

DATA NORMDATA (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF
                    SM_RATE SM_CESS SM_RTDN SM_CSDN  BMI_DN BMI
                    TOTCON GROUP XSEXA &WGT. age_n MPCSMPL NXNS_COV);
                    /* 05/10/2007 JSO Added NXNS_COV in the keep statement */
SET INNORM.&DSN_NORM.(DROP=&WGT.); /* 4/4/2006, KRR added drop so CFWT can renamed/used */
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

IF     XREGION=13 THEN XOCONUS=1; /* 08/24/2006, JSO Create XOCONUS for 2005 data */
ELSE IF XREGION=14 THEN XOCONUS=2;
ELSE IF XREGION=15 THEN XOCONUS=3;


TMP_CELL=STRATUM;


AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);
IF AGE_GRP < 4;

IF SERVAFF = 'A' THEN XSERVAFF = 1;         *Army;
ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;    *Air Force;
ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;    *Navy;
ELSE XSERVAFF = 4;                          *Other/unknown;

IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

IF XTNEXREG = 1 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 1;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
   ELSE XSERVREG = 5;
END;

IF XTNEXREG = 2 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 6;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
   ELSE XSERVREG = 10;
END;

IF XTNEXREG = 3 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 11;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
   ELSE XSERVREG = 15;
END;

IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
    IF      XOCONUS = 1 THEN XSERVREG = 16;
   ELSE IF XOCONUS = 2 THEN XSERVREG = 17;
   ELSE IF XOCONUS = 3 THEN XSERVREG = 18;
END;
```

```
IF HP_SMKH3 IN (1,2) THEN DO;
   SM_RATE = 0;
   IF HP_SMKH3 = 2 THEN SM_RATE=1;
   SM_RTDN=1;
END;

/* MER 3/31/11 Start using HP_CESH3 instead of re-creating work already done in convarq */
IF HP_CESH3 IN (1,2) THEN DO;
   SM_CESS = 0;
   IF HP_CESH3 = 1 THEN SM_CESS=1;
   SM_CSDN=1;
END;

IF xbmicat > 0  THEN DO;
    BMI = 0;
    BMI_DN=1;
   IF xbmicat <=3 THEN BMI=1;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG = 4 THEN TOTCON=2;

IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

RENAME &NORMWGT = &WGT;

IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

IF XTNEXREG = .    THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11
Added 10,11*/

NXNS_COV = XINS_COV;               /*JSO 04/26/2007 added for reservists logic*/
                                   /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
IF DBENCAT IN('GRD','IGR') AND H11003 = 3 THEN DO;
   NXNS_COV = 3;
   XENR_PCM = .;
END;

* prime enrollees;
IF NXNS_COV IN (1,2,6) AND H11004>=2 THEN DO;
   GROUP=1;
   OUTPUT;
END;

* enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM IN (1,2,6) AND H11004>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   XENR_PCM IN (1,2) AND H11004>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;

* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM = 3 AND H11004>=2 THEN DO;
   GROUP=3;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   ((XENR_PCM = 3 AND H11004>=2) OR NXNS_COV IN (3,9,10)) THEN DO; /*JSO 07/30/2007, Added 9*/
   GROUP=3;                                                        /*MER 07/12/11, Added 10*/
   OUTPUT;
END;
```

```
* nonenrollees;
IF NXNS_COV IN (3,9,10) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
   GROUP=4;                          /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11, Added 10*/
   OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
   GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR')THEN DO;
   GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
   GROUP=7;
   OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\Data\afinal\fmtlib';

DATA SMOKE (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF TOTCON GROUP
                 SM_RATE SM_CESS SM_RTDN SM_CSDN XSEXA &WGT BMI_DN BMI
                 MPCSMPL NXNS_COV);/* 05/10/2007 JSO Added NXNS_COV in the keep statement */
SET INDAT.&DSN.;
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

/* MER 4/20/09 - Restrict dataset to just non-zero V4 weights */
IF &WGT <= 0 THEN DELETE;

TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);

IF AGE_GRP < 4;
IF SERVAFF='A' THEN XSERVAFF=1;                 *Army;
   ELSE IF SERVAFF='F' THEN XSERVAFF=2;        *Air Force;
   ELSE IF SERVAFF='N' THEN XSERVAFF=3;        *Navy;
   ELSE XSERVAFF=4;

IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

IF XTNEXREG = 1 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 1;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
   ELSE XSERVREG = 5;
END;

IF XTNEXREG = 2 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 6;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
   ELSE XSERVREG = 10;
END;

IF XTNEXREG = 3 THEN DO;
```

```
    IF XSERVAFF = 1 THEN XSERVREG = 11;
    ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
    ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
    ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
    ELSE XSERVREG = 15;
END;

IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
    IF      XOCONUS = 1 THEN XSERVREG = 16;
    ELSE IF XOCONUS = 2 THEN XSERVREG = 17;
    ELSE IF XOCONUS = 3 THEN XSERVREG = 18;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG=4 THEN TOTCON=2;

IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

IF XTNEXREG = . THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11,
Added 10*/

NXNS_COV = XINS_COV;                    /*JSO 04/26/2007 added for reservists logic*/
                                        /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
IF DBENCAT IN('GRD','IGR') AND H13003 = 3 THEN DO;
    NXNS_COV = 3;
    XENR_PCM = .;
END;

IF HP_SMKH3 IN (1,2) THEN DO;
    SM_RATE = 0;
    IF HP_SMKH3 = 2 THEN SM_RATE=1;
    SM_RTDN=1;
END;

/* MER 3/31/11 Start using HP_CESH3 instead of re-creating work already done in convarq */
IF HP_CESH3 IN (1,2) THEN DO;
    SM_CESS = 0;
    IF HP_CESH3 = 1 THEN SM_CESS=1;
    SM_CSDN=1;
END;

IF xbmicat > 0  THEN DO;
     BMI = 0;
     BMI_DN=1;
    IF xbmicat <=3 THEN BMI=1;
END;

* prime enrollees;
IF NXNS_COV IN (1,2,6) AND H13004>=2 THEN DO;
    GROUP=1;
    OUTPUT;
END;

* enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
    XENR_PCM IN (1,2,6) AND H13004>=2 THEN DO;
    GROUP=2;
    OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
    XENR_PCM IN (1,2) AND H13004>=2 THEN DO;
    GROUP=2;
    OUTPUT;
END;

* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
```

```
      XENR_PCM = 3 AND H13004>=2 THEN DO;
      GROUP=3;
      OUTPUT;
   END;
   ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
      ((XENR_PCM = 3 AND H13004>=2) OR NXNS_COV IN (3,9,10)) THEN DO; /*JSO 07/30/2007, Added 9*/
      GROUP=3;                                                        /*MER 07/12/11, Added 10*/
      OUTPUT;
   END;

   * nonenrollees;
   IF NXNS_COV IN (3,9,10) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
      GROUP=4;                      /*JSO 07/30/2007, Added 9*/  /*MER 07/12/11, Added 10*/
      OUTPUT;
   END;

   * active duty;
   IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
      GROUP=5;          /*JSO 07/30/2007, added DBENCAT conditions*/
      OUTPUT;
   END;

   * active duty dependents;
   IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
      GROUP=6;          /*JSO 07/30/2007, added DBENCAT conditions*/
      OUTPUT;
   END;

   * retirees;
   IF XBNFGRP IN (3,4) THEN DO;
      GROUP=7;
      OUTPUT;
   END;

   * all beneficiaries;
   GROUP=8;
   OUTPUT;

   RUN;

   PROC SORT DATA=SMOKE;
   BY TMP_CELL;
   PROC SORT DATA=NORMDATA;
   BY TMP_CELL;
   RUN;

   %MACRO A_SUDAAN(TABLEVAR,SMOKE,SMOKEVAR,DEN);

   %IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
       %LET ENDNUM=&REGNUM;
          %LET PREF=R;
   %END;
   %ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
       %LET ENDNUM=&SRVNUM;
          %LET PREF=M;
   %END;
   %ELSE %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
       %LET ENDNUM=&CONNUM;
          %LET PREF=S;
   %END;

   %ELSE %IF %UPCASE(&TABLEVAR)=TOTCON %THEN %LET PREF=C;

   %DO I = 1 %TO 8;

       DATA INDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA MPCSMPL
                          &SMOKEVAR. &DEN. TMP_CELL XTNEXREG);
          SET SMOKE;
       WHERE XSERVREG > 0 AND GROUP=&I. AND &DEN. >= 0;
          %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
              IF XSERVAFF > 5 OR XSERVAFF = . THEN DELETE; /* MER 11/3/12 - Changed 4 to 5 */
          %END;
             %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
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```
                 IF TOTCON NE 1 THEN DELETE;
             %END;
             %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
                 IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
             %END;
      RUN;


         DATA NORMDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA &SMOKEVAR. &DEN.
                            TMP_CELL XTNEXREG MPCSMPL);
               SET NORMDATA;
               WHERE XSERVREG > 0 AND GROUP=&I.;

               %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
                   IF XSERVAFF > 5 OR XSERVAFF = . THEN DELETE; /* MER 11/3/12 - Changed 4 to 5
*/
               %END;
               %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
                   IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
               %END;

          RUN;

             %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                   PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                   WEIGHT &WGT;
                   SETENV DECWIDTH=4;
                   NEST TMP_CELL / missunit;
                   VAR &SMOKEVAR;
                   TABLES AGE_GRP*XSEXA*MPCSMPL*&TABLEVAR.;
                   SUBGROUP AGE_GRP XSEXA MPCSMPL &TABLEVAR.;
                   LEVELS 8 2 2 &ENDNUM.;
                   OUTPUT  SEMEAN MEAN wsum nsum
                            / TABLECELL=DEFAULT REPLACE
                              FILENAME=&PREF.GRP&I.&SMOKE.;
                   RUN;
             %END;
             %ELSE %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                   PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                   WEIGHT &WGT;
                   SETENV DECWIDTH=4;
                   NEST TMP_CELL / missunit;
                   VAR &SMOKEVAR;
                   TABLES AGE_GRP*XSEXA*MPCSMPL;
                   SUBGROUP AGE_GRP XSEXA MPCSMPL;
                   LEVELS 3 2 2;
                   OUTPUT  SEMEAN MEAN wsum nsum
                            / TABLECELL=DEFAULT REPLACE
                              FILENAME=&PREF.GRP&I.&SMOKE.;
                   RUN;
             %END;

      %IF %UPCASE(&SMOKE) NE CS %THEN %DO;

                 DATA &PREF.SER_&I.&SMOKE.;
                 SET &PREF.GRP&I.&SMOKE.;
                 GROUP=&I.;
                 IF SEMEAN NE .;
                 %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                     KEEP &TABLEVAR. GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
                 %END;
                 %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                     TOTCON=1;
                     KEEP TOTCON GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
                 %END;
               RUN;

               /* CREATE WEIGHTS FROM 2005 DATA*/
               proc summary data=normdat&i. nway;
                var &WGT;
                where &den>0;
                class age_grp xsexa MPCSMPL;
                output out=norm_&i. sum=normwt;
```

```
proc sort data=&pref.ser_&i.&smoke.;
by age_grp xsexa mpcsmpl;

data &pref.ser_&i.&smoke.;
merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
by age_grp xsexa mpcsmpl;
if gin;
wsum=wsum/normwt;
nsum=nsum/normwt;
sesq=normwt*semean**2;
run;

proc summary data=&pref.ser_&i.&smoke. nway;
var mean semean sesq wsum nsum;
class &tablevar.;
weight normwt;
output out=&pref.sert&i.&smoke. mean(mean sesq)= sum(wsum nsum)= sumwgt(semean)=;
run;

data &pref.sert&i.&smoke;
   set &pref.sert&i.&smoke;
   group=&i.;
    semean=sqrt(sesq/semean);
   drop _type_ _freq_;
run;

%IF &I. = 1 %THEN %DO;

    DATA &PREF._&SMOKE.;
    SET &PREF.SERT&I.&SMOKE.;
    RUN;
%END;
%ELSE %DO;

    DATA &PREF._&SMOKE.;
     SET &PREF._&SMOKE. &PREF.SERT&I.&SMOKE.;
    RUN;

    PROC SORT DATA=&PREF._&SMOKE.;
    BY GROUP;
    RUN;

%END;

%END;
    %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
        PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
        WEIGHT &WGT;
        SETENV DECWIDTH=4;
        NEST TMP_CELL / missunit;
        VAR &SMOKEVAR;
        TABLES AGE_GRP*XSEXA*&TABLEVAR.;
        SUBGROUP AGE_GRP XSEXA &TABLEVAR.;
        LEVELS 3 2 &ENDNUM.;
        OUTPUT  SEMEAN MEAN wsum nsum
                / TABLECELL=DEFAULT REPLACE
                  FILENAME=&PREF.GRP&I.&SMOKE.;
        RUN;
    %END;
    %ELSE %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
        PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
        WEIGHT &WGT;
        SETENV DECWIDTH=4;
        NEST TMP_CELL / missunit;
        VAR &SMOKEVAR;
        TABLES AGE_GRP*XSEXA;
        SUBGROUP AGE_GRP XSEXA;
        LEVELS 3 2 ;
        OUTPUT  SEMEAN MEAN wsum nsum
                / TABLECELL=DEFAULT REPLACE
                  FILENAME=&PREF.GRP&I.&SMOKE.;
        RUN;
```

```
        %END;

%IF %UPCASE(&SMOKE) = CS %THEN %DO;

        DATA &PREF.SER_&I.&SMOKE.;
        SET &PREF.GRP&I.&SMOKE.;
        GROUP=&I.;
        IF SEMEAN NE .;
        %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
           KEEP &TABLEVAR. GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
        %END;
        %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
           TOTCON=1;
           KEEP TOTCON GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
        %END;
        RUN;

        /* CREATE WEIGHTS FROM 2005 DATA*/
        proc summary data=normdat&i. nway;
         var &WGT;
         where &den>0;
         class age_grp xsexa;
         output out=norm_&i. sum=normwt;

         proc sort data=&pref.ser_&i.&smoke.;
         by age_grp xsexa;

         data &pref.ser_&i.&smoke.;
         merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
         by age_grp xsexa;
         if gin;
         wsum=wsum/normwt;
         nsum=nsum/normwt;
         sesq=normwt*semean**2;
         run;

         proc summary data=&pref.ser_&i.&smoke. nway;
         var mean semean sesq wsum nsum;
         class &tablevar.;
         weight normwt;
         output out=&pref.sert&i.&smoke. mean(mean sesq)= sum(wsum nsum)= sumwgt(semean)=;
         run;

        data &pref.sert&i.&smoke;
           set &pref.sert&i.&smoke;
           group=&i.;
            semean=sqrt(sesq/semean);
           drop _type_ _freq_;
        run;




        %IF &I. = 1 %THEN %DO;

        DATA &PREF._CESS;
        SET &PREF.SERT&I.&SMOKE.;
        RUN;
        %END;
        %ELSE %DO;

        DATA &PREF._CESS;
           SET &PREF._CESS &PREF.SERT&I.&SMOKE.;
         RUN;

        PROC SORT DATA=&PREF._CESS;
        BY GROUP;
        RUN;

        %END;
```

```
      %END;
%END;

%MEND;

%A_SUDAAN(XSERVAFF,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVAFF,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XSERVAFF,BM,BMI,BMI_DN);
%A_SUDAAN(XSERVREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XSERVREG,BM,BMI,BMI_DN);
%A_SUDAAN(XTNEXREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XTNEXREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XTNEXREG,BM,BMI,BMI_DN);
%A_SUDAAN(TOTCON,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(TOTCON,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(TOTCON,BM,BMI,BMI_DN);

%MACRO ADDIT(PREF, TYPE);

DATA &PREF._&TYPE;
SET &PREF._&TYPE;
LENGTH BENEFIT $34. BENTYPE $50.;

BENEFIT="Healthy Behaviors";
    %IF &TYPE=RT %THEN %DO;
        BENTYPE="Non-Smoking Rate";
    %END;
    %IF &TYPE=CESS %THEN %DO;
        BENTYPE="Counselled To Quit";
    %END;
    %IF &TYPE = BM %THEN %DO;
        BENTYPE = "Percent Not Obese";
    %END;
RUN;

%MEND;

%ADDIT(C,RT);
%ADDIT(C,CESS);
%ADDIT(C,BM);
%ADDIT(M,RT);
%ADDIT(M,CESS);
%ADDIT(M,BM);
%ADDIT(R,RT);
%ADDIT(R,CESS);
%ADDIT(R,BM);
%ADDIT(S,RT);
%ADDIT(S,CESS);
%ADDIT(S,BM);


%MACRO MAKEDATA(PREF, TABLEVAR);
  DATA &PREF._SMOKE;
   SET &PREF._RT
       &PREF._CESS
       &PREF._BM
;

    LENGTH MAJGRP $30. REGION REGCAT $30.; /* MER 11/11/12 - Updated REGION/REGCAT for Joint
Service facilities */

    IF      GROUP=1 THEN MAJGRP="Prime Enrollees             ";
    ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
    ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
    ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
    ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
    ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
    ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
    ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";

        %IF &TABLEVAR = XSERVAFF %THEN %DO;
```

```
            IF XSERVAFF = 1 THEN REGION = 'ARMY';
            IF XSERVAFF = 2 THEN REGION = 'AIR FORCE';
            IF XSERVAFF = 3 THEN REGION = 'NAVY';
            IF XSERVAFF = 4 THEN REGION = 'OTHER';
             IF XSERVAFF = 5 THEN REGION = 'JOINT SERVICE'; /* MER 11/3/12 - Added for Joint
Service facilities */
        %END;

        %IF &TABLEVAR = XSERVREG %THEN %DO;
                REGION = PUT(XSERVREG,SERVREGO.); /*JSO 08/24/2006, Create new format for
Overseas*/
        %END;

        %IF &TABLEVAR = XTNEXREG %THEN %DO;
         IF XTNEXREG=1 THEN REGION="NORTH";
             ELSE IF XTNEXREG=2 THEN REGION="SOUTH";
             ELSE IF XTNEXREG=3 THEN REGION="WEST";
             ELSE IF XTNEXREG=4 THEN REGION="OVERSEAS";
        %END;

        %IF &TABLEVAR = TOTCON %THEN %DO;
         REGION = "USA MHS";
        %END;


         REGCAT=REGION;
         DROP GROUP &TABLEVAR;

         IF &TABLEVAR NE 0;

    RUN;


%MEND MAKEDATA;

%MAKEDATA(M,XSERVAFF);
%MAKEDATA(C,TOTCON);
%MAKEDATA(R,XSERVREG);
%MAKEDATA(S,XTNEXREG);


DATA SMOKE;
SET M_SMOKE R_SMOKE S_SMOKE C_SMOKE;
SESQ = SEMEAN**2;
RENAME MEAN=SCORE wsum=n_wgt nsum=n_obs;
RUN;

/* CALCULATE COMPOSITE SCORE - AVERAGE RATE AND CESSATION*/

PROC SORT DATA=SMOKE;
BY MAJGRP REGION REGCAT;
RUN;

PROC SUMMARY DATA=SMOKE SUM;
BY MAJGRP REGION REGCAT;
VAR SCORE SESQ N_WGT N_OBS;
OUTPUT SUM= OUT=PRECOMP;
RUN;

DATA COMP(RENAME=(S_MEAN=SCORE S_SE=SEMEAN));
SET PRECOMP;
IF _FREQ_ = 3 THEN DO;
    S_MEAN=SCORE/3;
    S_SE=SQRT(SESQ)/3;
    N_OBS=round(N_OBS/3);
END;
ELSE DO;
    S_MEAN=.;
    S_SE=.;
END;
BENTYPE="Composite";
BENEFIT="Healthy Behaviors";
DROP _TYPE_ _FREQ_ SCORE SESQ;
```

```
RUN;

PROC SORT DATA=SMOKE;
BY MAJGRP BENTYPE;
RUN;

DATA BENCH;
SET SMOKE;
BY MAJGRP BENTYPE;
IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
   SCORE=&CNSLGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
   SCORE=&NSMKGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
   SCORE=&BMIGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
   SCORE=(SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   BENTYPE="Composite";
   DROP N_WGT;
   OUTPUT;
END;
RUN;

PROC SORT DATA=SMOKE;
BY REGION BENTYPE;
RUN;

DATA BENCH2;
SET SMOKE;
BY REGION BENTYPE;
IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
   SCORE=&CNSLGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
   SCORE=&NSMKGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT;
   OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
   SCORE=&BMIGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT;
   OUTPUT;
   SCORE=(SUM(&CNSLGOAL, &NSMKGOAL, &BMIGOAL))/3;
   SEMEAN=.;
   MAJGRP="Benchmark";
   BENTYPE="Composite";
```

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```
   DROP N_WGT N_OBS;
   OUTPUT;
END;
RUN;


DATA SIG1;
SET SMOKE COMP;
IF BENTYPE='Non-Smoking Rate' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&NSMKGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;

   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &NSMKGOAL THEN SIG = 1;
         ELSE IF SCORE < &NSMKGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Counselled To Quit' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&CNSLGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &CNSLGOAL THEN SIG = 1;
         ELSE IF SCORE < &CNSLGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Percent Not Obese' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&BMIGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &BMIGOAL THEN SIG = 1;
         ELSE IF SCORE < &BMIGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Composite' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3))/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > ((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = 1;
         ELSE IF SCORE <((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = -1;
   END;
END;

DROP TSTAT PVAL;
RUN;

DATA SMOKE_ALL;
SET SIG1 BENCH BENCH2;
TIMEPD="&CURRENT.";
RUN;

PROC SORT DATA=SMOKE_ALL OUT=OUT.SMOKE;
BY MAJGRP REGION REGCAT BENTYPE;
RUN;
```

G.4.C Q3FY2013\PROGRAMS\REPORTCARDS\MPR_ADULTQ3FY2013\LOADMPRQ.SAS - Convert the MPR Scores Database into the WEB layout - Run Quarterly.

```
****************************************************************************
*
*  Project:   DoD Reporting and Analysis 6077-410
*  Program:   LOADMPRQ.SAS
*  Purpose:   Calculate MPR Preventive Care Composites
*  Date:      4/07/2000
*  Author:    Chris Rankin
*
*  Modified:  1) 05-08-2001 By Keith Rathbun, Added SEMEAN to LOADMPRQ.SD2
*                to accommodate the Short Reports.  Condensed some code.
*             2) 07-15-2002 By Mike Scott, Changed PERIOD to = "April, 2001
*                to March, 2002".
*             3) 03-21-2003 By Mike Scott, Changed PERIOD to = "January, 2001
*                to December, 2002".
*             4) 04-30-2003 By Mike Scott, Changed CMPNUM1 from 4 to 5, and
*                changed the upper limits of both DO loops from 5 to 6 because
*                of the addition of Cholesterol Testing.
*             5) 06-23-2003 By Mike Scott, Changed setting BENTYPE from &PERIOD
*                to Composite.  Added TIMEPD variable.
*             6) 06-26-2003 By Mike Scott, Updated for Q2 2003.
*             7) 10-21-2003 By Mike Scott, Updated for Q3 2003.
*             8) 01-07-2004 By Mike Scott, Updated for Q4 2003.
*             9) 03-24-2004 By Mike Scott, Updated for Q1 2004.
*            10) 06-22-2004 By Regina Gramss, Updated for Q2 2004.
*            11) 09/2004    By Regina Gramss, Updated for Q3 2004.
*            12) 01/2005    By Regina Gramss, Replaced XTNEXREG with XSERVREG
*                to produce "last conus_q" for Q4 2005
*            13) 12/2005    By Regina Gramss, Updated for Q4 2005.
*            14) 03/24/2006 By Keith Rathbun, Updated for Q2 FY 2006.
*                %LET PERIOD = January, 2006 was the only change.
*            15) 07/12/2006 By Justin Oh, Updated for Q3 FY 2006.
*            16) 08/24/2006 By Justin Oh, change DO REG = 1 TO 15 from 1 TO 16.
*            17) 10/04/2006 By Justin Oh, Updated %LET PERIOD.
*            18) 12/20/2006 By Justin Oh, Updated %LET PERIOD October, 2006.
*            19) 04/05/2007 By Justin Oh, Updated %LET PERIOD January, 2007.
*            20) 06/22/2007 By Keith Rathbun, Updated %LET PERIOD April, 2007.
*            21) 09/04/2007 By Justin Oh, Updated %LET PERIOD July, 2007.
*            22) 01/10/2008 By Keith Rathbun, Updated %LET PERIOD October, 2007.
*            23) 04/11/2008 By Justin Oh, Updated %LET PERIOD January, 2008.
*            24) 06/13/2008 By Keith Rathbun, Updated %LET PERIOD April, 2008.
*            25) 01/06/2009 By Mike Rudacille, Updated %LET PERIOD October, 2008.
*            26) 01/16/2009 By Mike Rudacille, Changed CONUS variable to USA.
*            27) 03/11/2009 By Keith Rathbun, Updated %LET PERIOD January, 2009.
*            28) 06/22/2009 By Keith Rathbun, Updated %LET PERIOD April, 2009.
*            29) 09/30/2009 By Mike Rudacille, Updated %LET PERIOD July, 2009.
*            30) 12/17/2009 By Emma Ernst, Updated %LET Period October, 2009.
*            31) 03/02/2010 By Mike Rudacille, Updated %LET PERIOD January, 2010.
*            32) 06/19/2010 By Mike Rudacille, Updated %LET PERIOD April, 2010.
*            33) 08/28/2010 By Mike Rudacille, Updated %LET PERIOD July, 2010.
*            34) 12/02/2010 By Mike Rudacille, Updated %LET PERIOD October, 2010.
*            35) 02/24/2011 By Mike Rudacille, Updated %LET PERIOD January, 2011.
*            36) 12/10/2011 By Mike Rudacille, Updated %LET PERIOD October, 2011.
*            37) 03/05/2012 By Amanda Kudis, Updated %LET PERIOD January, 2012.
*            38) 06/20/2012 By Amanda Kudis, Updated for Q3FY2012.
*            39) 08/23/2012 By Christine Cheu, Updated for Q4FY2012.
*            40) 11/03/2012 By Mike Rudacille, Updated for handling of
*                Joint Service facilities
*            41) 12/28/2012 By Aimee Valenzuea, Updated for Q1FY2013
*            42) 03/23/2013 By Mike Rudacille, Updated %LET PERIOD January, 2013.
*
*    Input:   1) RFINAL.sas7bdat
*             2) CFINAL.sas7bdat
*             3) MFINAL.sas7bdat
*             4) SFINAL.sas7bdat
*             5) SMOKE.sas7bdat
*
*    Output:  loadmprq.sas7bdat
*
*    Note:    ***CHECK COMPNUM AND CMPNUM1 ASSIGNMENTS AND UPPER LIMIT OF DO LOOPS***
```

```
*
********************************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2;

LIBNAME INLIB   ".";
LIBNAME OUT     ".";
LIBNAME LIBRARY "..\..\..\Data\Afinal\fmtlib";

%LET CMPNUM1=4; /*** number of questions in first composite ***/ /*RSG 04/2005 Changed 5 to 4*/

%LET PERIOD = April, 2013;
%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";

****************************************************************;
*** Note -- take out access to care questions and composite ***;
****************************************************************;

data mfinal(keep=cpbmk1 compress=no);
  set inlib.mfinal(keep=majgrp cpbmk1) INLIB.CFINAL (KEEP=MAJGRP CPBMK1);
  where majgrp="All Beneficiaries";    /*RSG 02/2005 Include CONUS MHS data*/
run;

data mfinal;
  if _n_=1 then set mfinal;
  set inlib.mfinal(drop=cpbmk1) INLIB.CFINAL(DROP=CPBMK1) ;
run;

proc sort data=mfinal;         /*RSG 01/2005 - Added code to select only 1 record per majgrp */
by majgrp;                     /*using xservreg, there are now 4 conus areas which caused
duplicate benchmark calcs */
data mfinal;
set mfinal;
by majgrp;
if first.majgrp;
run;

************************;
***** Benchmarks     **;
************************;

DATA BENCHMKS(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SIG);
     FORMAT   MAJGRP  $30. REGION  $30. REGCAT $30.    /** RSG 01/2005 Increase region format to
accommodate service affiliation **/
              BENEFIT $34. BENTYPE $50. TIMEPD $35.;   ***MJS 06/23/03 Added TIMEPD; /* MER
11/08/12 Increase region/regcat formats */
  SET MFINAL;

  ARRAY BENCHMK{*} GOALVAR1-GOALVAR&CMPNUM1 CPBMK1;
  DO I = 1 TO 5;   ***RSG 04/2005 Changed 6 to 5;
     SCORE  = BENCHMK{I}*100;
     SIG    = .;
     REGION = "Benchmark";
     REGCAT = "Benchmark";
     BENEFIT = "Preventive Care";
     IF     I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
     ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
     ELSE IF I = 4 THEN BENTYPE = "Hypertension";
     /*RSG 04/2005 DELETED CHOLESTEROL*/
     ELSE IF I = 5 THEN BENTYPE = "Composite";   ***MJS 06/23/03 Changed &PERIOD to Composite;
     TIMEPD = "&PERIOD";   ***MJS 06/23/03 Added line;
     OUTPUT;
  END;
  DROP I;
RUN;

DATA BENCHMKS;
  SET BENCHMKS;
  OUTPUT;
  IF MAJGRP = "All Beneficiaries" THEN DO;
     DO REG = 1 TO 18; DROP REG; /*JSO 08/24/2006, Changed Regions, 16 to 15*/ /* MER 11/3/12 15
to 18 */
```

```
              MAJGRP = "Benchmark";
              REGION = PUT(REG,SERVREGO.);
              REGCAT = PUT(REG,SERVREGO.);
              OUTPUT;
       END;
       DO SERV = 1 TO 5; DROP SERV; /* MER 11/03/2012 Changed 4 to 5 for Joint Service facilities
*/
              MAJGRP = "Benchmark";
              REGION = PUT(SERV,XSERVAFF.);
              REGCAT = PUT(SERV,XSERVAFF.);
              OUTPUT;
       END;

              MAJGRP = "Benchmark";
              REGION = 'USA MHS';
              REGCAT = 'USA MHS';
              OUTPUT;
              MAJGRP = "Benchmark";
              REGION = 'NORTH';
              REGCAT = 'NORTH';
              OUTPUT;
              MAJGRP = "Benchmark";
              REGION = 'SOUTH';
              REGCAT = 'SOUTH';
              OUTPUT;
              MAJGRP = "Benchmark";
              REGION = 'WEST';
              REGCAT = 'WEST';
              OUTPUT;
              MAJGRP = "Benchmark";
              REGION = 'OVERSEAS';
              REGCAT = 'OVERSEAS';
              OUTPUT;
   END;
RUN;


PROC FREQ DATA=BENCHMKS;
   TABLES MAJGRP/MISSING LIST;
RUN;


*************************;
*****  Scores         **;
*************************;

DATA SCORES(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG N_OBS N_WGT);
     FORMAT MAJGRP $30. REGION  $30. REGCAT $30.    /** RSG 01/2005 Increase region format to
accommodate service affiliation **/
            BENEFIT $34. BENTYPE $50. TIMEPD $35.;   ***MJS 06/23/03 Added TIMEPD; /* MER
11/08/12 Increase region/regcat formats */
   SET INLIB.MFINAL INLIB.CFINAL
       INLIB.RFINAL INLIB.SFINAL;


  ARRAY SEMEANS{*} SERRV1-SERRV&CMPNUM1.  CP1SE ;
  ARRAY  SCORES{*} SCORV1-SCORV&CMPNUM1.  CSCOR1;
  ARRAY  SIGNIF{*} SIGV1-SIGV&CMPNUM1.    CPSIG1;
  ARRAY   NOBS {*} NOBSV1-NOBSV&CMPNUM1.  CPOBS1;
  ARRAY   NWGT {*} DENV1-DENV&CMPNUM1     CPDEN1;

  DO I = 1 TO 5;   ***RSG 04/2005 Changed 6 to 5;
     SCORE   = SCORES{I};
     SEMEAN  = SEMEANS{I};
     SIG     = SIGNIF{I};
     N_OBS   = NOBS{I};
     N_WGT   = NWGT{I};
     BENEFIT = "Preventive Care";
     IF      I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
     ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
     ELSE IF I = 4 THEN BENTYPE = "Hypertension";
     /*RSG 04/2005 DELETED CHOLESTEROL*/
     ELSE IF I = 5 THEN BENTYPE = "Composite";   ***MJS 06/23/03 Changed &PERIOD to Composite;
     TIMEPD = "&PERIOD";   ***MJS 06/23/03 Added line;
```

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```
      OUTPUT;
  END;
RUN;

DATA LOADMPRQ (KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG
                     N_OBS N_WGT);
SET BENCHMKS SCORES INLIB.SMOKE;
RUN;

PROC SORT DATA=LOADMPRQ OUT=OUT.LOADMPRQ;
BY MAJGRP REGION;
RUN;
```

G.5.A Q3FY2013\PROGRAMS\LOADWEB\FAKEQ.SAS - Generate the WEB layout/template file - Run Quarterly.

```
****************************************************************************
* PROJECT:  DOD Quarterly Survey, Consumer Reports (6077-410)
* PROGRAM:  FAKEQ.SAS
* PURPOSE:  Generate Fake Data for Report Cards
* AUTHOR:   Mark A. Brinkley
*
* MODIFIED: 1) July 2000 By Eric Schone to utilize CACRPT and CATREP
*              include files.
*           2) February 2001 By Keith Rathbun - More updates for
*              Quarterly report card format.  Made FAKE datastep into
*              a macro to handle multiple quarters.  Added QTR and
*              PERIOD parameters.
*           3) July 2001 By Mark Brinkley - Updated for
*              Quarterly 2 reports
*           4) April 2002 By Keith Rathbun - Updated DSN and %LET
*              statements for 2002 reports and added TREND records.
*              Removed Flu Shot.
*           5) July 2002 By Mike Scott - Updated DSN and %LET statements
*              for Q2 2002 reports.
*           6) March 2003 By Mike Scott - Updated for 2003 survey.
*           7) June 2003 By Mike Scott - Added TIMEPD variable to be set to the period
*              or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*              setting to 'Composite'.  Updated for Q2 2003.
*           8) July 2003 BY Mike Scott - Above for K=7 through 10 in loop DO K=0 TO 11.
*              Added LOADCAHQ.INC.
*           9) October 2003 By Mike Scott - Updated for Q3 2003.
*          10) January 2004 By Mike Scott - Updated for Q4 2003.
*          11) March 2004 By Mike Scott - Updated for Q1 2004.
*          12) June 2004 By Regina Gramss - Updated for Q2 2004.
*          13) September 2004 By Regina Gramss - Updated for Q3 2004, to use XTNEXREG vs XREGION
*          14) January 2005 By Regina Gramss - Prepare "Last Conus_q" for Q4 2005
*              replace XTNEXREG with XSERVREG
*          15) April 2005 By Regina Gramss - Update for Q1 2005, delete cholesterol
*              bentype and include Healthy Behaviors composite and BMI bentype.
*          16) July 2005 By Regina Gramss - Update for Q2 2005.
*          17) October 2005 By Regina Gramss - Updated for Q3 2005
*          18) December 2005 By Regina Gramss - Updated for Q4 2005
*          19) March 2006 By Keith Rathbun - Updated for Q2 FY 2006
*          20) July 2006 By Justin Oh - Updated for Q3 FY 2006
*          21) 08/22/2006 By Justin Oh - Changed XSERVREG for Overseas
*          22) 10/03/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS063_1 to HCS064_1 for Q4FY2006 reports.
*          23) 02/02/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS064_1 to HCS071_1 for Q4FY2006 reports.
*          24) 04/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS071_1 to HCS072_1 for Q4FY2006 reports.
*          25) 06/22/2007 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS072_1 to HCS073_1 for Q3FY2007 reports.
*          26) 09/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS073_1 to HCS074_1 for Q4FY2007 reports.
*          27) 01/10/2008 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS074_1 to HCS081_1 for Q1FY2008 reports.
*          28) 04/11/2008 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS081_1 to HCS082_1 for Q2FY2008 reports.
*          29) 06/13/2008 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS082_1 to HCS083_1 for Q3FY2008 reports.
*          30) 10/02/2008 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS083_1 to HCS084_1 for Q4FY2008 reports.
*          31) 01/06/2009 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS084_1 to HCS091_1 for Q1FY2009 reports.
*          32) 01/16/2009 By Mike Rudacille - Changed CONUS to USA.
*          33) 03/11/2009 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS091_1 to HCS092_1 for Q2FY2009 reports.
*          34) 04/11/2009 By Mike Rudacille - Updated composite definitions
*              to reflect modifications to beneficiary reports necessary for V4
*          35) 06/22/2009 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS092_1 to HCS093_1 for Q3FY2009 reports.
*          36) 09/30/2009 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS093_1 to HCS094_1 for Q4FY2009 reports.
```

```
*           37) 12/17/2009 By Emma Ernst - Changed %LET PERIOD1- Period4
*                Changed input data to HCS10_1 for Q1FY2010
*           38) 03/02/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS101_1 to HCS102_1 for Q2FY2010 reports.
*           39) 03/30/2010 By Mike Rudacille - Changed input data from
*                HCS102_1 to HCS102_2 (FIELDAGE no longer included in HCSyyq_1).
*           40) 06/19/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS102_2 to HCS103_2 for Q3FY2010 reports.
*           41) 08/28/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS103_2 to HCS104_2 for Q4FY2010 reports.
*           42) 12/02/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS104_2 to HCS111_2 for Q1FY2011 reports.
*           43) 02/24/2011 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS111_2 to HCS112_2 for Q2FY2011 reports.
*           44) 12/10/2011 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCD114_2 to HCS121_2 for Q1FY2012 reports.
*           45) 03/05/2012 By Amanda Kudis - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS121_2 to HCS122_2 for Q2FY2012 reports.
*           46) 06/20/2012 By Amanda Kudis - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS122_2 to HCS123_2 for Q3FY2012 reports.
*           47) 08/23/2012 By Christine Cheu - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS123_2 to HCS124_2 for Q4FY2012 reports.
*           48) 11/03/2012 By Mike Rudacille - Updated for handling of
*                Joint Service facilities
*           49) 12/28/2012 By Aimee Valenzuela - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS124_2 to HCS131_2 for Q1FY2013 reports
*           50) 03/23/2013 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                Changed input data HCS131_2 to HCS132_2 for Q2FY2013 reports
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
*************************************************************************;
%LET NUMQTR = 5;   ***MJS 06/18/03 Changed 4 to 5;

%LET PERIOD1 = July, 2012;
%LET PERIOD2 = October, 2012;
%LET PERIOD3 = January, 2013;
%LET PERIOD4 = April, 2013;

%LET PERIOD5 = Trend;   ***MJS 06/18/03 Added line;

%INCLUDE "LOADCAHQ.INC";   ***MJS 07/07/03 Added;

LIBNAME OUT       ".";
LIBNAME IN        "..\..\Data\AFinal";
LIBNAME LIBRARY  "..\..\Data\AFinal\fmtlib";

OPTIONS COMPRESS=YES NOFMTERR;

*************************************************************************
* CREATE TEMPORARY DATASET FOR RECODING CACSMPL TO BE COLLAPSED FOR
* REPORT CARD PURPOSES
* FOR QUARTERLY REPORTS CATCHMENT LEVEL REPORTING IS NOT DONE
* AND THEREFORE THE VALUE OF CELLP IS SET TO 1
* FOR ANNUAL REPORTING PURPOSES
* CELLP WILL NEED TO BE ASSIGNED TO GEOCELL (KEEP GEOCELL ON INPUT)
*************************************************************************;

DATA TEMP;
  SET IN.HCS133_2;
   CELLP=1;
   ********************************************************************
   * CODE FOR XSERVREG FROM XTNEXREG
   ********************************************************************;
    IF SERVAFF='A' THEN XSERVAFF=1;            *Army;
       ELSE IF SERVAFF='F' THEN XSERVAFF=2;    *Air Force;
       ELSE IF SERVAFF='N' THEN XSERVAFF=3;    *Navy;
       ELSE XSERVAFF=4;

    IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

    IF XTNEXREG = 1 THEN DO;
```

```
        IF XSERVAFF = 1 THEN XSERVREG = 1;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
        ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
        ELSE XSERVREG = 5;
    END;

    IF XTNEXREG = 2 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 6;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
        ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
        ELSE XSERVREG = 10;
    END;

    IF XTNEXREG = 3 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 11;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
        ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
        ELSE XSERVREG = 15;
    END;

    IF XTNEXREG = . THEN DELETE;

RUN;

proc freq;
table xservreg*cacsmpl/ noprint out=temp;
run;

data temp2;
length cafmt $30;
set temp end=last;
by xservreg;
  caf=0;
where cacsmpl ne 9999;
  if first.xservreg then do; /* took out condition for xregion= 8 since useing xservreg now */
    cafmt=put(xservreg,servregf.);
    output;
  end;
  cafmt=put(cacsmpl,catrep.);
  caf=1;
  if count>60 & cafmt ne 'INV' then output;
  if last then do;
    xservreg=0;
    caf=0;
    cafmt='Benchmark';
   output;
          /** RSG 01/2005 Add in codes for service affiliation categories **/


   caf=1;

   xservreg=16;
   cafmt='Overseas Europe';
   output;
  xservreg=17;
   cafmt='Overseas Pacific';
   output;
  xservreg=18;
   cafmt='Overseas Latin America';
   output;
xservreg=19;
  cafmt = 'ARMY';
        output;
        xservreg=20;
        cafmt = 'AIR FORCE';
        output;
        xservreg=21;
        cafmt = 'NAVY';
        output;
```

```
        xservreg=22;
        cafmt = 'OTHER';
         output;
         xservreg=23;
         cafmt = 'JOINT SERVICE';
         output;
        xservreg=24;
        cafmt = 'NORTH';
        output;
        xservreg=25;
        cafmt = 'SOUTH';
        output;
        xservreg=26;
        cafmt = 'WEST';
        output;
        xservreg=27;
        cafmt = 'OVERSEAS';
        output;
        xservreg=28;
        cafmt = 'USA MHS';
        output;
        xservreg=29;
        cafmt = 'Europe Army';
        output;
        xservreg=30;
        cafmt = 'Europe Air Force';
        output;
        xservreg=31;
        cafmt = 'Europe Navy';
         output;
        xservreg=32;
        cafmt = 'Europe Other';
        output;
         xservreg=33;
         cafmt = 'Europe Joint Service';
         output;
        xservreg=34;
        cafmt = 'Pacific Army';
        output;
        xservreg=35;
        cafmt = 'Pacific Air Force';
        output;
        xservreg=36;
        cafmt = 'Pacific Navy';
        output;
        xservreg=37;
        cafmt = 'Pacific Other';
        output;
         xservreg=38;
         cafmt = 'Pacific Joint Service';
         output;
        xservreg=39;
        cafmt = 'Latin America Army';
        output;
        xservreg=40;
        cafmt = 'Latin America Air Force';
        output;
        xservreg=41;
        cafmt = 'Latin America Navy';
        output;
        xservreg=42;
        cafmt = 'Latin America Other';
        output;
         xservreg=43;
         cafmt = 'Latin America Joint Service';
         output;
   end;
run;

/*RSG 04/2005 order region groups the way it should appear in reports*/
data temp3 (rename=(temp_r=xservreg));
   set temp2;
if      xservreg=0  then temp_r=1;
```

```
else if xservreg=28 then temp_r=2;
else if xservreg=19 then temp_r=3;
else if xservreg=21 then temp_r=4;
else if xservreg=20 then temp_r=5;
else if xservreg=22 then temp_r=6;
else if xservreg=23 then temp_r=7;
else if xservreg=24 then temp_r=8;
else if xservreg=1  then temp_r=9;
else if xservreg=3  then temp_r=10;
else if xservreg=2  then temp_r=11;
else if xservreg=4  then temp_r=12;
else if xservreg=5  then temp_r=13;
else if xservreg=25 then temp_r=14;
else if xservreg=6  then temp_r=15;
else if xservreg=8  then temp_r=16;
else if xservreg=7  then temp_r=17;
else if xservreg=9  then temp_r=18;
else if xservreg=10 then temp_r=19;
else if xservreg=26 then temp_r=20;
else if xservreg=11 then temp_r=21;
else if xservreg=13 then temp_r=22;
else if xservreg=12 then temp_r=23;
else if xservreg=14 then temp_r=24;
else if xservreg=15 then temp_r=25;
else if xservreg=27 then temp_r=26;
else if xservreg=16 then temp_r=27;
else if xservreg=17 then temp_r=28;
else if xservreg=18 then temp_r=29;
else if xservreg=29 then temp_r=30;
else if xservreg=31 then temp_r=31;
else if xservreg=30 then temp_r=32;
else if xservreg=32 then temp_r=33;
else if xservreg=33 then temp_r=34;
else if xservreg=34 then temp_r=35;
else if xservreg=36 then temp_r=36;
else if xservreg=35 then temp_r=37;
else if xservreg=37 then temp_r=38;
else if xservreg=38 then temp_r=39;
else if xservreg=39 then temp_r=40;
else if xservreg=41 then temp_r=41;
else if xservreg=40 then temp_r=42;
else if xservreg=42 then temp_r=43;
else if xservreg=43 then temp_r=44;
drop xservreg;
run;

proc sort;
by xservreg caf cafmt;
run;

data temp4;
set temp3 end=last;

start=_n_;
label=cafmt;
type='N';
fmtname='ROWMAT';
if last then call symput('x',_n_);

run;

proc format cntlin=temp4;

proc print data=temp4;
run;

%MACRO FAKE;
DATA FAKE;

  KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD I K;   ***MJS 06/18/03 Added TIMEPD;

  LENGTH MAJGRP  $ 30
         REGION  $ 30    /*RSG 01/2005 lengthen format to fit service affiliation*/
```

```
        REGCAT  $ 30    /*MER 11/08/2012 length format for region/regcat for Joint Service
facilities */
        BENTYPE $ 50
        TIMEPD  $ 35;   ***MJS 06/18/03 Added TIMEPD;



  DO I=1 TO 8;              ** 8 Major groups **;

     MAJGRP=PUT(I,MAJOR.);

     DO J=1 TO &x;          ** Region/catchment **;

     REGCAT=PUT(J,ROWMAT.);
     RETAIN REGION;

     **RSG 01/2005 Change code to fit XSERVREG values**;
     IF SUBSTR(REGCAT,1,8) IN ('Benchmar','Overseas','OVERSEAS') OR
          SUBSTR(REGCAT,1,5) IN ('Pacif','Europ','Latin','North','South','West
','NORTH','SOUTH','WEST') OR
          REGCAT IN ('ARMY','AIR FORCE','NAVY','OTHER','JOINT SERVICE','USA MHS') THEN
REGION=REGCAT;


        DO K=1 TO 11;      ** 11 Benefits **;  /*** 04-11-09 MER ***/

          BENEFIT=PUT(K,BEN.);

          IF K=1 THEN DO;
              DO L=1 TO 3;                ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,GETNCARE.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;    ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
              END;
          END;
          ELSE IF K=2 THEN DO;
              DO L=1 TO 3;                ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,GETCAREQ.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;    ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
              END;
          END;
          ELSE IF K=3 THEN DO;
              DO L=1 TO 5;                ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,HOWWELL.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;    ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
              END;
          END;
          ELSE IF K=4 THEN DO;
              DO L=1 TO 3;                ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,CUSTSERV.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;    ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
              END;
          END;
          ELSE IF K=5 THEN DO;
              DO L=1 TO 3;                ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,CLMSPROC.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;    ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
              END;
          END;
```

```
        ELSE IF K=6 THEN DO;
            %DO Q = 1 %TO &NUMQTR;
                BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
            %END;                            ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
        END;
        ELSE IF K=7 THEN DO;
            %DO Q = 1 %TO &NUMQTR;
                BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
            %END;                            ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
        END;
        ELSE IF K=8 THEN DO;
            %DO Q = 1 %TO &NUMQTR;
                BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
            %END;                            ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
        END;
        ELSE IF K=9 THEN DO;
            %DO Q = 1 %TO &NUMQTR;
                BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
            %END;                            ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
        END;
        ELSE IF K=10 THEN DO;
            DO L=1 TO 5;                     ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                BENTYPE=PUT(L,PREVCARE.);   ***that replaced BENTYPE hard assignment;
                %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                    TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
            END;
        END;
        ELSE IF K=11 THEN DO;                ***RSG 02/2005 Added for smoking scores.;
            DO M=1 TO 4;
                BENTYPE=PUT(M,SMOKEF.);
                %DO Q = 1 %TO &NUMQTR;
                    TIMEPD = "&&PERIOD&Q"; OUTPUT;
                %END;
            END;
        END;
      END;
    END;
  END;
RUN;
%MEND FAKE;
%FAKE;


/*** 12-13 MAB ***/
/*** Since quarterly files won't have catchment level data then delete ***/
DATA FAKE;
  SET FAKE;
  IF REGION=REGCAT;
RUN;

/*** 12-13 MAB ***/
/*** Need to create single benchmarks for ALL major groups ***/
DATA EXTRA;
  SET FAKE;
  IF MAJGRP="Prime Enrollees" AND REGION=REGCAT AND REGION^="Benchmark";
  MAJGRP="Benchmark";
RUN;
/*** Combine extra data with fake ***/
DATA FAKE;
```

```
   SET EXTRA FAKE;
RUN;

/*** Need to clean up data ***/
DATA OUT.FAKEQ;
  SET FAKE;

  /*** Need to set oddball records to missing ***/
  IF REGION="Benchmark" THEN SIG=.;
  if region=''|compress(regcat)='.' then delete;

  /*** Don't populate catchment areas for 4 major groups ***/
  *IF I IN(3,4,6,7) AND REGION^=REGCAT THEN DELETE;          /*** 12-13 MAB ***/

  DROP I K;

RUN;


PROC FREQ;
  TABLES MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG;   ***MJS 07/21/03 Added TIMEPD;
RUN;


ENDSAS;
```

G.5.B **Q3FY2013\PROGRAMS\LOADWEB\MERGFINQ.SAS - Merge the final CAHPS and MPR Scores Databases into the WEB layout - Run Quarterly.**

```
****************************************************************************
*
* PROGRAM:  MERGFINQ.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE:  Merge the final CAHPS and MPR Scores Databases
*           into the WEB layout preserving the order of the FAKEQ.SD2.
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from MERGFINL.SAS.
*
* INPUTS:   1) MPR and CAHPS Individual and Composite data sets with adjusted
*              scores, and benchmark data for quarterly DoD HCS.
*              - LOADMPRQ.sas7bdat - MPR Scores Database
*              - LOADCAHQ.sas7bdat - CAHPS Scores Database
*              - BENCHA04.sas7bdat - CAHPS Benchmark Database
*              - FAKEQ.sas7bdat    - WEB Layout in Column order
*
* OUTPUT:   1) MERGFINQ.sas7bdat - Combined Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* MODIFIED: 1) 07/15/2002 by Mike Scott: Updated libnames for Q2 2002.
*           2) 03/21/2003 by Mike Scott: Updated for 2003 survey.
*           3) 07/09/2003 by Mike Scott: Updated for Q2 2003.  Added TIMEPD to KEYs.
*           4) 07/23/2003 by Mike Scott: Added TIMEPD to FREQs and PRINT.
*           5) 10/21/2003 by Mike Scott: Updated for Q3 2003.
*           6) 01/07/2004 by Mike Scott: Updated for Q4 2003.
*           7) 03/24/2004 by Mike Scott: Updated for Q1 2004.
*           8) 06/22/2004 by Regina Gramss: Updated for Q2 2004.
*           9) 09/2004    by Regina Gramss: Updated for Q3 2004, Use XTNEXREG vs XREGION
*          10) 01/2005    by Regina Gramss: Changed XTNEXREG to XSERVREG to compile
*              "Last conus_q" for Q4 2005
*          11) 04/2005    by Regina Gramss: Updated for Q1 2005
*          12) 07/2005    by Regina Gramss: updated for Q2 2005
*          13) 10/2005    by Regina Gramss: Updated for Q3 2005
*          14) 12/2005    by Regina Gramss: Updated for Q4 2005
*          15) 07/2006    by Justin Oh: Updated for Q3 FY 2006
*          16) 08/22/2006 by Justin Oh: Change DO REG = 1 TO 15 from 1 TO 16
*          17) 10/03/2006 by Justin Oh - Changed libname in2 and in3 for Q4FY2006.
*          18) 12/20/2006 by Justin Oh - Changed libname in2 and in3 for Q1FY2007.
*          19) 04/05/2007 by Justin Oh - Changed libname in2 and in3 for Q2FY2007.
*          20) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*              ReportCards OR PurchasedReportCards.
*          21) 04/05/2007 by Justin Oh - Added %LET BCHTYPE to select BCH types
*              Benchmark OR PurchasedBenchmark.
*          22) 09/05/2007 by Justin Oh - Changed libname in2 and in3 for Q4FY2007.
*          23) 01/10/2008 by Keith Rathbun - Changed libname in2 and in3 for Q1FY2008.
*          24) 04/11/2008 by Justin Oh - Changed libname in2 and in3 for Q2FY2008.
*          25) 06/13/2008 by Keith Rathbun - Changed libname in2 and in3 for Q3FY2008.
*          26) 10/02/2008 by Mike Rudacille - Changed libname in2 and in3 for Q4FY2008.
*          27) 01/06/2009 by Mike Rudacille - Changed libname in2 and in3 for Q1FY2009.
*          28) 01/16/2009 by Mike Rudacille - Changed CONUS to USA.
*          29) 03/11/2009 by Keith Rathbun - Changed libname in2 and in3 for Q2FY2009.
*          30) 06/23/2009 by Keith Rathbun - Changed libname in2 and in3 for Q3FY2009.
*          31) 09/30/2009 by Mike Rudacille - Changed libname in2 and in3 for Q4FY2009.
*          32) 12/17/2009 by Emma Ernst- Changed libname in2 and in3 for Q1FY2010.
*          33) 03/02/2010 by Mike Rudacille - Changed libname in2 and in3 for Q2FY2010.
*          34) 06/19/2010 by Mike Rudacille - Changed libname in2 and in3 for Q3FY2010.
*          35) 08/28/2010 by Mike Rudacille - Changed libname in2 and in3 for Q4FY2010.
*          36) 12/02/2010 by Mike Rudacille - Changed libname in2 and in3 for Q1FY2011.
*          37) 02/24/2011 by Mike Rudacille - Changed libname in2 and in3 for Q2FY2011.
*          38) 12/10/2011 by Mike Rudacille - Changed libname in2 and in3 for Q1FY2012.
*          39) 03/05/2012 by Amanda Kudis - Changed libname in2 and in3 for Q2FY2012.
*          40) 06/20/2012 by Amanda Kudis - Changed libname in2 and in3 for Q3FY2012.
*          41) 08/23/2012 by Christine Cheu - Changed libname in2 and in3 for Q4FY2012.
*          42) 11/03/2012 by Mike Rudacille - Updated for handling of
*              Joint Service facilities
*          43) 12/28/2012 by Aimee Valenzuela - Changed libname in2 and in3 for Q1FY2013.
*          44) 03/23/2013 by Mike Rudacille - Changed libname in2 and in3 for Q2FY2013.
```

```
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*   - STEP1Q.SAS      - Recode questions and generate CAHPS group files
*   - STEP2Q.SAS      - Calculate CAHPS individual adjusted scores for groups 1-7
*   - COMPOSIT.SAS    - Calculate composite adjusted scores for group 1-8
*   - PRVCOMPQ.SAS    - Calculate MPR individual and composite scores
*   - BENCHA01-04.SAS - Convert Benchmark Scores into WEB layout
*   - LOADCAHQ.SAS    - Convert Quarterly CAHPS Scores Database into WEB layout
*   - LOADMPRQ.SAS    - Convert Quarterly MPR Scores Database into WEB layout
*
* 2) The output file (MERGFINQ.SD2) will be run through the
*    MAKEHTMQ.SAS program to generate the WEB pages.
*
*****************************************************************************
* Assign data libraries and options
*****************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards            ***/
%LET RCTYPE = ReportCards;

/*** SELECT PROGRAM - Benchmark OR PurchasedBenchmark               ***/
%LET BCHTYPE = Benchmark;

LIBNAME IN1  ".";
LIBNAME IN2  "CAHPS_ADULTQ3FY2013\Data";
LIBNAME IN3  "..\&RCTYPE\MPR_AdultQ3FY2013";
LIBNAME IN4  "..\&BCHTYPE\Data";
LIBNAME OUT  ".";
LIBNAME LIBRARY   "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=232 COMPRESS=YES NOCENTER;   ***MJS 07/23/03 Changed LS from 132;

%INCLUDE "LOADCAHQ.INC";

*****************************************************************************
* Construct ORDERing variable from WEB layout
*****************************************************************************;
DATA ORDER;
   SET IN1.FAKEQ;
   ORDER = _N_;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added TIMEPD;
   KEEP KEY ORDER;
RUN;

PROC SORT DATA=ORDER; BY KEY; RUN;

*****************************************************************************
* Merge the Scores Databases
*****************************************************************************;
DATA MERGFINQ;
   SET IN2.LOADCAHQ(IN=INCAHPQ)
       IN3.LOADMPRQ(IN=INMPRQ )
       IN4.BENCHA04(IN=INBENQ );
   SVCAHPQ = INCAHPQ;
   SVMPRQ  = INMPRQ;
   SVBENQ  = INBENQ;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added TIMEPD;
   KEYLEN=LENGTH(KEY);
   KEYTEST=LENGTH(BENEFIT)+LENGTH(BENTYPE)+LENGTH(MAJGRP)+LENGTH(REGION)+LENGTH(TIMEPD);
   OUTPUT;
   IF INBENQ THEN DO;
      IF MAJGRP = "All Beneficiaries" THEN DO;
         DO REG = 1 TO 30; DROP REG;  /*JSO 08/24/2006, Changed Regions, 16 to 24*/ /*MER
11/03/12 24 to 30*/
            MAJGRP = "Benchmark";
```

```
                REGION = PUT(REG,SERVREGF.);
                REGCAT = PUT(REG,SERVREGF.);
                KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                      UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                      UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added
TIMEPD;
                OUTPUT;
            END;
         DO SERV = 1 TO 5; DROP SERV;  /*RSG 02/2005 Add in serv affiliation*/ /*MER 11/03/12 4
to 5*/
                MAJGRP = "Benchmark";
                REGION = PUT(SERV,XSERVAFF.);
                REGCAT = PUT(SERV,XSERVAFF.);
                KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                      UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                      UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
                OUTPUT;
            END;

         MAJGRP = "Benchmark";
         REGION = 'NORTH';
         REGCAT = 'NORTH';
          KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
          OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'Overseas Europe';
         REGCAT = 'Overseas Europe';
          KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
          OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'Overseas Pacific';
         REGCAT = 'Overseas Pacific';
          KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
          OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'Overseas Latin America';
         REGCAT = 'Overseas Latin America';
          KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
          OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'SOUTH';
         REGCAT = 'SOUTH';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
          OUTPUT;

          MAJGRP = "Benchmark";
          REGION = 'WEST';
          REGCAT = 'WEST';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
          OUTPUT;

          MAJGRP = "Benchmark";
          REGION = 'OVERSEAS';
          REGCAT = 'OVERSEAS';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
```

```
        OUTPUT;

        MAJGRP = "Benchmark";
        REGION = 'USA MHS';
        REGCAT = 'USA MHS';
        KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
              UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
              UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
        OUTPUT;

      END;
   END;
   IF SCORE = . THEN DELETE;

RUN;

PROC SORT DATA=MERGFINQ; BY KEY; RUN;

*****************************************************************************
* Append ORDERing variable to the merged Scores database file
*****************************************************************************;
DATA MERGFINQ MISSING;
   MERGE MERGFINQ(IN=IN1) ORDER(IN=IN2);
   BY KEY;

   LENGTH FLAG $30;
   IF IN1 AND IN2 THEN FLAG = "IN SCORES DB AND LAYOUT";
   ELSE IF    IN1 THEN FLAG = "IN SCORES DB ONLY";
   ELSE IF    IN2 THEN FLAG = "IN LAYOUT ONLY";

   LENGTH SOURCE $30;
   IF SVCAHPQ = 1 THEN SOURCE = "CAHPS     ";
   IF SVMPRQ  = 1 THEN SOURCE = "MPR       ";
   IF SVBENQ  = 1 THEN SOURCE = "BENCHMARK ";

   IF IN1 AND NOT IN2 THEN OUTPUT MISSING; *Missing from layout;
   IF IN1 THEN OUTPUT MERGFINQ;
RUN;

*****************************************************************************
* Reorder file according to WEB layout
*****************************************************************************;
PROC SORT DATA=MERGFINQ OUT=OUT.MERGFINQ; BY ORDER; RUN;

DATA FAKEQ;
   SET IN1.FAKEQ;
   ORDER = _N_;
RUN;

DATA LAYONLY;
   MERGE FAKEQ(IN=IN1) OUT.MERGFINQ(IN=IN2 KEEP=ORDER);
   BY ORDER;
   IF IN1 AND NOT IN2;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6663-410)";
TITLE2 "Program Name: MERGFINQ.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MPR and CAHPS Combined Scores data sets and WEB Layout";
TITLE4 "Program Outputs: MERGFINQ.sas7bdat - Merged Final Scores Database for input to
MAKEHTML.SAS";

TITLE5 "MERGFINQ.sas7bdat Data source counts";
PROC FREQ DATA=OUT.MERGFINQ;
TABLES SOURCE FLAG SVCAHPQ SVMPRQ SVBENQ
                SVCAHPQ*SVMPRQ*SVBENQ
     /MISSING LIST;
RUN;

TITLE5 "MERGFINQ.sas7bdat Data attribute counts";
PROC FREQ DATA=OUT.MERGFINQ;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/23/03 Added TIMEPD*/
       REGION*REGCAT
     /MISSING LIST;
```

```
RUN;

TITLE5 "LAYONLY Data attribute counts";
PROC FREQ DATA=LAYONLY;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/23/03 Added TIMEPD*/
       REGION*REGCAT
      /MISSING LIST;
RUN;

TITLE5 "No matching record found in LAYOUT file (FAKEQ.sas7bdat)";
PROC PRINT DATA=MISSING;
VAR MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD;   ***MJS 07/23/03 Added TIMEPD;
RUN;
```

G.6 Q3FY2013\PROGRAMS\LOADWEB\CONUS_Q.SAS - Generate CAHPS CONUS scores and perform significance tests - Run Quarterly.

```
****************************************************************************
*
*  PROGRAM:   CONUS_Q.SAS
*  TASK:      Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
*  PURPOSE:   Generate CAHPS CONUS scores and perform significance tests.
*
*  WRITTEN:   11/13/2000 BY KEITH RATHBUN, Adapted from CONUS_A.SAS.
*             Merged SIGNIF_A.SAS funtionality.
*
*  MODIFIED:  1) 04/10/2002 BY KEITH RATHBUN, Update for 2002 survey:
*                   changed code to process 4 rolling quarters.
*             2) 04/30/2002 By Eric Schone, to calculate & test trend.
*             3) 07/17/2002 BY MIKE SCOTT, Updated %LET statements for
*                   Q2 2002.
*             4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*             5) 07/08/2003 BY MIKE SCOTT, Updated for Q2 2003.  Changed BENTYPE="&PERIOD4"
*                   to BENTYPE="Composite".  Added TIMEPD to KEY and FREQ.
*             6) 07/23/2003 BY MIKE SCOTT, Added TIMEPD constraint to DATA LASTQTR.
*             7) 10/21/2003 BY MIKE SCOTT, Updated for Q3 2003.
*             8) 01/07/2004 BY MIKE SCOTT, Updated for Q4 2003.
*             9) 01/28/2004 BY MIKE SCOTT, Updated LSTCONUS to point to Q3_2003t.
*             10) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*             11) 06/22/2004 BY REGINA GRAMSS, Updated for Q2 2004, Added conditions
*                   to avoid error messages in data sigtest2 step (ensure degree of freedom
*                   is not zero for the probt function) and data trend steps (ensure division
*                   by zero is not taking place).
*             12) 09/2004 BY REGINA GRAMSS, Updated for Q3, 2004.  Added in codes
*                   for trend calculations (per Eric Schone). Revised to use XTNEXREG.
*             13) 01/2005 BY REGINA GRAMSS, Changed codes for XTNEXREG to XSERVREG
*                   to incorporate service affiliation into regions.  Change
*                   adjustments made to trend calculation to what was previous.
*             14) 06/2005 BY REGINA GRAMSS, Included relevant codes from TOTAL_Q.SAS
*                   to consolidate both programs into one.  TOTAL_Q.SAS will no longer
*                   be used. Also put in codes to set trend score to missing if any of the
*                   previous scores are missing.
*             15) 10/2005 BY REGINA GRAMSS, Updated for Q3 2005
*             16) 12/2005 BY REGINA GRAMSS, Updated for Q4 2005
*             17) 07/2006 BY Justin Oh, Updated for Q3 FY 2006
*             18) 10/03/2006 By Justin Oh – Changed %LET PERIOD1 – PERIOD4
*                   Changed %LET LSTCONUS.
*             19) 12/20/2006 By Justin Oh – Changed %LET PERIOD1 – PERIOD4
*                   Changed %LET LSTCONUS.
*             20) 02/02/2007 By Justin Oh – Added "s" to Healthy Behaviors.
*             21) 02/16/2007 By Justin Oh – Added if statement to change BENEFIT
*                   "Heathly Behavior" to Healthy "Behaviors" for the Last CONUS_Q.SD2 data
*             22) 04/05/2007 By Justin Oh – Changed %LET PERIOD1 – PERIOD4
*                   Changed %LET LSTCONUS.
*             23) 04/05/2007 by Justin Oh – Added %LET BCHTYPE to select BCH types
*                   Benchmark OR PurchasedBenchmark.
*             24) 04/05/2007 by Justin Oh – Added changes to select RC types
*                   ReportCards OR PurchasedReportCards.
*             25) 10/03/2007 by Justin Oh – Removed code that removed Civilian PCM.
*                   IF "&RCTYPE" = 'ReportCards' AND
*                   MAJGRP="Enrollees with Civilian PCM" THEN DELETE;
*             26) 10/03/2007 by Justin Oh – Removed %LET BCHTYPE to select BCH types
*                   Benchmark OR PurchasedBenchmark.
*             27) 09/05/2007 By Justin Oh – Changed %LET PERIOD1 – PERIOD4
*                   Changed %LET LSTCONUS.
*             28) 01/10/2008 By Keith Rathbun – Changed %LET PERIOD1 – PERIOD4
*                   Changed %LET LSTCONUS.
*             29) 04/11/2008 By Justin Oh – Changed %LET PERIOD1 – PERIOD4
*                   Changed %LET LSTCONUS.
*             30) 10/02/2008 By Mike Rudacille – Changed %LET PERIOD1 – PERIOD4
*                   Changed %LET LSTCONUS.
*             31) 01/06/2009 By Mike Rudacille – Changed %LET PERIOD1 – PERIOD4
*                   Changed %LET LSTCONUS
*             32) 01/16/2009 By Mike Rudacille – Changed CONUS to USA where appropriate
*             33) 03/11/2009 By Keith Rathbun – Changed %LET PERIOD1 – PERIOD4
*                   Changed %LET LSTCONUS
```

```
*            34) 04/11/2009 By Mike Rudacille - Changed BENTYPE and Composite definitions
*                 to reflect modifications to beneficiary reports necessary for V4
*            35) 06/22/2009 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            36) 09/30/2009 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            37) 12/17/2010 by Emma Ernst- Changed %LET PERIOD1 - PERIOD4.
*                 Changed %LET LSTCONUS
*            38) 03/02/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            39) 06/19/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            40) 08/28/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            41) 12/02/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            42) 02/24/2011 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            43) 12/10/2011 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            44) 03/05/2012 By Amanda Kudis - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            45) 06/20/2012 By Amanda Kudis - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            46) 08/23/2012 By Christine Cheu - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS
*            47) 11/03/2012 By Mike Rudacille - Updated for handling of
*                 Joint Service facilities
*            48) 12/28/2012 By Aimee Valenzuela - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS for Q1FY2013
*            49) 03/23/2013 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                 Changed %LET LSTCONUS for Q2FY2013
*
*   INPUTS:  1) MERGFINQ.sas7bdat - Scores Database in WEB Layout
*            2) FAKEQ.sas7bdat - Scores Database WEB Layout
*            3) CONUS_Q.sas7bdat - Previous Quarters Combined CAHPS/MPR Scores Database in WEB
layout
*
*   OUTPUT:  1) TOTAL_Q.sas7bdat - Combined CAHPS/MPR Scores Database in WEB layout
*            2) LT30Q.sas7bdat - Records with <= 30 observations
*            3) CONUS_Q.sas7bdat - Current Quarters Combined CAHPS/MPR Scores Database in WEB
layout
*
*
*   NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1Q.SAS   - Recode questions and generate group files
*    - STEP2Q.SAS   - Calculate individual adjusted scores for group 1-7
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*    - LOADCAHPQ.SAS - Combine all questionnaire (CAHPS) scores together
*    - PRVCOMPQ.SAS - Calculate preventative measure scores for group1-8
*    - SMOKING_BMI.SAS    - Calculate healthy behaviors scores for group1-8
*    - LOADMPRQ.SAS   - Combined preventative and healthy behaviors scores
*    - MERGFINQ.SAS - Merge the final CAHPS and MPR Scores Databases
*
****************************************************************************
* Assign data libraries and options
***************************************************************************;

LIBNAME IN1  ".";
LIBNAME OUT  ".";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER MPRINT MLOGIC;

***************************************************************************;
* Define GLOBAL parameters for last CONUSQ.sas7bdat, rolling quarters, and
* input dataset name.
*
* IMPORTANT: Update these GLOBALS each quarter prior to rerunning program.
***************************************************************************;
%LET LSTCONUS = ..\..\..\Q2FY2013t\Programs\Loadweb;
```

```
%LET PERIOD1 = July, 2012;
%LET PERIOD2 = October, 2012;
%LET PERIOD3 = January, 2013;
%LET PERIOD4 = April, 2013;

%LET DSN     = MERGFINQ;

******************************************************************************;
* Set up empty template file for data merge purposes and set first time flag
******************************************************************************;
DATA INIT;
   SET IN1.&DSN;
   DELETE;
RUN;
%LET FLAG = 0;
******************************************************************************
*
* Process Macro Input Parameters:
*
* 1) BENTYPE = Benefit Type
* 2) MAJGRP = Major Group
* 3) TYPE = INDIVIDUAL or COMPOSITE
* 4) BENEFIT = COMPOSITE Benefit Type
*
******************************************************************************;
%MACRO PROCESS(BENTYPE=,MAJGRP=,TYPE=,BENEFIT=);
DATA TEMP;
   SET IN1.&DSN END=FINISHED;
   %IF "&TYPE" = "INDIVIDUAL" %THEN %DO;
       WHERE BENTYPE = "&BENTYPE" AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
             /*SUBSTR(REGION,1,5) NOT IN("Bench","USA") AND*/
             /*SUBSTR(REGCAT,1,5) NOT IN("Bench","USA") AND*/
             SUBSTR(REGION,1,5) NE "Bench" AND SUBSTR(REGION,1,3) NE "USA" AND
             SUBSTR(REGCAT,1,5) NE "Bench" AND SUBSTR(REGCAT,1,3) NE "USA" AND
             REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER","JOINT SERVICE");
   %END;
   %ELSE %IF "&TYPE" = "COMPOSITE" %THEN %DO;
       WHERE BENTYPE = &BENTYPE AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
             BENEFIT = "&BENEFIT" AND
             /*SUBSTR(REGION,1,5) NOT IN("Bench","USA") AND*/
             /*SUBSTR(REGCAT,1,5) NOT IN("Bench","USA") AND*/
             SUBSTR(REGION,1,5) NE "Bench" AND SUBSTR(REGION,1,3) NE "USA" AND
             SUBSTR(REGCAT,1,5) NE "Bench" AND SUBSTR(REGCAT,1,3) NE "USA" AND
             REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER","JOINT SERVICE");
   %END;
   %ELSE %DO;
       PUT "ERROR - Invalid Type = &TYPE";
   %END;

   IF SUBSTR(REGION,1,5) IN ('North','South') THEN DO;
      IF      SUBSTR(REGION,1,5)='North' THEN REGCON=1;
      ELSE IF SUBSTR(REGION,1,5)='South' THEN REGCON=2;
      TOTCON=1;
      IF      SUBSTR(REGION,7,4)='Army'      THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,7,9)='Air Force' THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,7,4)='Navy'      THEN SERVICE=3;
      ELSE IF SUBSTR(REGION,7,5)='Joint'     THEN SERVICE=5;
      ELSE                                        SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,4)='West' THEN DO;
      REGCON=3;
      TOTCON=1;
      IF      SUBSTR(REGION,6,4)='Army'      THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,6,9)='Air Force' THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,6,4)='Navy'      THEN SERVICE=3;
      ELSE IF SUBSTR(REGION,6,5)='Joint'     THEN SERVICE=5;
      ELSE                                        SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,6)='Europe' THEN DO;
      REGCON=4;
      TOTCON=2;
      IF      SUBSTR(REGION,8,4)='Army'      THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,8,9)='Air Force' THEN SERVICE=2;
```

```
      ELSE IF SUBSTR(REGION,8,4)='Navy'        THEN SERVICE=3;
      ELSE IF SUBSTR(REGION,8,5)='Joint'       THEN SERVICE=5;
      ELSE                                           SERVICE=4;
   END;
      ELSE IF SUBSTR(REGION,1,7)='Pacific' THEN DO;
      REGCON=5;
      TOTCON=2;
      IF      SUBSTR(REGION,9,4)='Army'        THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,9,9)='Air Force'   THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,9,4)='Navy'        THEN SERVICE=3;
      ELSE IF SUBSTR(REGION,9,5)='Joint'       THEN SERVICE=5;
      ELSE                                           SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,13)='Latin America' THEN DO;
      REGCON=6;
      TOTCON=2;
      IF      SUBSTR(REGION,15,4)='Army'        THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,15,9)='Air Force' THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,15,4)='Navy'        THEN SERVICE=3;
      ELSE IF SUBSTR(REGION,15,5)='Joint'       THEN SERVICE=5;
      ELSE                                            SERVICE=4;
   END;


RUN;

************************************************************************;
* RSG 01/2005 Calc. total Service Affiliation Scores        *;
************************************************************************;
PROC SORT DATA=TEMP;
BY SERVICE;

DATA TEMP2;
   SET TEMP;
   BY SERVICE;
      length key $200;
   IF FIRST.SERVICE THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;


KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

   IF LAST.SERVICE THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
         SCORE  = SUMSCOR1/SUMWGT1;
         SEMEAN = SQRT(SUMSE2)/SUMWGT1;
      END;
      ELSE DO;
         SCORE  = .;
         SEMEAN = .;
      END;

      N_OBS  = N_OBS1;
      N_WGT  = SUMWGT1;
      SOURCE = "USA";
      FLAG   = "USA";
      IF SERVICE=1 THEN REGION = "ARMY";
      IF SERVICE=2 THEN REGION = "AIR FORCE";
      IF SERVICE=3 THEN REGION = "NAVY";
      IF SERVICE=4 THEN REGION = "OTHER";
      IF SERVICE=5 THEN REGION = "JOINT SERVICE";
```

```
           REGCAT  = REGION;
           KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                 UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                 UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
           OUTPUT;
        END;
   END;
RUN;
***********************************************************************;
* RSG 01/2005 Calc. Total Region scores                             *;
***********************************************************************;
PROC SORT DATA=TEMP;
BY REGCON;
DATA TEMP3;
   SET TEMP;
   BY REGCON;
      length key $200;
   IF FIRST.REGCON THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;

KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

   IF LAST.REGCON THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
         SCORE = SUMSCOR1/SUMWGT1;
         SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
      END;
      ELSE DO;
         SCORE   = .;
         SEMEAN  = .;
      END;
      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "REGION";
      FLAG    = "REGION";
      IF REGCON=1 THEN REGION = "NORTH";
      IF REGCON=2 THEN REGION = "SOUTH";
      IF REGCON=3 THEN REGION = "WEST";
      IF REGCON=4 THEN REGION = "Overseas Europe";
      IF REGCON=5 THEN REGION = "Overseas Pacific";
      IF REGCON=6 THEN REGION = "Overseas Latin America";

      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
   END;
RUN;

***********************************************************************;
* RSG 01/2005 Calc. Total CONUS Scores                              *;
* MER 01/2009 Changed CONUS to USA                                  *;
***********************************************************************;
PROC SORT DATA=TEMP;
BY TOTCON;
DATA TEMP4;
   SET TEMP END=FINISHED;
   BY TOTCON;
      length key $200;
   IF FIRST.TOTCON THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
```

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```
       SUMWGT1 = 0;      RETAIN SUMWGT1;
       SUMSE2 = 0;       RETAIN SUMSE2;
       SUMWGT2 = 0;      RETAIN SUMWGT2;
       N_OBS1 = 0;       RETAIN N_OBS1;
    END;


    IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
    IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
    IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
    IF N_OBS  NE . THEN N_OBS1 + N_OBS;

  IF LAST.TOTCON THEN DO;




    IF SUMWGT1 NOTIN (.,0) THEN DO;
      SCORE  = SUMSCOR1/SUMWGT1;
      SEMEAN = SQRT(SUMSE2)/SUMWGT1;
        END;
        ELSE DO;
          SCORE  = .;
          SEMEAN = .;
        END;
    N_OBS  = N_OBS1;
    N_WGT  = SUMWGT1;
    SOURCE = "USA";
    FLAG   = "USA";
  IF TOTCON=1 THEN REGION = "USA MHS";
  IF TOTCON=2 THEN REGION = "OVERSEAS";
    REGCAT = REGION;
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
          UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
          UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
    OUTPUT;
END;
KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

RUN;

%IF &FLAG = 0 %THEN %DO;
   DATA FINAL;
      SET INIT TEMP2 TEMP3 TEMP4;
   RUN;
%END;
%ELSE %DO;
   DATA FINAL;
      SET FINAL TEMP2 TEMP3 TEMP4;
   RUN;
%END;
%LET FLAG = 1;

%MEND;

****************************************************************************
* Create CONUS for Active Duty - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly        ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service      ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand  ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information             ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist     ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment               ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully               ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                   ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You            ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit          ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care            ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);


****************************************************************************
```

```
* Create CONUS for Active Duty Dependents - Individual
*****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly          ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand     ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                  ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                      ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You               ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit             ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care               ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);


*****************************************************************************
* Create CONUS for Enrollees with Civilian PCM - Individual
*****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly          ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand     ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                  ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You               ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit             ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care               ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);


*****************************************************************************
* Create CONUS for Enrollees with Military PCM - Individual
*****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly          ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand     ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
```

```
%PROCESS(BENTYPE=Listens Carefully                  ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                      ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You               ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit             ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care               ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);

****************************************************************************
* Create CONUS for Non-enrolled Beneficiaries - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly           ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand      ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                  ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                      ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You               ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit             ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care               ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);

****************************************************************************
* Create CONUS for Prime Enrollees - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly           ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand      ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                  ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                      ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You               ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit             ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care               ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);

****************************************************************************
* Create CONUS for Retirees and Dependents - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly           ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand      ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
```

```
%PROCESS(BENTYPE=Listens Carefully                  ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                      ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You               ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit             ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care               ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);


*****************************************************************************
* Create CONUS for All Beneficiaries - Individual
*****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly           ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand      ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                  ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                      ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You               ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit             ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care               ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);


*****************************************************************************
* Process Quarterly CONUS Composites
*****************************************************************************
*****************************************************************************
* Create CONUS for Claims Processing - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Claims
Processing);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Claims
Processing);


*****************************************************************************
* Create CONUS for Customer Service - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Customer
Service);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Customer
Service);


*****************************************************************************
* Create CONUS for Getting Care Quickly - Quarterly
*****************************************************************************;
```

```
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);

*****************************************************************************
* Create CONUS for Getting Needed Care - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);

*****************************************************************************
* Create CONUS for Health Care - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Health
Care);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Health
Care);

*****************************************************************************
* Create CONUS for Health Plan - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Health
Plan);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Health
Plan);
```

```
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Health
Plan);

*****************************************************************************
* Create CONUS for How Well Doctors Communicate - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);

*****************************************************************************
* Create CONUS for Primary Care Manager - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);

*****************************************************************************
* Create CONUS for Specialty Care - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to
BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);

*****************************************************************************
* Extract ORDER and KEY from the WEB Layout file.  TEMPQ will be used
* as place holders for missing records.  FAKEQ will be used for adding
* new records.
*****************************************************************************;
DATA FAKEQ;
   SET IN1.FAKEQ;
```

```
       length key $200;
    SIG = .;
    SCORE = .;
    ORDER = _N_;
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
          UPCASE(TRIM(MAJGRP)) || UPCASE(TRIM(REGCAT))  ||
          UPCASE(TRIM(REGION)) || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;

RUN;
PROC SORT DATA=FAKEQ OUT=TEMPQ;        BY KEY; RUN;
PROC SORT DATA=FAKEQ(KEEP=ORDER KEY); BY KEY; RUN;

*****************************************************************************
* Append BENCHMARK records to CAHPS records and perform significance tests
*****************************************************************************;
DATA BENCHMRK(KEEP=MAJGRP BENEFIT BENTYPE SEMEAN SCORE);
    SET IN1.&DSN;
    WHERE SUBSTR(REGION,1,5) = "Bench" AND SVMPRQ = 0;
RUN;
Data abnchmrk(keep=benefit bentype ascore);
set benchmrk;
where upcase(majgrp)='ALL BENEFICIARIES';
rename score=ascore;
run;
proc sort; by benefit bentype;
proc sort data=benchmrk; by benefit bentype;
data benchmrk;
merge benchmrk abnchmrk; by benefit bentype;run;
PROC SORT DATA=BENCHMRK; BY MAJGRP BENEFIT BENTYPE; RUN;

PROC SORT DATA=FINAL; BY KEY; RUN;

DATA CONUS_Q;
    MERGE FINAL(IN=IN1) FAKEQ(IN=IN2);
    BY KEY;
    IF IN1;
RUN;
PROC SORT DATA=CONUS_Q; BY MAJGRP BENEFIT BENTYPE; RUN;

*****************************************************************************
* Perform significance tests for CONUS scores
*****************************************************************************;
DATA SIGTEST1;
    MERGE CONUS_Q(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
    BY MAJGRP BENEFIT BENTYPE;
    length key $200;
    TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
    IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1)); /** RSG 06/22/2004 - PUT CONDITION TO
AVOID DF=0 WHICH CAUSES ERROR FOR PROBT FUNCTION **/
    ELSE TEST = .; /** RSG 06/22/2004 - ADDED FOR CASES WITH N_OBS = 1 OR LESS SINCE PROBT CAN'T
BE PERFORMED AND WOULD RESULT IN TEST = MISSING ANYWAY **/
    SIG = 0;
    IF TEST < 0.05 AND TEST NE . THEN SIG = 1; /** RSG 06/22/2004 - ADDED CONDITION "TEST NE ." IN
CASE MISSING IS CONSIDERED LESS THAN 0.05 **/
    IF SCORE < BSCORE THEN SIG = -SIG;


    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
          UPCASE(TRIM(MAJGRP)) || UPCASE(TRIM(REGCAT))  ||
          UPCASE(TRIM(REGION)) || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
    SOURCE = "USA_Q";
    FLAG   = "USA_Q";
    IF SIN;
    score=score+ascore-bscore;
RUN;
PROC SORT DATA=SIGTEST1; BY KEY; RUN;

*****************************************************************************
* Extract CAHPS scores to perform significance tests
*****************************************************************************;
DATA CAHPS MPR bench;
    SET IN1.&DSN;
    *****************************************************************
```

```
   * Significance tests have already been performed for MPR scores,
   * so remove from file.
   ****************************************************************************;
   IF SVMPRQ = 1 THEN OUTPUT MPR;
   IF SVMPRQ = 0 THEN do;
    if majgrp ne 'Benchmark' then OUTPUT CAHPS;
    else output bench; end;
RUN;


PROC SORT DATA=CAHPS;
   BY MAJGRP BENEFIT BENTYPE;
RUN;

****************************************************************************
* Perform significance tests for CAHPS scores
****************************************************************************;
DATA SIGTEST2;
   MERGE CAHPS(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
   BY MAJGRP BENEFIT BENTYPE;
   TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
   IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1));  /** RSG 06/22/2004 PUT N_OBS > 1
CONDITION TO AVOID ERRORS BECAUSE PROBT CAN NOT HANDLE DF=0 **/
   ELSE TEST = .;
   SIG = 0;
   IF N_OBS >= 30 AND TEST < 0.05 THEN SIG = 1;
   IF SCORE < BSCORE THEN SIG = -SIG;
   IF SIN;
   score=score+ascore-bscore;
   RUN;
proc sort data=bench; by majgrp benefit bentype;
data sigtest2;
set sigtest2 bench; by majgrp benefit bentype;
PROC SORT DATA=SIGTEST2; BY KEY; RUN;

****************************************************************************
* When NOT 1st quarter: Get records from previous quarters
****************************************************************************;
%MACRO LASTQTR;
   ************************************************************************
   * Input composite records from previous quarters.
   ************************************************************************;
   LIBNAME IN2 "&LSTCONUS";
   DATA LASTQTR (drop=key2); /*RSG 10/2005 - KEY2 WAS CREATED AT END OF PROG TO HELP
                                SET TREND TO MISSING FOR SCORES MISSING IN ANY QUARTERS
                                THIS SHOULD BE DROPPED AND RESET AT THE END OF PROG*/
      SET IN2.CONUS_Q (DROP=KEY);

/*** Change BENEFIT "Heathly Behavior" to Healthy "Behaviors" JSO 02/16/2007 ***/
      IF BENEFIT = 'Healthy Behavior' THEN BENEFIT = 'Healthy Behaviors';

/*** Change SOURCE and FLAG from "CONUS_Q" to "USA_Q" MER 01/29/2009 ***/
/*** Change REGION and REGCAT from "CONUS MHS to USA MHS" MER 01/29/2009 ***/
      IF SOURCE = 'CONUS_Q' THEN SOURCE = 'USA_Q';
      IF FLAG = 'CONUS_Q' THEN FLAG = 'USA_Q';
      IF REGION = 'CONUS MHS' THEN REGION = 'USA MHS';
      IF REGCAT = 'CONUS MHS' THEN REGCAT = 'USA MHS';

      IF timepd IN ("&PERIOD1","&PERIOD2","&PERIOD3") AND
        (REGION = REGCAT) AND
         BENEFIT IN ("Getting Needed Care",
                     "Getting Care Quickly",
                     "How Well Doctors Communicate",
                     "Customer Service",
                     "Claims Processing",
                     "Health Care",
                     "Health Plan",
                     "Primary Care Manager",
                     "Specialty Care",
                     "Preventive Care",
                     "Healthy Behaviors") & TIMEPD NE "Trend";
```

```
            KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));

    RUN;
%MEND LASTQTR;
%LASTQTR;

PROC SORT DATA=LASTQTR(DROP=ORDER); BY KEY; RUN;

DATA LASTQTR;
    MERGE TEMPQ(IN=IN1) LASTQTR(IN=IN2);
    BY KEY;
    IF IN1 AND IN2;
RUN;

PROC SORT DATA=MPR; BY KEY; RUN;

*****************************************************************************
* Combine previously created records with the new file
*****************************************************************************;
DATA COMBINE OUT.LT30Q;
    SET SIGTEST1 SIGTEST2 LASTQTR MPR;
    BY KEY;
    if timepd="&period1" then period=1;   ***MJS 07/08/03 Changed from bentype="&period1";
    if timepd="&period2" then period=2;   ***MJS 07/08/03 Changed from bentype="&period2";
    if timepd="&period3" then period=3;   ***MJS 07/08/03 Changed from bentype="&period3";
    if timepd="&period4" then period=4;   ***MJS 07/08/03 Changed from bentype="&period4";
    *****************************************************************************
    * Remove N_OBS < 30 OR N_WGT < 200
    *************************************************************************;
    IF (N_OBS < 30 OR N_WGT < 200) AND (MAJGRP NE "Benchmark") AND
        (REGION NE "Benchmark")
        THEN OUTPUT OUT.LT30Q;
    ELSE OUTPUT COMBINE;
RUN;

data trend;
set combine;
where period ne . ;
if period<4|benefit="Preventive Care" then score=score/100;

proc sort data=trend;
by majgrp region regcat benefit bentype period;
run;

data avg(keep=majgrp region regcat benefit t_obs a_period a_score twgt bentype) ;
set trend;   by majgrp region regcat benefit bentype period;
if majgrp="Benchmark"|region="Benchmark" then n_wgt=1;
if first.majgrp|first.region|first.regcat|first.benefit|first.bentype then do;
t_obs=0;
t_score=0;
twgt=0;
t_period=0;
end;
t_obs+n_obs;
t_Score+n_wgt*score;
twgt+n_wgt;
t_period+period*n_wgt;
 if last.majgrp|last.region|last.regcat|last.benefit|last.bentype then do;
    if twgt notin (.,0) then do;
        a_score=t_score/twgt;
        a_period=t_period/twgt;
    end;
    else do;
        a_score=.;
        a_period=.;
    end;
    output;
 end;
RUN;
```

```
data trend2(drop=score) btrend(keep=majgrp benefit bentype trend serr);
merge trend avg;  by majgrp region regcat benefit bentype;
if majgrp="Benchmark"|region="Benchmark" then n_wgt=1;
if first.majgrp|first.region|first.regcat|first.benefit|first.bentype then do;
t_score=0;
t_se=0;
t_period=0;
end;
t_se+((n_wgt**2)*(semean**2));
t_score+n_wgt*(score-a_score)*(period-a_period);
t_period+n_wgt*(period-a_period)**2;
if last.majgrp|last.region|last.regcat|last.benefit|last.bentype then do;
if t_period ne 0 then do;   /* RSG 06/22/2004 Added to avoid division by zero*/
   trend=t_score/t_period;
   serr=sqrt(t_se/(t_period*twgt));
end;
else do;
   trend=.;
   serr=.;
end;
if region="Benchmark"|majgrp="Benchmark" then output btrend;
output trend2;
end;
proc sort data=trend2; by majgrp benefit bentype;RUN;
proc sort data=btrend; by majgrp benefit bentype;
data trend3(rename=(trend=score));
merge trend2 btrend(rename=(trend=btrend serr=bserr));
by majgrp benefit bentype;
   length key $200;
if ^(region="Benchmark"|majgrp="Benchmark") then do;
ttrend=trend-btrend;
serr=sqrt((serr**2)+(bserr**2));
sig=0;
if serr > 0 and t_obs notin (.,0) then test= 2*(1-probt(abs(ttrend/serr),t_obs));  /* RSG
06/22/2004 Added to avoid division by zero*/
else test = .;
if test<.05 & test ne . then sig=1;
if sig=1 & ttrend<0 then sig=-1;
end;
timepd="Trend";
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
        UPCASE(TRIM(MAJGRP)) || UPCASE(TRIM(REGCAT))  ||
        UPCASE(TRIM(REGION)) || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
run;

proc sort data=trend3(drop=t_obs twgt a_score a_period t_score t_se t_period serr
 bserr btrend ttrend order); by key;
 data trend4 ;
 merge trend3(in=din) fakeq(in=cin); by key;
 if din;
 RUN;


data combine2;
set combine trend4;RUN;

proc sort; by key;
data combine3 dupe;
set combine2; by key;
if ^(first.key & last.key) then output dupe;
output combine3;
proc print data=dupe;run;

/* RSG 06/2005 - set trend to missing for component/composite
   scores with missing scores in any of the quarter*/
data misses (keep=key2) all;
set combine3;
length key2 $200.;
KEY2 = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP)) || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION));
if score = . then output misses;
output all;
```

```
run;
proc sort data=misses;
by key2;
proc sort data=all;
by key2;
run;

data combine4;
merge all (in=a) misses (in=b);
by key2;
if a and b then do;
  if timepd = "Trend" then score = .;
end;
run;

****************************************************************************
* Create place holders for missing records
****************************************************************************;
DATA FAKEONLY;
   MERGE COMBINE4(IN=IN1) TEMPQ(IN=IN2);
   BY KEY;
   SOURCE = "FAKE ONLY";
   FLAG   = "FAKE ONLY";
   IF IN2 AND NOT IN1;

RUN;

****************************************************************************
* Combine all of the missing records with the existing records to generate
* the complete WEB layout file.
****************************************************************************;
DATA CONUS_Q;
   SET FAKEONLY COMBINE4;
   BY KEY;
   ****************************************************************************
   * Convert CAHPS Composites and Individual to 1-100 scale
   ****************************************************************************;
   IF timepd="Trend" OR (timepd="&PERIOD4" & benefit ne "Preventive Care")
      then
        SCORE = SCORE*100;
RUN;

PROC SORT DATA=CONUS_Q; BY ORDER; RUN;

DATA FAKEQ;
   SET IN1.FAKEQ;
   SIG = .;
   SCORE = .;
   ORDER = _N_;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/31/03 Added TIMEPD;

RUN;
PROC SORT DATA=FAKEQ OUT=TEMPQ;        BY KEY; RUN;
PROC SORT DATA=FAKEQ(KEEP=ORDER KEY); BY KEY; RUN;

PROC SORT DATA=CONUS_Q out=OUT.CONUS_Q;
BY KEY;
RUN;

DATA FAKEONLY;
   MERGE OUT.CONUS_Q(IN=IN1) TEMPQ(IN=IN2);
   BY KEY;
   SOURCE = "FAKE ONLY";
   FLAG   = "FAKE ONLY";
   IF IN2 AND NOT IN1;
RUN;

DATA TOTAL_Q;
   SET FAKEONLY OUT.CONUS_Q;
   BY KEY;
   IF MAJGRP="All Beneficiaries" then MAJGRP="All Users";
```

```
    IF MAJGRP="Non-enrolled Beneficiaries" then MAJGRP="Standard/Extra Users";
    IF BENEFIT="Primary Care Manager" THEN BENEFIT="Personal Doctor";   /*MJS 02/05/2003*/
    /* 11/14/2005 RSG - ADDED IN THESE CODE TO CAPITALIZE ALL WORDS IN TITLE */
    /*IF BENTYPE = "Problems Getting Referral to Specialist      "
       THEN BENTYPE = "Problems Getting Referral To Specialist  ";
    IF BENTYPE = "Delays in Care while Awaiting Approval       "
       THEN BENTYPE = "Delays In Care While Awaiting Approval   ";
    IF BENTYPE = "Advice over Telephone                        "
       THEN BENTYPE = "Advice Over Telephone                    ";
    IF BENTYPE = "Wait for Routine Visit                       "
       THEN BENTYPE = "Wait For Routine Visit                   ";
    IF BENTYPE = "Wait for Urgent Care                         "
       THEN BENTYPE = "Wait For Urgent Care                     ";
    IF BENTYPE = "Wait More than 15 Minutes Past Appointment   "
       THEN BENTYPE = "Wait More Than 15 Minutes Past Appointment";
    IF BENTYPE = "Explains so You can Understand               "
       THEN BENTYPE = "Explains So You Can Understand           ";
    IF BENTYPE = "Spends Time with You                         "
       THEN BENTYPE = "Spends Time With You                     ";
    IF BENTYPE = "Courteous and Respectful                     "
       THEN BENTYPE = "Courteous And Respectful                 ";
    IF BENTYPE = "Problem Getting Help from Customer Service   "
       THEN BENTYPE = "Problem Getting Help From Customer Service";
    IF BENTYPE = "Problem with Paperwork                       "
       THEN BENTYPE = "Problem With Paperwork                   ";
    IF BENTYPE = "Claims Handled in a Reasonable Time          "
       THEN BENTYPE = "Claims Handled In A Reasonable Time      ";*/
    IF substr(region,1,5) in ('Latin','Europ','Pacif')|Region='Overseas Latin America'
     then delete;
    IF REGION IN ("South Joint Service","West Joint Service","Europe Joint Service",
                 "Pacific Joint Service","Latin America Joint Service") THEN DELETE;

RUN;

PROC SORT DATA=TOTAL_Q OUT=OUT.TOTAL_Q; BY ORDER; RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6401-904)";
TITLE2 "Program Name: CONUS_Q.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MERGFINQ.sas7bdat - Scores Database in WEB Layout";
TITLE4 "Program Outputs: TOTAL_Q.sas7bdat - USA Scores Database in WEB layout";

PROC FREQ;
TABLES SIG FLAG SOURCE BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/08/03 Added
TIMEPD*/
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

G.7 Q3FY2013\PROGRAMS\LOADWEB\CreateTotal_qp4.sas - Combines the regular totalq and purchase totalq into one dataset - Run Quarterly.

```
/*****************************************************************************/
/*** Project: 6244 DOD                                                  ***/
/*** Program: CreateTotal_qp&PERIOD.sas                                 ***/
/*** Purpose: Add from Purchase Care's Totalq data, Enrollees with Civilian PCM ***/
/***          to the Adult Beneficiary's Totalq data.  New data will be use to  ***/
/***          populate the Purchase Care's section of the html reports. ***/
/*** Author : Justin Oh 08/06/2008                                      ***/
/*** Input  : ..currentPeriod\PurchasedLoadweb\total_q                  ***/
/***          ..currentPeriod\Loadweb\total_q                           ***/
/*** Output : .\total_q                                                 ***/
/*** Modify :                                                           ***/
/*** B-4-Run: Change the %LET statements at the top of the program.     ***/
/*****************************************************************************/
OPTIONS COMPRESS=YES;

/*** Reference quarter's period                                         ***/
%LET PERIOD = 4;

/*** Adult Beneficiary and Purchase Care total_q.sas7bdat locations     ***/
LIBNAME TOTQ_P '..\PurchasedLoadweb';
LIBNAME TOTQ_A '.';
LIBNAME TOTQ_X '.';

/*** Keep only Enrollees with Civilian PCM, used for the Purchased Care group ***/
DATA total_pc;
   SET TOTQ_P.total_q;
   IF MAJGRP = 'Enrollees with Civilian PCM';
   IF MAJGRP = 'Enrollees with Civilian PCM' THEN MAJGRP = 'Purchased Care Users';
RUN;
/*** Add Purchase Care's renamed MAJGRP to create a final total_q file  ***/
DATA TOTQ_X.total_qp&PERIOD;
   SET TOTQ_A.total_q total_pc;
RUN;

/******************************* END OF PROGRAM ********************************/
```

G.8   Q3FY2013\PROGRAMS\LOADWEB\MAKEHTMQ.SAS - Generate HTML and XLS files for TRICARE Beneficiary Reports - Run Quarterly.

```
*=====================================================================;
*   Programmer:  Mark A. Brinkley                                     ;
*       Title:  MAKEHTMQ.SAS                                          ;
*      Client:  6077-410                                             ;
*        Date:  06-01-2001                                           ;
*                                                                    ;
*     Purpose:  This program is designed to create                  ;
*                report cards for the 2000 DOD project              ;
*                                                                    ;
*                                                                    ;
*  Input files:  TOTAL_QP4.sas7bdat                                 ;
* Output files:  HTML\                                              ;
*                  1269*3 F*.HTM Files (Frame version)              ;
*                  1269  P*.HTM Files (Printer friendly - no frames) ;
*                   P*.XLS Files (Excel files)                      ;
*                  -------------------                              ;
*                                                                    ;
*                                                                    ;
*                                                                    ;
*   ÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!    ;
*                                                                    ;
*    IF YOU MODIFY THIS PROGRAM THEN PLEASE INITIAL AND DOCUMENT    ;
*    YOUR CHANGES.  THOSE FAILING TO DO THIS WILL BE SEVERELY       ;
*    BEATEN.                                                         ;
*                                                                    ;
*   ÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!    ;
*                                                                    ;
*                                                                    ;
*                                                                    ;
* Modifications:                                                     ;
* 11-01-2000 - JSykes added pieces to create Excel Spreadsheets     ;
* 07-01-2001 - MAB modified for qtr 2                               ;
* 10-25-2001 - C.Rankin moved link to printer friendly version     ;
*              from frame, created macro variable to include        ;
*              third row of subbenefit heading                     ;
* 11-01-2001 - D.Beahm changed splitpercent to splitpixel and adjusted;
*              the pixel size of the top frame to prevent scrolling  ;
*              she also added a <BR> before the printer icon to make ;
*              sure it appears on it's own line                    ;
* 12-21-2001 - D.Beahm changed column widths for frame page a so that ;
*              the column headers would line up with the data in frame;
*              page b. Also revised Excel code so benchmarks for the ;
*              majorgrp are shaded dark red instead of blue         ;
* 04-18-2002 - Quarterly report cards will now show a rolling 4     ;
*              quarters of data for the trend. DKB updated the period ;
*              BENTYPE references to account for this, this will need ;
*              to be done each quarter. Also revised footnote        ;
*              to indicate that this is the 2002 Survey of Health Care;
*              Beneficiaries. This reflects a change from previous  ;
*              years, the survey year now refers to the processing  ;
*              year instead of the year for which data was collected. ;
*              Also changed image reference from QTR to COL, these  ;
*              new names for the qtr images reflects the column they ;
*              are in instead of the quarter they represent         ;
* 06-19-2002 - Mark Brinkley                                        ;
*              Updated for Q2_2002                                  ;
*              Changed macro var PERIOD to CURRENTPERIOD            ;
*              Added macro vars PERIOD1-PERIOD3                     ;
* 07-29-2002 - Daniele Beahm                                        ;
*              Added links to trend pages. Clicking on the fielding ;
*              Period now takes you to the component page for that  ;
*              period and clicking on the Trend column header now   ;
*              takes you to the Trend section of the help file      ;
* 02-04-2003 - Mike Scott                                           ;
*              Changed "Primary Care Manager" to "Personal Doctor"  ;
* 02-10-2003 - Mike Scott                                           ;
*              Inserted LENGTH HREF $ 250 statements before         ;
*              href = "string" statements so that href wouldn't be  ;
*              set by default                                       ;
```

```
* 02-14-2003 - Mike Scott                                         ;
*             Added code to avoid scores > 100                    ;
* 04-30-2003 - Mike Scott                                         ;
*             Changed Preventive Care columns from 5 to 6 to      ;
*             accommodate Cholesterol Testing.                    ;
* 05-01-2003 - Mike Scott                                         ;
*             Updated periods for Q1 2003, and changed "2001 and  ;
*             2002" to "2002 and 2003" and "2002 Health Care      ;
*             Survey" to "2003 Health Care Survey".               ;
* 05-04-2003 - Mike Scott                                         ;
*             Removed Civilian PCM (var1=3 or majgrp=3), and      ;
*             changed 4-8 references to 3-7.                       ;
* 05-06-2003 - Mike Scott                                         ;
*             Changed 7-0-0 to 8-0-0.                             ;
* 05-13-2003 - Mike Scott                                         ;
*             Changed two widths.                                 ;
* 05-14-2003 - Mike Scott                                         ;
*             Changed columns from 2-12 to 1-11 which is          ;
*             controlled by var3 - decreased var3's by 1 and      ;
*             decreased K loops by 1.                             ;
* 07-03-2003 - Mike Scott                                         ;
*             Incorporated TIMEPD variable into program to run    ;
*             with Q1 2003 TOTAL_Q rerun to include TIMEPD        ;
*             variable.                                           ;
* 07-30-2003 - Mike Scott                                         ;
*             Added else do section to correct header.            ;
* 07-31-2003 - Mike Scott                                         ;
*             Updated periods for Q2 2003.                        ;
* 08-01-2003 - Mike Scott                                         ;
*             Added code so periods would print on var3=7,8,9,10. ;
* 08-07-2003 - Regina Gramss                                      ;
*             Changed program to create additional trend pages    ;
*             for each sub-benefit: pages are now named with 4    ;
*             numbers (var4 has been added to all file name       ;
*             references) to compensate for additional layer      ;
*             of pages. All file references have been changed     ;
*             to include var4.                                    ;
* 01-28-2004 - Mike Scott                                         ;
*             Changed back to html being generated in HTML        ;
*             directory below directory where MAKEHTMQ is being   ;
*             run.                                                ;
* 01-29-2004 - Mike Scott                                         ;
*             Commented out LENGTH HREF $ 250 statements, since   ;
*             HREF was already declared.                          ;
* 02-11-2004 - Mike Scott                                         ;
*             Changed all lengths to 100 that were less than 100. ;
* 03-24-2004 - Mike Scott                                         ;
*             Updated for Q1 2004.  Changed hard-coded years in   ;
*             footnotes stating source to macro variables.        ;
* 05-07-2004 - Mike Scott - Changed "Wait More than 15 Minutes Past ;
*             Appointment" to "Wait in Doctor's Office" and       ;
*             "Problems Getting Referral to Specialist" to "Problems ;
*             Getting to See Specialist".  NAed out trends for the ;
*             composites Getting Needed Care, Getting Care Quickly, ;
*             and Customer Service and for the questions Problems  ;
*             Getting Personal Doctor/Nurse (GNC), Wait in Doctor's ;
*             Office (GCQ), and Problem with Paperwork (CS).       ;
* 02-16-2004 - Mike Scott - Moved initial data read-in outside macro ;
*             loop to speed up program.                           ;
* 06-22-2004 - Regina Gramss - Updated for Q2 2004 run.           ;
* 08-02-2004 - Regina Gramss - removed lines that replaced trend  ;
*             with NA                                             ;
* 10-07-2004 - Regina Gramss - Adjusted for XTNEXREG              ;
* 02-14-2005 - Mark Brinkley - added 12th benefit SMOKING         ;
* 05-10-2005 - Regina Gramss - deleted chol testing under Prevention ;
*             and added BMI for Healthy Behaviors (which replaced ;
*             Smoking Cessation)                                  ;
* 07-29-2005 - Regina Gramss - updated for Q2 2005 - changed period ;
*             values to quarter, cy values (vs. dates)            ;
* 10-31-2005 - Regina Gramss - updated for Q3 2005                ;
* 12-28-2005 - Regina Gramss - updated for Q4 2005                ;
* 05-11-2006 - Lucy Lu - updated for Q2 FY 2006                   ;
*             change made:  change macro variables SRCYR1 to SRFYR1 ;
```

```
*                                              SRCYR2 to SRFYR2  ;
* 02-09-2007 - Justin Oh - condensed %if statement for bottom_notes   ;
*                     macro.                                    ;
* 02-15-2007 - Justin Oh - added bottom_notes_xls to condensed %if    :
*             statements for xls outputs in three places        ;
* 02-01-2009 - Mike Rudacille - changed CONUS to USA            ;
* 11-09-2012 - Mike Rudacille - added handling of 2 new servreg     ;
*             categories (JOINT SERVICE, North Joint Service)   ;
*                                                                ;
* NOTE: Update only SRFYR1, SRFYR2, PERIOD1/2/3, and CURRENTPERIOD.   ;
*===================================================================;

%LET SRFYR1 = 2012;   *** Previous year;   /*MJS 03/24/04 Added macro variables*/
%LET SRFYR2 = 2013;   *** Current year;


/*** Added macro variables for previous periods (MAB 6-19-2002) ***/
%LET PERIOD1 = July, 2012;
%LET PERIOD2 = October, 2012;
%LET PERIOD3 = January, 2013;


/*** Change name of macro variable from PERIOD (MAB 6-19-2002) ***/
%LET CURRENTPERIOD = April, 2013;   /** Current Period of these reports **/
%LET QTRS=4; /** Qtr of these reports     **/
%LET QTRNO=0;   /**LLU 5/15/06. ne 1 indicates the data is from current year and preceding year,
1 is from current year only*/


/*** Added macro variables for DDE/Excel fix (MER 05-03-2010) ***/
%LET CURRQTR = Q3FY2013;



OPTIONS NOXWAIT;          /* 2000/11: added noxwait*/



%LET HTMLSP=%NRSTR( );      /**DANIELE CHANGED %STR(&NBSP;) TO %NRSTR(&NBSP)**/
%LET QUOTE=%STR("");
%LET OUTDIR=html;                  /** Directory to put HTML files **/  /*MJS 01/28/04 Set to
HTML*/
%LET IMGDIR=images;                /** Directory with images **/
%LET TARGET=target='_parent';     /** HTML code for frames targeting **/
%LET OUTXLS=1;                     /** 1=Make XLS file/0=Don't   Added 1-24 MAB **/
%LET fontface=%STR(Arial,Helvetica,Swiss,Geneva);
%LET hdcolr=%STR('white');
%LET BLUE=%STR('#663300');         /** This is really dark red **/
%LET GREEN=%STR('#009933');
%LET RED=%STR('#cc0000');
%LET GRAY=%STR('white');
%LET LOGO=%STR('images\tricare_side_35_new.gif');
%LET HELP_BUT=%STR('images\help75.gif');
%LET HOME_BUT=%STR('images\home75.gif');
%LET BACK_BUT=%STR('images\back75.gif');
%LET NUMBER_HTML_FILES=0;          /** Keep count of HTML files created **/


%LET SUB_HEAD=0;                   /** Macro variable for sub-benfit heading **/
                                   /** 1=headings, 0=no headings          **/

/*******************************************************/
/***** Macro for putting notes at bottom of table   *****/
/*******************************************************/
%MACRO BOTTOM_NOTES();              /** Modified %if condition at the QTRNO level to minimize
duplicate codes **/
                                   /** Deleted previously commented out per page bottom notes. JSO
02/09/07  **/
      PUT "<tr>";

   %IF &QTRNO NE 1 %THEN %DO;
      PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRFYR1 and &SRFYR2.</font>";   ***MJS
03/24/04
   %END;
   %ELSE %DO;
      PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
&SRFYR2 Health Care Survey of DOD Beneficiaries</font>";   ***MJS 03/24/04 Changed hard-coded
year to
```

```
      %END;

         PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2' color='#009933'><br>";
         PUT "    <b>Indicates score significantly exceeds benchmark</b></font><b>&htmlsp.<br>";
         PUT "    </b><font face='Arial,Helvetica,Swiss,Geneva' size='2'
color='#cc0000'><i>Indicates score significantly falls short of benchmark</i></font><br>";
         PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'>NA Indicates not
applicable</font><br>";

      /* MER 10/24/2009 Fix no longer needed */
      /*%if &var3 = 4 and &seppage = 2 %then %do;
         PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'>* Indicates scores not
available for that quarter</font><br>";
      %end;*/

         PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'>*** Indicates suppressed due to
small sample size</font><br>";

      /* MER 05/14/2010 Fix no longer needed */
      /*%if &var3 = 0 %then %do;
         PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'># Indicates <a
href='..\html\help.htm#transition' &target.>change</a> to composite</font><br>";
      %end;
      %else %if &var3 = 1 or &var3 = 3 or (&var3 = 11 and &seppage = 1) %then %do;
         PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'># Indicates <a
href='..\html\help.htm#transition' &target.>change</a> to questions</font><br>";
      %end;*/

         PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";
         PUT "</td></tr>";

%MEND BOTTOM_NOTES;

%MACRO BOTTOM_NOTES_XLS();          /** Added BOTTOM_NOTES_XLS macro to substitute 3 separate
duplicate codes.          **/
                                   /** Big difference between BOTTOM_NOTES macro is the special
fonts. JSO 02/15/07  **/
      %if &outxls.=1 %then %do;
         FILE XLSDATA;
         PUT; PUT;
         %if &var3.=0 %then %do;
            PUT "Source: &SRFYR2 Health Care Survey of DOD Beneficiaries";
         %end;
         %else %do;
            %IF &QTRNO NE 1 %THEN %DO;
               PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRFYR1 and
&SRFYR2";
            %END;
            %ELSE %DO;
               PUT "Source: &SRFYR2 Health Care Survey of DOD Beneficiaries";
            %END;
         %end;
            PUT "Indicates score significantly exceeds benchmark";
            PUT "Indicates score significantly falls short of benchmark";
            PUT "NA Indicates not applicable";
         /* MER 10/24/2009 Fix no longer needed */
         /*%if &var3 = 4 and &seppage = 2 %then %do;
            PUT "* Indicates scores were not available that quarter";
         %end;*/
         PUT "*** Indicates suppressed due to small sample size";
         /* MER 05/14/2010 Fix no longer needed */
         /*%if &var3 = 0 %then %do;
            PUT "# Indicates change to composite";
         %end;
         %else %if &var3 = 1 or &var3 = 3 or (&var3 = 11 and &seppage = 1) %then %do;
            PUT "# Indicates change to questions";
         %end;*/
      %end;

%MEND BOTTOM_NOTES_XLS;

/*******************************************************/
```

```
/***** Macro for adding in link row to trends data  *****/
/*******************************************************/

/*** Macro variable with Javascript to go back ***/
%LET GOBACK=%STR(<script>document.write(&quote.<a href='javascript:history.go(-1)'
target='_parent'>&quote.);
document.write(&quote.<img src='images\\back75.gif' border='0' alt='Go to previous
page'>&quote.);document.write(&quote.</a>&quote.);</script>);

LIBNAME SRC1  '.'  ACCESS=READONLY;
OPTIONS LS=210;

/************************************************************************/
/****    Macro to create html pages                         ****/
/****          var1=major group                             ****/
/****          var2=region                                  ****/
/****          var3=benefit                                 ****/
/****          var4=trend                                   ****/
/****       seppage=0/no separate pages for qtrly trends    ****/
/****            1/1st separate page                        ****/
/****            2/2nd separate page                        ****/
/************************************************************************/
/** RSG 08/07/03 - added var4 to add extra dimension of page numbers for
    sub benefit trend pages**/

/** Load in data **/   ***MJS 05/13/04;
DATA PRE_SUBSET;
  SET SRC1.TOTAL_QP4;

  /* MER 4/30/11 - Set scores for Counselled To Quit = N/A for April and July, 2010 for trends
pages */
  /*              Also set Trend to N/A
*/
  /*IF BENEFIT = "Healthy Behaviors" AND BENTYPE = "Counselled To Quit" AND
     TIMEPD IN ("April, 2010", "July, 2010", "Trend") THEN SCORE = .A;*/


  IF BENEFIT="Total" THEN DELETE;  /*** MAB testing 2/11/2005 ***/

  /* MER 08/27/09 Temporary fix for Q3FY2009 */
  /*IF (BENEFIT="Customer Service" AND TIMEPD="Trend") THEN SCORE=.;*/

  IF SCORE>100 then SCORE=100;                                  ***MJS ADDED 2/14/2003 to
avoid scores > 100;
  IF (TIMEPD="Trend" and -.5<SCORE<0) THEN SCORE=ABS(SCORE);    ***DKB ADDED 8/13/2002 to
avoid negative zero values;
  IF TIMEPD="Trend" THEN TIMEPD="Est. Quarterly Rate of Change";  ***DKB ADDED 8/12/2002 to
rename Trend column;

  IF BENTYPE="Wait More Than 15 Minutes Past Appointment" THEN    /*MJS 5/7/04 Changed label*/
    BENTYPE="Wait In Doctor`s Office";
  IF BENTYPE="Problems Getting Referral To Specialist" THEN       /*MJS 5/7/04 Changed label*/
    BENTYPE="Problems Getting To See Specialist";
  IF BENTYPE="Percent Normal Weight" THEN
    BENTYPE="Percent Not Obese";                                 /* RSG 09/20/2005 Changed
label*/

  /**RSG 01/2005 CREATE SERVICE FIELD TO ORDER REGION BY SERVICE AFFILIATION, ALSO
     CHANGE CONUS SERVICE AFFILIATION TO LOWER CASE*/

    IF MAJGRP = "Benchmark" THEN LINEUP=1;
    ELSE IF MAJGRP = "Prime Enrollees" THEN LINEUP=2;
    ELSE IF MAJGRP = "Enrollees with Military PCM" THEN LINEUP=3;
    ELSE IF MAJGRP = "Enrollees with Civilian PCM" THEN LINEUP=4; ***JSO 11/07/07 Added Civilian
PCM;
    ELSE IF MAJGRP = "Standard/Extra Users" THEN LINEUP=5;
    ELSE IF MAJGRP = "Purchased Care Users" THEN LINEUP=6;        ***JSO 07/28/08 Added
Purchased Care Users;
    ELSE IF MAJGRP = "Active Duty" THEN LINEUP=7;
    ELSE IF MAJGRP = "Active Duty Dependents" THEN LINEUP=8;
    ELSE IF MAJGRP = "Retirees and Dependents" THEN LINEUP=9;
    ELSE IF MAJGRP = "All Users" THEN LINEUP=10;
```

```
        IF REGION = "Benchmark" THEN LINEUP2=1;
        ELSE IF UPCASE(REGION) = 'USA MHS' THEN DO;
            LINEUP2=2;
            REGION = 'US MHS';
            REGCAT = 'US MHS';
        END;
        ELSE IF UPCASE(REGION) = 'ARMY' THEN LINEUP2=3;
        ELSE IF UPCASE(REGION) = 'NAVY' THEN LINEUP2=4;
        ELSE IF UPCASE(REGION) = 'AIR FORCE' THEN LINEUP2=5;
        ELSE IF UPCASE(REGION) = 'OTHER' THEN LINEUP2=6;
        ELSE IF UPCASE(REGION) = 'JOINT SERVICE' THEN LINEUP2=7;
        ELSE IF UPCASE(REGION) = 'NORTH' THEN LINEUP2=8;
        ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP2=9;
        ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP2=10;
        ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP2=11;
        ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP2=12;
        ELSE IF UPCASE(REGION) = 'NORTH JOINT SERVICE' THEN LINEUP2=13;
        ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP2=14;
        ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP2=15;
        ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP2=16;
        ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP2=17;
        ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP2=18;
        ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP2=19;
        ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP2=20;
        ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP2=21;
        ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP2=22;
        ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP2=23;
        ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP2=24;
        ELSE IF UPCASE(REGION) = 'OVERSEAS EUROPE' THEN LINEUP2=25;
        ELSE IF UPCASE(REGION) = 'OVERSEAS PACIFIC' THEN LINEUP2=26;


RUN;   ***MJS 07/03/03 Changed BENTYPE to TIMEPD;

PROC SORT;
BY LINEUP LINEUP2;
RUN;

%MACRO MKHTML(var1,var2,var3,seppage,var4);


/*** Determine some macro variables ***/
%if &prefix=f %then %do;
  %let width1=640;
  %let width2=640;
  %let border=0;
%end;
%else %do;
  %let width1=90%;
  %let width2=85%;
  %let border=1;
%end;



%let number_html_files=%EVAL(1+&number_html_files.);


/** Load in data **/
DATA SUBSET;
  SET PRE_SUBSET;
  LENGTH FILEOUT1 $ 100;    /*MJS 02/11/04*/
  LENGTH FILEOUT2 $ 100;
  LENGTH FILEOUT3 $ 100;


  /*** VAR1 indicated major group ***/
  %if &var1.=0 %then %let major=%STR();
  %if &var1.=1 %then %let major=%STR(Prime Enrollees);
  %if &var1.=2 %then %let major=%STR(Enrollees with Military PCM);
  %if &var1.=3 %then %let major=%STR(Enrollees with Civilian PCM);   ***JSO 10/31/07 Added
Civilian PCM;
```

```
  %if &var1.=4 %then %let major=%STR(Standard/Extra Users);          ***(var1.=3), and changed 3-
7 back to 4-8;
  %if &var1.=5 %then %let major=%STR(Purchased Care Users);          ***JSO 07/28/08 Added
Purchased Care Users;
  %if &var1.=6 %then %let major=%STR(Active Duty);
  %if &var1.=7 %then %let major=%STR(Active Duty Dependents);
  %if &var1.=8 %then %let major=%STR(Retirees and Dependents);
  %if &var1.=9 %then %let major=%STR(All Users);


  %if &var1.=0 %then %do;
     /* RSG 02/2005 - CONUS WILL NOW BE PART OF REGION LIST SO COMMENT OUT NEXT SECTION*/
     /* %if &var2.^=99 %then %do;
        IF SUBSTR(REGION,1,3)="USA" THEN DELETE;
     %end;*/

     %let comma=%STR();
     %let grpmsg=%STR();
  %end;
  %else %do;
     IF MAJGRP="&major.";    /*** Subset data by major group ***/
     %let comma=%STR(,);
     %let grpmsg=%STR(Click below to view this table by other groups);
  %end;



  /*** Create macro variables to refer to Component or Trend pages ***/
  %if &seppage.=2 %then %do;
     %let q=q;
     %let unq=;
     %let click_alt=Click for Component data;
     %let click_image=component.gif;
  %end;
  %else %do;
     %let q=;
     %let unq=q;
     %let click_alt=Click for Trend data;
     %let click_image=trend.gif;
  %end;


  FILEOUT1=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q..htm");    /** Main html **/
  FILEOUT2=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q.a.htm");   /** Header html
**/
  FILEOUT3=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q.b.htm");   /** Data html **/
   /*** Added &var4 to all file names for additional sub-benefit trend pages
        08-07-2003 RSG ***/
     /*MJS 01/28/04 Added &outdir.\ to above filenames*/

   /*** Added 07-12-2001 MAB  If creating Excel then don't create HTML ***/
   %if &outxls.=1 %then %do;
     %let fileout1= NUL;
     %let fileout2= NUL;
     %let fileout3= NUL;
   %end;
   %else %do;
     call symput('fileout1',FILEOUT1);
     call symput('fileout2',FILEOUT2);
     call symput('fileout3',FILEOUT3);
   %end;



  /*------------------------*/
  /* 2000/11: begin xls code */
  /*------------------------*/

  /*MJS 01/28/04 Added &outdir.\ to filename*/
  FILEOUTX=COMPRESS("&outdir.\p&var1.-&var2.-&var3.-&var4.&q..xls");         /* create run-
specific xls file */
  CALL SYMPUT('fileoutX',FILEOUTX);                                  /* via global macro vars
*/
```

```
   %if &seppage. ne 2 %then %do;
       /* MER 05/14/2010 Fix no longer needed */
       /*%if &var3 = 0 or &var3 = 1 or &var3 = 3 or &var3 = 11 %then %do;
          TEMPLATE=COMPRESS("Templates\Template&var3._trans.xls");
       %end;
       %else %do;
          TEMPLATE=COMPRESS("Templates\Template&var3..xls");
       %end;*/
       TEMPLATE=COMPRESS("Templates\Template&var3..xls");
   %end;
   /* MER 10/24/2009 Fix no longer needed */
   /*%else %if &var3 = 4 %then %do;
      TEMPLATE=COMPRESS("Templates\Template_trend2.xls");
   %end;*/
   /* MER 05/14/2010 Fix no longer needed */
   /*%else %if &var3 = 1 or &var3 = 3 %then %do;
      TEMPLATE=COMPRESS("Templates\Template_trend_trans.xls");
   %end;*/
   %else %do;
      TEMPLATE=COMPRESS("Templates\Template_trend.xls");
   %end;
   CALL SYMPUT('template',TEMPLATE);                              /* identify which template
xls file */
   /*------------------------*/
   /* 2000/11: end xls code   */
   /*------------------------*/


   /*** VAR3 dictates type of benefit heading ***/
   %if &var3=0 %then %do;
     %let headvar=BENEFIT;
   %end;
   %else %do;            /*MJS 07/30/03 Added else do - was %else %let headvar=BENTYPE;*/
     %if &seppage.=2 or &var3=6 or &var3=7 or &var3=8 or &var3=9 %then %let headvar=TIMEPD;
/*MJS 08/01/03 Added &var3 code*/
     %else %let headvar=BENTYPE;
   %end;

   /*** clean up headvar variable ***/
   /***IF BENTYPE="Trend" THEN BENTYPE="Trend<BR>% change";***/

   /*** Link to XLS file ***/
   HREFXLS=COMPRESS("p&var1.-&var2.-&var3.-&var4.&q..xls");
   call symput('hrefxls',HREFXLS);
RUN;


/*** Subset data by region ***/
DATA SUBSET2;
  SET SUBSET;

  %if &var2.=0 %then %do;     /** 0 = All regions **/
     IF REGION=REGCAT;        /** Just do All Region table **/
      %let sub_regs=%STR(All Regions);
   %end;

   %else %if &var2.=1 %then %do;
      IF UPCASE(REGION)="US MHS"; /* MER 08/27/09 changed to US MHS */
       %let sub_regs=%STR(US MHS);
   %end;
   %else %if &var2.=2 %then %do;
      IF UPCASE(REGION)="ARMY";
       %let sub_regs=%STR(ARMY);
   %end;
   %else %if &var2.=3 %then %do;
      IF UPCASE(REGION)="NAVY";
       %let sub_regs=%STR(NAVY);
   %end;
   %else %if &var2.=4 %then %do;
      IF UPCASE(REGION)="AIR FORCE";
       %let sub_regs=%STR(AIR FORCE);
   %end;
   %else %if &var2.=5 %then %do;
```

```
   IF UPCASE(REGION)="OTHER";
    %let sub_regs=%STR(OTHER);
%end;
%else %if &var2.=6 %then %do;
   IF UPCASE(REGION)="JOINT SERVICE";
    %let sub_regs=%STR(JOINT SERVICE);
%end;
%else %if &var2.=7 %then %do;
   IF UPCASE(REGION)="NORTH";
    %let sub_regs=%STR(NORTH);
%end;
%else %if &var2.=8 %then %do;
   IF UPCASE(REGION)="NORTH ARMY";
    %let sub_regs=%STR(North Army);
%end;
%else %if &var2.=9 %then %do;
   IF UPCASE(REGION)="NORTH NAVY";
    %let sub_regs=%STR(North Navy);
%end;
%else %if &var2.=10 %then %do;
   IF UPCASE(REGION)="NORTH AIR FORCE";
    %let sub_regs=%STR(North Air Force);
%end;
%else %if &var2.=11 %then %do;
   IF UPCASE(REGION)="NORTH OTHER";
    %let sub_regs=%STR(North Other);
%end;
%else %if &var2.=12 %then %do;
   IF UPCASE(REGION)="NORTH JOINT SERVICE";
    %let sub_regs=%STR(North Joint Service);
%end;
%else %if &var2.=13 %then %do;
   IF UPCASE(REGION)="SOUTH";
    %let sub_regs=%STR(SOUTH);
%end;
%else %if &var2.=14 %then %do;
   IF UPCASE(REGION)="SOUTH ARMY";
    %let sub_regs=%STR(South Army);
%end;
%else %if &var2.=15 %then %do;
   IF UPCASE(REGION)="SOUTH NAVY";
    %let sub_regs=%STR(South Navy);
%end;
%else %if &var2.=16 %then %do;
   IF UPCASE(REGION)="SOUTH AIR FORCE";
    %let sub_regs=%STR(South Air Force);
%end;
%else %if &var2.=17 %then %do;
   IF UPCASE(REGION)="SOUTH OTHER";
    %let sub_regs=%STR(South Other);
%end;
%else %if &var2.=18 %then %do;
   IF UPCASE(REGION)="WEST";
    %let sub_regs=%STR(WEST);
%end;
%else %if &var2.=19 %then %do;
   IF UPCASE(REGION) = "WEST ARMY";
    %let sub_regs=%STR(West Army);
%end;
%else %if &var2.=20 %then %do;
   IF UPCASE(REGION) = "WEST NAVY";
    %let sub_regs=%STR(West Navy);
%end;
%else %if &var2.=21 %then %do;
   IF UPCASE(REGION) = "WEST AIR FORCE";
    %let sub_regs=%STR(West Air Force);
%end;
%else %if &var2.=22 %then %do;
   IF UPCASE(REGION) = "WEST OTHER";
    %let sub_regs=%STR(West Other);
%end;
%else %if &var2.=23 %then %do;
   IF UPCASE(REGION) = "OVERSEAS";
```

```
        %let sub_regs=%STR(OVERSEAS);
    %end;
    %else %if &var2.=24 %then %do;
        IF UPCASE(REGION) = "OVERSEAS EUROPE";
         %let sub_regs=%STR(Overseas Europe);
    %end;
    %else %if &var2.=25 %then %do;
        IF UPCASE(REGION) = "OVERSEAS PACIFIC";
         %let sub_regs=%STR(Overseas Pacific);
    %end;

RUN;


/*** Subset data by Benefit ***/
DATA SUBSET3;
  SET SUBSET2;

  %if &var3.=0 %then %do;    /** 0=All Benefits **/
      IF BENTYPE="Composite" and TIMEPD="&currentperiod.";    ***MJS 07/03/03 Changed from IF
BENTYPE="&currentperiod.";
  %end;
  %else %if &var3.=1 %then %do;    ***MJS 4/23/03 Changed 2 to 1;
      IF BENEFIT="Getting Needed Care";

      /*** # of columns for this benefit table ***/
      %let columns=%EVAL(3+&qtrs.); ***MER ADDED 3+ instead of 5+ 4/21/09;
  %end;
  %else %if &var3.=2 %then %do;    ***MJS 4/23/03 Changed 3 to 2;
      IF BENEFIT="Getting Care Quickly";
      %let columns=%EVAL(3+&qtrs.); ***MER ADDED 3+ instead of 5+ 4/21/09;
  %end;
  %else %if &var3.=3 %then %do;    ***MER 4/21/09 Changed 4 to 3;
      IF BENEFIT="How Well Doctors Communicate";
      %let columns=%EVAL(5+&qtrs.);
  %end;
  %else %if &var3.=4 %then %do;    ***MER 4/21/09 Changed 5 to 4;
      IF BENEFIT="Customer Service";
      %let columns=%EVAL(3+&qtrs.); ***MER ADDED 3+ instead of 4+ 4/21/09;
  %end;
  %else %if &var3.=5 %then %do;    ***MER 4/21/09 Changed 6 to 5;
      IF BENEFIT="Claims Processing";
      %let columns=%EVAL(3+&qtrs.);
  %end;
  %else %if &var3.=6 %then %do;    ***MER 4/21/09 Changed 7 to 6;
      IF BENEFIT="Health Plan";
      %let columns=%EVAL(2+&qtrs.);      ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
  %end;
  %else %if &var3.=7 %then %do;    ***MER 4/21/09 Changed 8 to 7;
      IF BENEFIT="Health Care";
      %let columns=%EVAL(2+&qtrs.);      ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
  %end;
  %else %if &var3.=8 %then %do;    ***MER 4/21/09 Changed 9 to 8;
      IF BENEFIT="Personal Doctor";      ***MJS 02/04/2003;
      %let columns=%EVAL(2+&qtrs.);      ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
  %end;
  %else %if &var3.=9 %then %do;    ***MER 4/21/09 Changed 10 to 9;
      IF BENEFIT="Specialty Care";
      %let columns=%EVAL(2+&qtrs.);      ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
  %end;
  %else %if &var3.=10 %then %do;  ***MER 4/21/09 Changed 11 to 10;
      IF BENEFIT="Preventive Care";    ***MJS 04/30/03 Changed from 5+ to 6+ because Cholesterol
Testing was added;
      %let columns=%EVAL(5+&qtrs.);    ***DKB CHANGED FROM 6+ to 5+ because removed flu shot
5/7/02;
  %end;
  %else %if &var3.=11 %then %do;  ***MER 4/21/09 Changed 12 to 11;
      IF BENEFIT="Healthy Behaviors";
      %let columns=%EVAL(4+&qtrs.);
  %end;

  /*** Set macro variable ***/
  %if &var3.=0 %then %do;
```

```
     %let sub_ben=%STR(&currentperiod. Composite Scores);
     %let columns=12;   ***MER 4/21/09 Changed from 13 to 12;
  %end;
  %else %do;
    call symput('sub_ben',BENEFIT);
  %end;


  /*** Determine number of columns for sub-benefits  ***/
  /*** Equals cols - (x for qtrs  - 1 for stub column) ***/
  %let subcols=%EVAL(&columns.-&qtrs.-2);              ***DKB CHANGED FROM -1 to -2 5/3/2002;

  /*** Determine number of columns less 1st (stub) column ***/
  %let columns_less1=%EVAL(&columns.-1);

RUN;



/*** Added 4-3-01 MAB ***/
DATA SUBSET4;
  SET SUBSET3;

  WIDTH_COL1=120; /** Set width of column 1 **/

  IF BENTYPE="Composite" THEN WIDTH3=90;  ***DKB ADDED TREND and changed width3 from 120 to 90
4/30/2002***;
  ELSE WIDTH3=90;                         ***MJS 07/03/03 Changed from BENTYPE IN any period and
Est. Quarterly Rate of Change;

  /** Deal with some special cases **/
  IF BENEFIT="Preventive Care" THEN DO;
     IF BENTYPE="Composite" THEN WIDTH3=.;    ***DKB ADDED TREND 4/30/2002***;
     ELSE WIDTH3=80;                          ***MJS 07/03/03 Changed from BENTYPE IN any period
and Est. Quarterly Rate of Change;
  END;
  %if &prefix.=p %then %do;
     WIDTH3=.;
  %end;

  %else %if &var3.=0 %then %do;
/*     WIDTH_COL1=.;
     WIDTH3=40;*/
/* MER 05/02/09 new values for V4 frames */
     WIDTH_COL1=80;
     /* MER 05/02/09 */
     %if &var2.=0 %then %do;
        WIDTH3=44;
     %end;
     %else %do;
        WIDTH3=43;
     %end;
  %end;



        /*** Added 5-7-2001 mab ***/

RUN;

/*************************************************************/
/****  Put out Header rows of table                     ****/
/*************************************************************/
DATA HTML;
  SET SUBSET4;
  LENGTH HREFBACK $100;   /*MJS 02/11/04*/

  IF REGION IN("Benchmark") OR MAJGRP IN("Benchmark");

  /** Determine where back button should link to **/
  %if &var1.=0 %then %do;
     HREFBACK=COMPRESS("&prefix.8-0-0-0.htm");   ***MJS 05/06/03 Changed 8-0-0 to 7-0-0;
                                                 ***JSO 11/12/07 Changed 7-0-0 to 8-0-0;
  %end;
```

```
   %else %do;
      HREFBACK=COMPRESS("&prefix.&var1.-0-0-0.htm");
   %end;

   /*** Create macro variable date with today's date ***/
   DATETIME=DATETIME();
   CALL SYMPUT ('DATETIME',left(put(datetime,datetime20.)));
   DROP DATETIME;

RUN;

/*** ÛÛ FRAMES SECTION ÛÛ ***/
%if &prefix=f %then %do;

    /*** Make frameset page split frames smaller on all ratings pages ***/

    %if &var3.=0 %then %do;
         %let splitpixel=228;
      %end;
      %else %if &var3.=1 OR &var3.=2 %then %do;   ***MJS 4/23/03 Changed 2&3 to 1&2;
         %let splitpixel=211;
      %end;
      %else %if &var3.=5 OR &var3.=11 %then %do;  ***MER 4/21/09 Changed 6&12 to 5&11;
         %let splitpixel=181;
      %end;
      %else %if &var3.=3 %then %do;   ***MER 4/21/09 Changed 4 to 3;
         %let splitpixel=196;
      %end;
      %else %if &var3.=4 %then %do;   ***MER 4/21/09 Changed 5 to 4;
         %let splitpixel=221;
      %end;
      %else %if &var3.=6 OR &var3.=7 OR &var3.=8 OR &var3.=9 %then %do;
         %let splitpixel=158;   ***MER 4/21/09 Changed 7/8/9/10 to 6/7/8/9;
      %end;
      %else %if &var3.=10 %then %do;   ***MER 4/21/09 Changed 11 to 10;
         %let splitpixel=192;
      %end;

      %if &SEPPAGE.=2 %then %do;
         %let splitpixel=157;
      %end;


    /*** Create frameset page HTML page ***/
     DATA _NULL_;
       FILE "&FILEOUT1.";
       PUT "<html><head><title>";
       PUT "&major. &comma. &sub_ben., &sub_regs.";
       PUT "</title></head>";
       PUT "<frameset rows='&splitpixel.,*'>";
        %if &seppage.=2 %then %do;
         PUT "    <frame src='f&var1.-&var2.-&var3.-&var4.qa.htm'  MARGINHEIGHT='0'
MARGINWIDTH='0'>";
         PUT "    <frame src='f&var1.-&var2.-&var3.-&var4.qb.htm'  MARGINHEIGHT='0'
MARGINWIDTH='0'>";
        %end;
        %else %do;
         PUT "    <frame src='f&var1.-&var2.-&var3.-&var4.a.htm'  MARGINHEIGHT='0'
MARGINWIDTH='0'>";
         PUT "    <frame src='f&var1.-&var2.-&var3.-&var4.b.htm'  MARGINHEIGHT='0'
MARGINWIDTH='0'>";
        %end;


      PUT "</frameset></html>";
     RUN;


    /*** Since done making frameset page then assign fileout1 = frame 1 ***/
    %let fileout1=&fileout2.;
    %if &seppage.=1 %then %do;
        %let fileout1=&fileout2.;
    %end;
```

```
    %else %if &seppage.=2 %then %do;
       %let fileout1=&fileout2.;
    %end;

%end;


/*** Initialize HTML page ***/
DATA _NULL_;
  FILE "&FILEOUT1.";

  PUT "<! Created &datetime.>";
  PUT "<html><head><title>";
  PUT "&major. &comma. &sub_ben., &sub_regs.";
  PUT "</title></head>";
  PUT "<body bgcolor='#999999' text='#000099' link='#660066' alink='#660066' vlink='#996699'>";

  /*** link to printer friendly version moved, 10/25/2001 C.Rankin ***/


RUN;

/*------------------------*/
/* 2000/11: begin xls code */
/*------------------------*/
%if &outxls.=1 %then %do;
  options noxsync noxwait mprint;
  /* Build macro variable for PUT statements used to */
  /* open template and save to run-specific worksheet */
  %LET stmt = ;
  %LET stmt2 = ;
  DATA _NULL_;
      single = "'";
      double = '"';

      length stmt $300.;
      length stmt2 $300.;

      stmt = "PUT
"||single||"[open("||double||"L:\&CURRQTR.\Programs\LoadWeb\&template."||double||")]"||single;
      stmt2 = "PUT
"||single||"[save.as("||double||"L:\&CURRQTR.\Programs\LoadWeb\&fileoutX."||double||")]"||single;

      call symput('stmt',left(trim(stmt)));
      call symput('stmt2',left(trim(stmt2)));
  RUN;
  /* open Excel */
  FILENAME SAS2XL DDE 'excel|system';
  DATA _NULL_;
      length fid rc start stop time 8;
      fid=fopen('SAS2XL','s');
      if (fid le 0) then do;
          rc=system('start excel');
          start=datetime();
          stop=start+100;
          do while (fid le 0);
              fid=fopen('SAS2XL','s');
              time=datetime();
              if (time ge stop) then fid=1;
          end;
      end;
      rc=fclose(fid);
  RUN;
  /* open xls template and save as run-specific worksheet */
  DATA _NULL_;
      FILE SAS2XL;
      &stmt;
      &stmt2;
  RUN;

  FILENAME XLSTITLE DDE 'excel|Sheet1!R1C1:R2C20' NOTAB;        /* xls rows 1 & 2 (titles)
*/
```

```
   FILENAME XLSDATA DDE 'excel|Sheet1!R6C1:R100C20' NOTAB;          /* xls rows 6+ (body of table)
*/
%end;
/*------------------------*/
/* 2000/11: end xls code   */
/*------------------------*/




/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*** If ALL benefits (VAR3=0) then do special column headers ***/
%if &var3.=0 %then %do;
DATA _NULL_;
  SET HTML END=EOF;
  *LENGTH HREF $ 250;    /*MJS 01/29/04 Commented out statement*/

  IF _N_=1 THEN DO;

        FILE "&FILEOUT1." MOD;       /* 2000/11: moved file stmt inside if stmt */

        /*** put table title ***/
        /**PUT "<h2><center><font face='&fontface.'>&major., &sub_regs. <br> &sub_ben.
</font></center></h2>"**/

        /** MF Changes ROW 1 **/
        PUT "<center><table border='&border.' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
colspan=12 width='&width1.'>";
        PUT "<tr bgcolor='white'>";
        PUT "    <td colspan='6' valign='top' bgcolor='#999999'><img border='0' height='25'
width='242' src=&logo.></td>";
        PUT "    <td colspan='6' align='right' valign='bottom' bgcolor='#999999'>";
        PUT "        <div align='right'>";
        PUT "        <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";

        /*** 4-17 MAB added JS code to go back ***/
        PUT "&goback.";

        PUT "        <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
        PUT "        &htmlsp. &htmlsp.";
        PUT "        <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
        PUT "    </td>";
        PUT "</tr>";

        /** MF Changes ROW 2 **/
        /** Modified 2-2 MAB to better align title **/
        PUT "<tr>";
        PUT "        <td valign='center' align='center' colspan='12' bgcolor='#D8D8D8'>";
        PUT "            <font face='&fontface.' color='#3333cc' size='5'><b>&major. &comma.
&sub_regs.<br>";
        PUT "            &sub_ben.</b></font>";
        PUT "        </td>";
        PUT "</tr>";


        /*** Print out 3rd row ***/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/


         /***here***/

        %if &prefix=f %then %do;
            PUT "<tr bgcolor= &hdcolr.>";
            /**RSG 02/2005 add in a dummy gif to align titles and comment out extra cell**/
            /**PUT "<td width=70>&htmlsp.</td>";**/
            PUT "<td width=40 colspan=1><IMG SRC='&imgdir.\dummy.gif' ALT=' ' BORDER=0></td>";
            PUT "<td width=80 colspan=2><IMG SRC='&imgdir.\eoa.gif'ALT='Ease of Access'
BORDER=0></td>";
            PUT "<td width=185 colspan=3><IMG SRC='&imgdir.\com_cus_ser.gif' ALT='Communication
and Customer Service' BORDER=0></td>";
```

```
                PUT "<td width=160 colspan=4><IMG SRC='&imgdir.\ratings0.gif' ALT='Ratings'
BORDER=0></td>";
                PUT "<td width=50 colspan=1><IMG SRC='&imgdir.\prevention.gif' ALT='Prevention'
BORDER=0></td>";
                PUT "<td width=80 colspan=1><IMG SRC='&imgdir.\healthy.gif' ALT='Healthy Behaviors'
BORDER=0></td>";
                PUT "</tr>";
                PUT "<tr bgcolor= &hdcolr.>";
            %end;
          %else %do;
                PUT "<tr bgcolor= &hdcolr.>";
                PUT "<td>&htmlsp.</td>";

                /*** MAB rearranged 2/11/2005 ***/
                PUT "<td align='center' valign='bottom' colspan=2><font face='&fontface.'
size='2'><b>Ease of Access</b></font></td>";
                PUT "<td align='center' valign='bottom' colspan=3><font face='&fontface.'
size='2'><b>Communication and Customer Service</b></font></td>";
                PUT "<td align='center' valign='bottom' colspan=4><font face='&fontface.'
size='2'><b>Ratings</b></font></td>";
                PUT "<td align='center' valign='bottom' colspan=1><font face='&fontface.'
size='2'><b>Prevention</b></font></td>";
                PUT "<td align='center' valign='bottom' colspan=1><font face='&fontface.'
size='2'><b>Behaviors</b></font></td>";
                PUT "</tr>";
                PUT "<tr bgcolor= &hdcolr.>";
            %end;


        /*** Print out 1st column of 4th row ***/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        %if &prefix=f %then %do;
            *PUT "<td width=80>&htmlsp.</td>";
            /* MER 05/02/09 trying new values for V4 frames */
            PUT "<td width=125>&htmlsp.</td>";
            /**RSG 02/2005 Added in dummy gif to align title**/
        /*    PUT "<td align='center' valign='bottom'><IMG SRC='&imgdir.\dummy.gif'ALT=' '
BORDER=0>";*/
        %end;
        %else %do;
            PUT "<td width='8%'><font face='&fontface.'>&htmlsp.</font></td>";
        %end;



        /*** MAB 2/11/2005 ***/
        bennum=1;  /** index to all 11 benefits **/



        /*------------------------*/
        /* 2000/11: begin xls code */
        /*------------------------*/
        %if &outxls.=1 %then %do;
          FILE XLSTITLE;
          PUT "&major. &comma. &sub_regs.";
          PUT "%cmpres('&sub_ben.')";
        %end;
        /*------------------------*/
        /* 2000/11: begin xls code */
        /*------------------------*/
  END;

  FILE "&FILEOUT1." MOD ;                  /* 2000/11: refer back to htm file */

  /*** Put Benefits across columns (Continuation of 4th row) ***/
  HREF=COMPRESS("..\html\&prefix.&var1.-&var2.-"||bennum||"-&var4..htm");


  /** If TOTAL benefit then don't have HREF **/
  /*** ÛÛ FRAMES SECTION ÛÛ ***/
  %if &prefix=f %then %do;
    /* MER 05/14/2010 Fix no longer needed */
```

```
      /*IF BENNUM=1 OR BENNUM=2 OR BENNUM=3 OR BENNUM=4 OR BENNUM=11 THEN DO;
         IMAGE=COMPRESS("&imgdir.\image0_"||bennum||"_trans.gif");
      END;
      ELSE DO;
         IMAGE=COMPRESS("&imgdir.\image0_"||bennum||".gif");
      END;*/
      IMAGE=COMPRESS("&imgdir.\image0_"||bennum||".gif");
      IF BENNUM=0 THEN PUT "<td align='center' valign='bottom'><IMG SRC='&imgdir.\image0_0.gif'
alt='Total' BORDER=0></td>";
      ELSE PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='"
IMAGE "' alt='" BENEFIT "' BORDER=0></a></td>";

   %end;
   %else %do;
      IF BENNUM=0 THEN PUT "<td width='8%' align='center' valign='bottom'><font
face='&fontface.'size='1'>" &HEADVAR. "</font></td>";
      /* MER 05/14/2010 Fix no longer needed */
      /*ELSE IF BENNUM<5 OR BENNUM=11 THEN PUT "<td width='8%' align='center'
valign='bottom'><font face='&fontface.'size='1'><a href=""" HREF +(-1) """ &target.>" &HEADVAR.
+(-1) "<b>#</b></a></font><
      ELSE PUT "<td width='8%' align='center' valign='bottom'><font face='&fontface.'size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
   %end;


  bennum+1;


  IF EOF THEN DO;
    PUT "</tr>";
    /***  2-2 MAB removed scale row ***/
  END;

RUN;
%end;

/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*** If Sub-benefit (VAR3^=0) then do differently ***/
/*** If not separate page (SEPPAGE=0) for quarterly info then do as before ***/
%else %if &seppage.=0 OR &var3.=6 OR &var3.=7 OR &var3.=8 OR &var3.=9 %then %do;
                                 ***MER 4/21/09 Changed 7/8/9/10 to 6/7/8/9;

DATA _NULL_;
  SET HTML END=EOF;
  *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/

  COLUMNS=&columns.;
  SPAN1=ROUND(COLUMNS/2,1);
  SPAN2=COLUMNS-SPAN1;


  IF _N_=1 THEN DO;

      FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */


      /** MF Changes ROW 1 **/
      PUT "<center><table border='&border.' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
width='&width2.'>";
      PUT "<tr bgcolor='white'>";
      PUT "    <td colspan=""" SPAN1 +(-1) """ valign='top' bgcolor='#999999'><img border='0'
height='25' width='242' src=&logo.></td>";
      PUT "    <td colspan=""" SPAN2 +(-1) """ align='right' valign='bottom'
bgcolor='#999999'>";
      PUT "          <div align='right'>";
      PUT "          <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";

      /*** 4-17 MAB added JS code to go back ***/
      PUT "&goback.";

      PUT "          <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
```

```
        PUT "          &htmlsp. &htmlsp.";
        PUT "             <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
        PUT "     </td>";
        PUT "</tr>";

        /** MF Changes ROW 2 **/
        /** Modified 2-2 MAB to better align title **/
        PUT "<tr>";
        PUT "        <td valign='center' align='center' colspan=""" COLUMNS +(-1) """
bgcolor='#D8D8D8'>";
        PUT "                 <font face='&fontface.' color='#3333cc' size='5'><b>&major. &comma.
&sub_regs. <br>";

        /*** If ratings then don't display reference period ***/
        %if &var3.=6 OR &var3.=7 OR &var3.=8 OR &var3.=9 %then %do;
                      ***MER 4/21/09 Changed 7/8/9/10 to 6/7/8/9;
            PUT "                &sub_ben.</b></font>";
        %end;
        %else %do;
            PUT "                &sub_ben.<BR>&currentperiod.</b></font>";
        %end;


        PUT "        </td>";
        PUT "</tr>";


        /*** Sub_head macro variable added C.Rankin 10/25/2001  ***/

        %if &sub_head.=1 %then %do;
           /** 3rd Row ***/
           /** ÛÛ FRAMES SECTION ÛÛ ***/
           %if &prefix=f %then %do;
                PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                /*** If sub-benefits then output sub-benefit columns ***/
                %if &subcols.^=0 %then %do;
                  IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
                  PUT "<td align='center' valign='bottom' colspan=&subcols.><IMG SRC=" IMAGE "
alt='" BENEFIT "' BORDER=0></td>";
                  PUT "<td align='center' valign='bottom' colspan=&qtrs.><IMG
SRC='&imgdir.\composite.gif' ALT='Composite' BORDER=0></td></tr>";
                %end;
                %else %do;
                  PUT "<td align='center' valign='bottom' colspan=&qtrs.><IMG
SRC='&imgdir.\border_rating.gif' ALT='Ratings' BORDER=0></td></tr>";
                %end;
           %end;
           %else %do;
                PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                /*** If sub-benefits then output sub-benefit columns ***/
                %if &subcols.^=0 %then %do;
                  PUT "<td align='center' valign='bottom' colspan=&subcols.><font
face='&fontface.'><b>&sub_ben.<br>components</b></font></td>";
                  PUT "<td align='center' valign='bottom' colspan=&qtrs.><font
face='&fontface.'><b>Composite</b></font></td></tr>";
                %end;
                %else %do;
                  PUT "<td align='center' valign='bottom' colspan=&qtrs.><font
face='&fontface.'><b>Ratings</b></font></td></tr>";
                %end;
           %end;
        %end;


        /*** 4th Row start (column 1) ***/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        %if &prefix=f %then %do;
          PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
          PUT "<td align='center' valign='bottom'><img src='&imgdir.\blank_120_50.gif'
border=0></td>";
        %end;
        %else %do;
```

```
        PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
        PUT "<td width='10%'>&htmlsp.</td>";
      %end;



        /*-----------------------*/
        /* 2000/11: begin xls code */
        /*-----------------------*/
        %if &outxls.=1 %then %do;
          FILE XLSTITLE;
          PUT "&major. &comma. &sub_regs.";
          PUT "%cmpres('&sub_ben.')";
        %end;
        /*-----------------------*/
        /* 2000/11: begin xls code */
        /*-----------------------*/
  END;

  FILE "&FILEOUT1." MOD ;                    /* 2000/11: refer back to htm file */
  /*** Print out column headings ***/

      HREF=COMPRESS("..\html\help.htm#q&var3.");
      HREF1=COMPRESS("..\html\help.htm#trend");   /*7-29-2002 DKB ADDED LINK FOR TREND SECTION OF
HELP FILE*/



  /*** 4th Row (columns 2+) ***/
  /*** If quarter column then HREF link is different ****/
  /*** ÛÛ FRAMES SECTION ÛÛ ***/
  %if &prefix=f %then %do;
      IF _N_>&subcols. THEN IMAGE=COMPRESS("&imgdir.\col"||_N_-&subcols.||".gif");
*DKB CHANGED IMAGE NAME FROM QTR TO COL;
      ELSE IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");

      /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE */   ***MJS 07/03/03 Changed
BENTYPE to TIMEPD;
      IF TIMEPD NE "Est. Quarterly Rate of Change" THEN PUT "<td align='center' valign='bottom'><a
href=""" HREF +(-1) """ &target.><IMG SRC='" IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
      ELSE PUT "<td align='center' valign='bottom'><a href=""" HREF1 +(-1) """ &target.><IMG
SRC='" IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
  %end;
  %else %do;
      /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE */   ***MJS 07/03/03 Changed
BENTYPE to TIMEPD;
      IF TIMEPD NE "Est. Quarterly Rate of Change" THEN PUT "<td width='10%' align='center'
valign='bottom'><font face='&fontface.' size='1'><a href=""" HREF +(-1) """ &target.>" &HEADVAR.
"</a></font><
      ELSE PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF1 +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
  %end;


  IF EOF THEN DO;
    PUT "</font></tr>";
    /***  2-2 MAB removed scale row ***/
  END;

RUN;
%end;

/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*** Added MAB 11-20-2000 ***/
/*** If Sub-benefit then do differently ***/
/*** If separate page (SEPPAGE=1) then create 1st of 2 HTML files ***/
/*** 1 for data without qtrly info and 1 for just qtrly info ***/
%else %if &seppage.=1 %then %do;

/*** 8-7-2003 Mark Brinkley ***/
DATA HTML2;
  SET HTML;
```

```
  IF TIMEPD="&currentperiod.";
RUN;

/*** Remove qtrs from column counts ***/
%let columns=%EVAL(&columns.-&qtrs.);

/*** Do sub-benefit page without any qtrly info ***/
DATA _NULL_;
  SET HTML2 END=EOF;


  /*** Since spliting up table need to delete some records ***/
  /*** Modified 2-2 MAB to deal with new period values **/
  IF BENTYPE="Composite" THEN DELETE; ***DKB ADDED TREND 4/30/2002***;
                                      ***MJS 07/03/03 Changed from BENTYPE IN any period and Est.
Quarterly Rate of Change;

  FILE "&FILEOUT1." MOD ;

  COLUMNS=&columns.;
  SPAN2=ROUND(COLUMNS/2,1);
  SPAN1=COLUMNS-SPAN2;


  IF _N_=1 THEN DO;

        FILE "&FILEOUT1." MOD ;    /* 2000/11: moved inside if stmt */


        /** MF Changes ROW 1 **/
        PUT "<center><table border='&border.' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
width='&width2.'>";
        PUT "<tr bgcolor='white'>";
        PUT "    <td colspan=""" SPAN1 +(-1) """ valign='top' bgcolor='#999999'><img border='0'
height='25' width='242' src=&logo.></td>";
        PUT "    <td colspan=""" SPAN2 +(-1) """ align='right' valign='bottom'
bgcolor='#999999'>";
        PUT "          <div align='right'>";
        /** RSG - 09/02/03 Second set of trend pages need to refer to var4=0 pages **/
        PUT "            <a href='..\html\&prefix.&var1.-&var2.-&var3.-0&unq..htm' &target.><img
src='&imgdir.\&click_image.' alt='&click_alt.' border=0></a>&htmlsp.";
        PUT "            <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. ";

                /*** 4-17 MAB added JS code to go back ***/
        PUT "&goback.";
        PUT "            <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
        PUT "            &htmlsp. ";
        PUT "            <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
        PUT "    </td>";
        PUT "</tr>";

        /** MF Changes ROW 2 **/
        /** Modified 2-2 MAB to better align title **/
        PUT "<tr>";
        PUT "        <td valign='center' align='center' colspan=""" COLUMNS +(-1) """
bgcolor='#D8D8D8'>";
        PUT "            <font face='&fontface.' color='#3333cc' size='5'><b>&major. &comma.
&sub_regs. <br>";


        PUT "            &sub_ben.<BR>&currentperiod.</b></font>";


        PUT "        </td>";
        PUT "</tr>";

        /*** Sub_head macro variable added C.Rankin 10/25/2001  ***/

        %if &sub_head.=1 %then %do;
```

```
            /*** 3rd Row ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            %if &prefix=f %then %do;
                PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
                PUT "<td align='center' valign='bottom' colspan=&subcols.><IMG SRC=" IMAGE "
alt='" BENEFIT "' BORDER=0></td>";
            %end;
            %else %do;
                PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                PUT "<td align='center' valign='bottom' colspan=&subcols.><font
face='&fontface.'><b>&sub_ben.<br>components</b></font></td>";
            %end;
        %end;

        /*** 4th Row start (column 1) ***/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        %if &prefix=f %then %do;
          PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
          PUT "<td align='center' valign='bottom'><img src='&imgdir.\blank_130_50.gif'
border=0></td>";
        %end;
        %else %do;
          PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
          PUT "<td width='10%'>&htmlsp.</td>";
        %end;


  qnum=1; /**RSG 08/07/03 Added as counter to use to for link to the trend pages**/

        /*------------------------*/
        /* 2000/11: begin xls code */
        /*------------------------*/
        %if &outxls.=1 %then %do;
          FILE XLSTITLE;
          PUT "&major. &comma. &sub_regs.";
          PUT "%cmpres('&sub_ben.')";
        %end;
        /*------------------------*/
        /* 2000/11: begin xls code */
        /*------------------------*/
  END;

  FILE "&FILEOUT1." MOD ;                 /* 2000/11: refer back to htm file */
  /*** Print out column headings ***/

  /*HREF=COMPRESS("help.htm#q&var3.");   */

  HREF=COMPRESS("..\html\&prefix.&var1.-&var2.-&var3.-"||qnum||"&unq..htm");
    *** RSG 08/07/03 Use qnum counter to refer to subbenefit trend pages;

***************************************;
  /*** 4th Row (columns 2+) ***/
  /*** If quarter column then HREF link is different ****/
  /*** ÛÛ FRAMES SECTION ÛÛ ***/
  %if &prefix=f %then %do;
     /* MER 05/14/2010 Fix no longer needed */
     /*%if &var3 = 1 or &var3 = 3  %then %do;
    IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||"_trans.gif");
     %end;
     %else %if &var3 = 11 %then %do;
        IF _N_ < 3 THEN IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||"_trans.gif");
        ELSE IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");
     %end;
     %else %do;
    IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");
     %end;*/
     IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");
     PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='"
IMAGE "' alt='" BENTYPE "' BORDER=0></a></td>";
  %end;
  %else %do;
```

```
      /* MER 05/14/2010 Fix no longer needed */
      /*%if &var3 = 1 or &var3 = 3 %then %do;
         PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "<b>#</b></a></font></td>";
      %end;
      %else %if &var3 = 11 %then %do;
         IF _N_ < 3 THEN PUT "<td width='10%' align='center' valign='bottom'><font
face='&fontface.' size='1'><a href=""" HREF +(-1) """ &target.>" &HEADVAR.
"<b>#</b></a></font></td>";
         ELSE PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.'
size='1'><a href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
      %end;
      %else %do;
         PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
      %end;*/
      PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
  %end;

  qnum+1; *** RSG 08/07/03 Added to increase the counter;

  IF EOF THEN DO;
    PUT "</font></tr>";
    /***  2-2 MAB removed scale row ***/
  END;


RUN;
%end;

/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*** If separate page (SEPPAGE=2) then create 2nd of 2 HTML files ***/
/*** 1 for data without qtrly info and 1 for just qtrly info ***/
%else %if &seppage.=2 %then %do;


/*** Keep only qtrs in column counts ***/
/**DKB CHANGED FROM +1 to +3 on 4/29/2002 ***/
%let columns=%EVAL(&qtrs.+2);  /** MAB changed to 2   6-19-2002 **/


/*** Then do sub-benefit page with just qtrly info ***/
DATA JUSTQTR;
  SET HTML;
  /*** Since spliting up table need to delete some records ***/
  /*** Modified 2-2 MAB to deal with new period values **/

  *  IF BENTYPE="Composite";   ***DKB ADDED TREND on 4/29/2002 to account for trend col;
  %if &var4. = 0 %then %do;  **RSG ADDED TREND FOR BENTYPES on 8/7/2003 - select
                                   records appropriate for bentype;
      IF BENTYPE="Composite";
  %end;
  %else %if &var4. ne 0 and BENTYPE ne "Composite" %then %do;
      %if &var3. = 1 %then %do;
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Getting to See a Specialist";
          %end;
          %else %if &var4. = 2 %then %do;
              IF BENTYPE = "Getting Treatment";
          %end;
      %end;
      %else %if &var3. = 2 %then %do;
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Wait for Routine Visit";
          %end;
          %else %if &var4. = 2 %then %do;
              IF BENTYPE = "Wait for Urgent Care";
          %end;
      %end;
      %else %if &var3. = 3 %then %do;
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Listens Carefully";
```

```
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Explains so You Can Understand";
            %end;
            %else %if &var4. = 3 %then %do;
                IF BENTYPE = "Shows Respect";
            %end;
            %else %if &var4. = 4 %then %do;
                IF BENTYPE = "Spends Time with You";
            %end;
        %end;
        %else %if &var3. = 4 %then %do;
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Getting Information";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Courteous Customer Service";
            %end;
        %end;
        %else %if &var3. = 5 %then %do;
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Claims Handled in a Reasonable Time";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Claims Handled Correctly";
            %end;
        %end;
        %else %if &var3. = 10 %then %do;
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Mammography";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Pap Smear";
            %end;
            %else %if &var4. = 3 %then %do;
                IF BENTYPE = "Hypertension";
            %end;
            %else %if &var4. = 4 %then %do;
                IF BENTYPE = "Prenatal Care";
            %end;
        %end;
        %else %if &var3. = 11 %then %do;    /*** MAB Added 2/11/2005 ***/
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Non-Smoking Rate";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Counselled To Quit";
            %end;
                        %else %if &var4. = 3 %then %do;
                            IF BENTYPE = "Percent Not Obese";
                        %end;
        %end;
        call symput('sub2_ben',BENTYPE); **create macro var to use in sub-benefit
                                    trend pages (below) - RSG 08/07/03;
    %end;


RUN;                        ***MJS 07/03/03 Changed from BENTYPE IN any period and Est. Quarterly
Rate of Change;

DATA _NULL_;
  SET JUSTQTR END=EOF;
  *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/

  FILE "&FILEOUT1." MOD ;

  COLUMNS=&columns.;
  SPAN2=ROUND(COLUMNS/2,1);
  SPAN1=COLUMNS-SPAN2;

  IF _N_=1 THEN DO;

        FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */
```

```
        /** MF Changes ROW 1 **/
        PUT "<center><table border='&border.' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
width='&width2.'>";
        PUT "<tr bgcolor='white'>";
        PUT "    <td colspan=""" SPAN1 +(-1) """ valign='top' bgcolor='#999999'><img border='0'
height='25' width='242' src=&logo.></td>";
        PUT "    <td colspan=""" SPAN2 +(-1) """ align='right' valign='bottom'
bgcolor='#999999'>";
        PUT "            <div align='right'>";
        PUT "            <a href='..\html\&prefix.&var1.-&var2.-&var3.-0&unq..htm' &target.><img
src='&imgdir.\&click_image.' alt='&click_alt.' border=0></a>&htmlsp.";
        PUT "            <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";

        /*** 4-17 MAB added JS code to go back ***/
        PUT "&goback.";

        PUT "            <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
        PUT "            &htmlsp.";
        PUT "            <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
        PUT "    </td>";
        PUT "</tr>";

        /** MF Changes ROW 2 **/
        /** Modified 2-2 MAB to better align title **/
        PUT "<tr>";
        PUT "        <td valign='center' align='center' colspan=""" COLUMNS +(-1) """
bgcolor='#D8D8D8'>";
        PUT "            <font face='&fontface.' color='#3333cc' size='5'><b>&major. &comma.
&sub_regs. <br>";

        /*** Since trend data don't display reference period ***/
        PUT "            &sub_ben.</b></font><br>";
        /*** For trend data for each benefit type, display benefit type - RSG 08/07/03***/
        %if &var4. ne 0 %then %do;
        PUT "            <font face='&fontface.' color='#3333cc' size='4'><b>";
        PUT "            &sub2_ben.</b></font>";
        %end;
        PUT "        </td>";
        PUT "</tr>";


        /*** 3rd Row ***/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        /**PUT "<td></td>"**/


        /*** 4th Row start (column 1) ***/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        %if &prefix=f %then %do;
          PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
          PUT "<td align='center' valign='bottom'><img src='&imgdir.\blank_130_50.gif'
border=0></td>";
        %end;
        %else %do;
          PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
          PUT "<td width='10%'>&htmlsp.</td>";
        %end;


        /*------------------------*/
        /* 2000/11: begin xls code */
        /*------------------------*/
        %if &outxls.=1 %then %do;
          FILE XLSTITLE;
          PUT "&major. &comma. &sub_regs.";
          %if &var4. = 0 %then %do;
           PUT "%cmpres('&sub_ben.')";
```

```
            %end;
            %else %do;
             PUT "%CMPRES('&sub_ben. &comma. &sub2_ben.')";
            %end;
         %end;
        /*-----------------------*/
        /* 2000/11: begin xls code */
        /*-----------------------*/
   END;

   FILE "&FILEOUT1." MOD ;                    /* 2000/11: refer back to htm file */
   /*** Print out column headings ***/


      LENGTH HREFf1 $250;
      LENGTH HREFf2 $250;
      LENGTH HREFf3 $250;
      LENGTH HREFf4 $250;

      LENGTH HREFp1 $250;
      LENGTH HREFp2 $250;
      LENGTH HREFp3 $250;
      LENGTH HREFp4 $250;

      LENGTH HREF5  $250;


      ****7-29-2002 DKB ADDED LINKS TO COMPONENT PAGES OF PREVIOUS QUARTERS FROM TREND PAGE****;
      *********************THIS WILL NEED TO BE UPDATED EACH QUARTER********************;
      ***FRAMES***;
      HREFf1=COMPRESS("..\Period1\f&var1.-&var2.-&var3.-0.htm");
      HREFf2=COMPRESS("..\Period2\f&var1.-&var2.-&var3.-0.htm");
      HREFf3=COMPRESS("..\Period3\f&var1.-&var2.-&var3.-0.htm");
      HREFf4=COMPRESS("f&var1.-&var2.-&var3.-0.htm");

      ***NO FRAMES***;
      HREFp1=COMPRESS("..\Period1\p&var1.-&var2.-&var3.-0.htm");
      HREFp2=COMPRESS("..\Period2\p&var1.-&var2.-&var3.-0.htm");
      HREFp3=COMPRESS("..\Period3\p&var1.-&var2.-&var3.-0.htm");
      HREFp4=COMPRESS("p&var1.-&var2.-&var3.-0.htm");

      ****HELP FILE FOR TREND COLUMN***;
      HREF5=COMPRESS("..\html\help.htm#trend");    /*7-29-2002 DKB ADDED LINK FOR TREND SECTION
OF HELP FILE*/

   ****************************************************;

      /* MER 05/09/2009 Temporary fix for V4 transition
         No Customer Service composite for April and July, 2008 */
      /* MER 08/06/2009 Modified for Q3FY2009 to handle July, 2008 only */
      /* MER 10/24/2009 Fix no longer needed */
      /*%if &var3.=4 %then %do;
         HREFf1=HREF5;
         HREFf2=HREF5;
         HREFp1=HREF5;
         HREFp2=HREF5;
      %end;*/

   /*** 4th Row (columns 2+) ***/
   /*** If quarter column then HREF link is different ****/
   /*** ÛÛ FRAMES SECTION ÛÛ ***/

      *LENGTH HREF $250;

   %if &prefix=f %then %do;
     /* MER 10/24/2009 Fix no longer needed */
     /*%if &var3.=4 and &seppage.=2 %then %do;
       IF TIMEPD = "April, 2008" OR TIMEPD = "July, 2008" THEN DO;
          IMAGE=COMPRESS("&imgdir.\col"||_N_||"_R.gif");
       END;
       ELSE DO;
          IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");
       END;
```

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```
    %end;*/
    /* MER 05/14/2010 Fix no longer needed */
    /*%if &var3.=1 or &var3.=3 %then %do;
        IF TIMEPD = "Est. Quarterly Rate of Change" THEN DO;
          IMAGE=COMPRESS("&imgdir.\col"||_N_||"_trans.gif");
        END;
        ELSE DO;
          IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");
        END;
    %end;
    %else %do;
        IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");  *DKB CHANGED IMAGE NAME FROM QTR TO COL;
    %end;*/
    IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");  *DKB CHANGED IMAGE NAME FROM QTR TO COL;

    IF _N_=1 THEN HREF=HREFf1;
    ELSE IF _N_=2 THEN HREF=HREFf2;
    ELSE IF _N_=3 THEN HREF=HREFf3;
    ELSE IF _N_=4 THEN HREF=HREFf4;
    ELSE IF _N_=5 THEN HREF=HREF5;
      if timepd ne "Est. Quarterly Rate of Change*" then
        PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='"
IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
      else do;
        IMAGE=COMPRESS("&imgdir.\col"||_N_||"_R.gif");
        PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='"
IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
      end;
  %end;
  %else %do;
    IF _N_=1 THEN HREF=HREFp1;
    ELSE IF _N_=2 THEN HREF=HREFp2;
    ELSE IF _N_=3 THEN HREF=HREFp3;
    ELSE IF _N_=4 THEN HREF=HREFp4;
    ELSE IF _N_=5 THEN HREF=HREF5;

    /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE*/

    /* MER 10/24/09 Fix no longer needed */
    /*%if &var3.=4 and &seppage.=2 %then %do;
        IF TIMEPD = "April, 2008" OR TIMEPD = "July, 2008" THEN DO;
          PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "<b>*</b></a></font></td>";
        END;
        ELSE DO;
          PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
        END;
    %end;*/
    /* MER 05/14/2010 Fix no longer needed */
    /*%if &var3.=1 or &var3.=3 %then %do;
        IF TIMEPD = "Est. Quarterly Rate of Change" THEN DO;
          PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "<b>#</b></a></font></td>";
        END;
        ELSE DO;
          PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
        END;
    %end;
    %else %do;
        PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
    %end;*/
    PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
%end;


  IF EOF THEN DO;
    PUT "</font></tr>";
    /*** 2-2 MAB removed scale row ***/
  END;
```

```
RUN;

%end;

/*** ÛÛ FRAMES SECTION ÛÛ ***/
%if &prefix=f %then %do;
  /*** Close out header HTML page ***/
  DATA _NULL_;
    FILE "&FILEOUT1." MOD;

    PUT "</center></table>";
    PUT "</body></html>";
  RUN;


  /*** Since done making frame 1 page then assign fileout1 = frame 2 ***/
  %let fileout1=&fileout3.;

  /*** Initialize out data HTML page ***/
  DATA _NULL_;
    FILE "&FILEOUT3.";

    PUT "<! Created &datetime.>";
    PUT "<html>";
    PUT "<body bgcolor='#999999' text='#000099' link='#660066' alink='#660066' vlink='#996699'>";
    PUT "<center><table border='1' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
cols=&columns. width=640>";
  RUN;




%end;




/**********************************/
/****  Put out rest of table      ****/
/****  Colored scores and Stub    ****/
/**********************************/
%if &seppage.=0 OR &var3.=6 OR &var3.=7 OR &var3.=8 OR &var3.=9 %then %do;
                             ***MER 4/21/09 Changed 7/8/9/10 to 6/7/8/9;
DATA HTML3;
  SET SUBSET4;
RUN;
%end;
%else %if &seppage.=1 %then %do;
DATA HTML3;
  SET SUBSET4;

  /*** 8-7-2003 Mark Brinkley ***/
  IF TIMEPD="&currentperiod.";

  /*** Since splitting up table need to delete some records ***/
  /*** Modified 2-2 MAB to deal with new period values **/
  IF BENTYPE="Composite" THEN DELETE;   ***DKB ADDED TREND 5/2/2002***;
RUN;                                    ***MJS 07/03/03 Changed from BENTYPE IN any period and
Est. Quarterly Rate of Change;
%end;
%else %if &seppage.=2 %then %do;

DATA HTML3;
  SET SUBSET4;
  /*** Since splitting up table need to delete some records ***/
  /*** Modified 2-2 MAB to deal with new period values **/
*  IF BENTYPE="Composite";   ***DKB ADDED TREND 5/2/2002***;

  *** RSG ADDED VAR4 CONDITIONS FOR SUB-BENEFIT TREND PAGES 08/07/03;
  %if &var4. = 0 %then %do;
       IF BENTYPE="Composite";
  %end;
```

```
%else %if &var4. ne 0 and BENTYPE ne "Composite" %then %do;
      %if &var3. = 1 %then %do;
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Getting to See a Specialist";
          %end;
          %else %if &var4. = 2 %then %do;
              IF BENTYPE = "Getting Treatment";
          %end;
      %end;
      %else %if &var3. = 2 %then %do;
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Wait for Routine Visit";
          %end;
          %else %if &var4. = 2 %then %do;
              IF BENTYPE = "Wait for Urgent Care";
          %end;
      %end;
      %else %if &var3. = 3 %then %do;
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Listens Carefully";
          %end;
          %else %if &var4. = 2 %then %do;
              IF BENTYPE = "Explains so You Can Understand";
          %end;
          %else %if &var4. = 3 %then %do;
              IF BENTYPE = "Shows Respect";
          %end;
          %else %if &var4. = 4 %then %do;
              IF BENTYPE = "Spends Time with You";
          %end;
      %end;
      %else %if &var3. = 4 %then %do;
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Getting Information";
          %end;
          %else %if &var4. = 2 %then %do;
              IF BENTYPE = "Courteous Customer Service";
          %end;
      %end;
      %else %if &var3. = 5 %then %do;
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Claims Handled in a Reasonable Time";
          %end;
          %else %if &var4. = 2 %then %do;
              IF BENTYPE = "Claims Handled Correctly";
          %end;
      %end;
      %else %if &var3. = 10 %then %do;
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Mammography";
          %end;
          %else %if &var4. = 2 %then %do;
              IF BENTYPE = "Pap Smear";
          %end;
          %else %if &var4. = 3 %then %do;
              IF BENTYPE = "Hypertension";
          %end;
          %else %if &var4. = 4 %then %do;
              IF BENTYPE = "Prenatal Care";
          %end;
      %end;
      %else %if &var3. = 11 %then %do;    /*** MAB Added 2/11/2005 ***/
          %if &var4. = 1 %then %do;
              IF BENTYPE = "Non-Smoking Rate";
          %end;
          %else %if &var4. = 2 %then %do;
              IF BENTYPE = "Counselled To Quit";
          %end;
          %else %if &var4. = 3 %then %do;
              IF BENTYPE = "Percent Not Obese";
          %end;
      %end;
%end;
```

```
RUN;                            ***MJS 07/03/03 Changed from BENTYPE IN any period and Est. Quarterly
Rate of Change;
%end;


/*ÛÛÛÛ ALL MAJGRPS ÛÛÛÛ*/
%if &var1.=0 %then %do;

DATA HTML4;
  SET HTML3 END=EOF;
  *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/


  IF MAJGRP="Prime Enrollees" THEN MAJNUM=1;
  IF MAJGRP="Enrollees with Military PCM"  THEN MAJNUM=2;
  IF MAJGRP="Enrollees with Civilian PCM" THEN MAJNUM=3;
  IF MAJGRP="Standard/Extra Users" THEN MAJNUM=4;   ***JSO 10/31/07  Added Civilian PCM;
  IF MAJGRP="Purchased Care Users" THEN MAJNUM=5;   ***JSO 07/28/08  Purchased Care Users;
  IF MAJGRP="Active Duty" THEN MAJNUM=6;            ***(MAJNUM=3), and changed 3-7 bacl to 4-8;
  IF MAJGRP="Active Duty Dependents" THEN MAJNUM=7;
  IF MAJGRP="Retirees and Dependents" THEN MAJNUM=8;
  IF MAJGRP="All Users" THEN MAJNUM=9;


  /*** HREF link to another page ***/
/*  HREF=COMPRESS("..\html\&prefix."||MAJNUM||"-0-&var3.-&var4.&q..htm");
    RSG 02/2005 - changed for period1-3, link goes to that period component page*/
    HREF=COMPRESS("&prefix."||MAJNUM||"-0-&var3.-&var4.&q..htm");
  /*** MAB 7-12-2001 updated to reference trend page if needed ***/


  /**RSG 02/2005 - CONUS TREATED AS REGION, COMMENT OUT CODE**/
  /*%if &var2.^=17 and &var2.^=18 and &var2.^=19 and &var2.^=20 %then %do;
    IF SUBSTR(REGION,1,3)="USA" THEN DELETE;
  %end;*/


  LENGTH HREFQ LMAJGRP $ 100;   /*MJS 02/11/04*/
  RETAIN LMAJGRP;

  IF _N_=1 THEN DO;
    LMAJGRP=" ";
    ROW=0;


    /*** Add links to trend data 7.6.2001 MAB ***/
    %let columns_less1=%EVAL(&columns.-1);
    %if &seppage.=0 %then %do;
        FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */
        PUT "<tr bgcolor= &gray.><td width='" WIDTH_COL1 "'><font face='&fontface.'
size='2'><b>Trends</b></font></td>";
        /**RSG 02/2005 Comment out next line because total score is removed **/
/*      PUT "<td width='" WIDTH3 "'>&htmlsp.</td>";            */

        %do i=1 %to 11;   ***MER 04/21/09 Changed 12 to 11 for 11 Benefits;
            %if &i.^=6 AND &i.^=7 AND &i.^=8 AND &i.^=9 %then %do;   ***MER 04/21/09 Changed
7,8,9,10 to 6,7,8,9;
                HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0q.htm");  /*** href to 2nd
html file ***/
            %end;
            %else %do;
                HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0.htm");  /*** href to 2nd
html file ***/
            %end;

            PUT "<td width='" WIDTH3 "'><a href='" HREFQ "' &target.><CENTER><img
src='&imgdir.\trend_row.gif' border=0></CENTER></a></td>";
        %end;
        PUT "</tr>";
    %end;

  END;
```

```
   IF LMAJGRP^=MAJGRP THEN DO;                  /*** Start new row ***/
         FILE "&FILEOUT1." MOD ;    /* 2000/11: moved inside if stmt */
         ROW+1;
         IF LMAJGRP^=" " THEN PUT "</tr>";   /*** terminate previous row ***/


         /*** Column 1 / Row 1 ***/
         /*** ÛÛ FRAMES SECTION ÛÛ ***/
         %if &prefix=f %then %do;
             IF MAJGRP IN("Benchmark") THEN PUT "<tr><td width='" WIDTH_COL1 "'><b><font
face='&fontface.' size='2'>" MAJGRP "</font></b></td>";     /*** no HREF links ***/
         %end;
         %else %do;
             IF MAJGRP IN("Benchmark") THEN PUT "<tr><td><b><font face='&fontface.' size='2'>"
MAJGRP "</font></b></td>";                          /*** no HREF links ***/
         %end;

         /*** Column 1 / Row 2+ ***/

         ELSE IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'><a href=""" HREF +(-1) """ &target.> " MAJGRP " </a></font></td>";   /** Shade row **/
         ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href=""" HREF +(-1) """ &target.> "
MAJGRP " </a></font></td>";


         /*------------------------*/
         /* 2000/11: begin xls code */
         /*------------------------*/
          %if &outxls.=1 %then %do;
            FILE XLSDATA;
            IF LMAJGRP^=" " THEN          PUT " ";
            IF REGION IN("Benchmark") THEN PUT REGION '09'x @@;   /* '09'x ensures text string is
put into one cell */
            ELSE IF MOD(ROW,2)=0 THEN      PUT MAJGRP '09'x @@;   /* rather than spanning across
cells          */
            ELSE                           PUT MAJGRP '09'x @@;
         %end;
         /*------------------------*/
         /* 2000/11: end xls code   */
         /*------------------------*/

         LMAJGRP=MAJGRP;
   END;


   /*** Column 2+ ***/
   /*******************************************/
   /**** Need to output different formats    ****/
   /*******************************************/
   FILE "&FILEOUT1." MOD ;                   /* 2000/11: refer back to htm file */


   IF MAJGRP IN("Benchmark") THEN DO;
         IF SCORE=. THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
         ELSE IF SCORE=.A THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
         ELSE PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
   END;
   ELSE DO;
     IF SCORE=. THEN DO;
         PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
     END;
     ELSE IF SCORE=.A THEN DO;
         PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
     END;
     ELSE DO;
```

```
        IF SIG=1 THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'
color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
        ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE 3.0
"<!CODE= " +(-1) ORDER Z5.  "></font></td>";
    END;
  END;




  /*------------------------*/
  /* 2000/11: begin xls code */
  /*------------------------*/
  %if &outxls.=1 %then %do;
    FILE XLSDATA;
    IF MAJGRP IN("Benchmark") THEN DO;   /** Replaced 1-22 mab **/
        IF SCORE=. THEN        PUT "***" '09'x @@;
        ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
        ELSE                   PUT SCORE 3.0 '09'x @@;
    END;
    ELSE DO;
      IF SCORE=. THEN DO;
        PUT "***" '09'x @@;
      END;
      ELSE IF SCORE=.A THEN DO;
        PUT "NA" '09'x @@;
      END;
      ELSE DO;
        IF SIG=1 THEN        PUT SCORE 3.0 '09'x @@;
        ELSE IF SIG=. THEN   PUT "***" '09'x @@;
        ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
        ELSE IF SIG=-1 THEN PUT SCORE 3.0 '09'x @@;
        ELSE                PUT SCORE 3.0 '09'x @@;
      END;
    END;
  %end;
  /*------------------------*/
  /* 2000/11: end xls code   */
  /*------------------------*/

  IF EOF THEN DO;
    FILE "&FILEOUT1." MOD ;                         /* 2000/11: to refer back to htm file */
    PUT "</tr>";  /*** terminate last row ***/

    %BOTTOM_NOTES;  /** Macro with bottom notes **/


    /*------------------------*/
    /* 2000/11: begin xls code */
    /*------------------------*/

    %BOTTOM_NOTES_XLS;  /** Macro with bottom notes for XLS **/

    /*------------------------*/
    /* 2000/11: end xls code   */
    /*------------------------*/

  END;
RUN;
%end;




/*ÛÛÛÛ All Regions ÛÛÛÛ*/
%if &var2.=0 %then %do;
```

```
DATA HTML4;
  SET HTML3 END=EOF;
  *LENGTH HREF $ 250;    /*MJS 01/29/04 Commented out statement*/

  LENGTH LREGION HREFQ $ 100;    /*MJS 02/11/04*/
  RETAIN LREGION;

  IF _N_=1 THEN DO;
     LREGION=" ";
     REGNUM=1;
     ROW=0;


    /*** Add links to trend data 7.6.2001 MAB ***/
    %let columns_less1=%EVAL(&columns.-1);
    %if &seppage.=0 %then %do;
         FILE "&FILEOUT1." MOD ;    /* 2000/11: moved inside if stmt */
         PUT "<tr bgcolor= &gray.><td width='" WIDTH_COL1 "'><font face='&fontface.'
size='2'><b>Trends</b></font></td>";
         /**RSG 02/2005 Commented out next line because no longer have TOTAL score**/
/*          PUT "<td width='" WIDTH3 "'>&htmlsp.</td>";              */

          %do i=1 %to 11;    ***MER 04/21/09 changed 12 to 11 since we now have 11 benefits;
             %if &i.^=6 AND &i.^=7 AND &i.^=8 AND &i.^=9 %then %do;    ***MER 04/21/09 Changed
from 7,8,9,10 to 6,7,8,9;
                 HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0q.htm");  /*** href to 2nd
html file ***/
             %end;
             %else %do;
                 HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0.htm");  /*** href to 2nd
html file ***/
             %end;

             PUT "<td width='" WIDTH3 "'><a href='" HREFQ "' &target.><CENTER><img
src='&imgdir.\trend_row.gif' border=0></CENTER></a></td>";
          %end;
          PUT "</tr>";
    %end;


END;


  IF LREGION^=REGION THEN DO;               /*** Start new row ***/
       FILE "&FILEOUT1." MOD ;    /* 2000/11: moved inside if stmt */
       ROW+1;
       IF LREGION^=" " THEN PUT "</tr>";  /*** terminate previous row ***/


       /*-------------------------*/
       /* 2000/11: begin xls code */
       /*-------------------------*/
       %if &outxls.=1 %then %do;
         FILE XLSDATA;
         IF LREGION^=" " THEN PUT " ";           /*** terminate previous row ***/
         FILE "&FILEOUT1." MOD ;                 /* 2000/11: to refer back to htm file */
       %end;
       /*-------------------------*/
       /* 2000/11: end xls code   */
       /*-------------------------*/


       /*** Column 1 / Row 1 ***/
       /*** ÛÛ FRAMES SECTION ÛÛ ***/
       %if &prefix=f %then %do;
          IF REGION IN("Benchmark") THEN PUT "<tr><td width='" WIDTH_COL1 "'><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";  /*** no HREF links ***/
       %end;
       %else %do;
          IF REGION IN("Benchmark") THEN PUT "<tr><td><b><font face='&fontface.' size='2'>"
REGCAT "</font></b></td>";  /*** no HREF links ***/
       %end;
       ELSE DO;    /*** HREF links for each region ***/
```

```
         /*HREF=COMPRESS("..\html\&prefix.0-"||REGNUM||"-&var3.-&var4.&q..htm");
           RSG 02/2005 - Changed link so period1-3 will link to appropriate component page*/
           HREF=COMPRESS("&prefix.0-"||REGNUM||"-&var3.-&var4.&q..htm");

         /*** MAB 7-12-2001 updated to reference trend page if needed ***/



         /*** Certain major groups are not large enough to show ***/
         /*** catchment level detail. so don't add HREF link here  ***/
         /*** Remove since qtrs not going down to catchment level ***/
         /**%if &var1.=3 or &var1.=5 or &var1.=6  %then %do;    ***MJS 05/04/03 Removed Civilian
PCM (&var1.=3), and changed 4,6,7 to 3,5,6;
           IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font  face='&fontface.' size='2'>
" REGCAT " </font></td>";     Shade row
           ELSE PUT "<tr><td><font  face='&fontface.' size='2'> " REGCAT " </font></td>";
           %end;
           %else %do;
           IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font  face='&fontface.'
size='2'><a href=""" HREF +(-1) """> " REGCAT " </a></font></td>";    Shade row
           ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href=""" HREF +(-1) """> "
REGCAT " </a></font></td>";
           %end;**/

         /*** Column 1 / Row 2+ ***/
         %if &prefix=f %then %do;
            if regcat = "NORTH" or regcat = "SOUTH" or regcat="WEST" or
                regcat = "OVERSEAS" or regcat="US MHS" then do; /* MER 08/27/09 changed to US
MHS */
                IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><b><font face='&fontface.'
size='2'><a href=""" HREF +(-1) """ &target.> " REGCAT " </a></b></font></td>"; /** Shade row **/
                ELSE PUT "<tr><td><b><font face='&fontface.' size='2'><a href=""" HREF +(-1) """
&target.> " REGCAT " </a></b></font></td>";
              end;
              else do;
                IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'><a href=""" HREF +(-1) """ &target.> " REGCAT " </a></font></td>"; /** Shade row **/
                ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href=""" HREF +(-1) """
&target.> " REGCAT " </a></font></td>";
              end;
         %end;
         %else %do;
            if regcat = "NORTH" or regcat = "SOUTH" or regcat="WEST" or
                regcat = "OVERSEAS" or regcat="US MHS" then do; /* MER 08/27/09 changed to US
MHS */
                IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><b><font  face='&fontface.'
size='2'><a href=""" HREF +(-1) """ &target.> " REGCAT " </a></b></font></td>"; /** Shade row **/
                ELSE PUT "<tr><td><b><font face='&fontface.' size='2'><a href=""" HREF +(-1) """
&target.> " REGCAT " </a></b></font></td>";
              end;
              else do;
                IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font  face='&fontface.'
size='2'><a href=""" HREF +(-1) """ &target.> " REGCAT " </a></font></td>"; /** Shade row **/
                ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href=""" HREF +(-1) """
&target.> " REGCAT " </a></font></td>";
              end;
         %end;


         REGNUM+1;

         /**RSG 02/2005 Conus treated as Region, comment out code**/
         /**IF SUBSTR(REGION,1,3) = "USA" THEN DO;
           REGNUM=ORIGNUM;
         END;**/

       END;

       /*------------------------*/
       /* 2000/11: begin xls code */
       /*------------------------*/
```

```
        %if &outxls.=1 %then %do;
           FILE XLSDATA;
           IF REGION IN("Benchmark") THEN  PUT REGCAT '09'x @@;   /* no logic difference */
           ELSE DO;
             IF MOD(ROW,2)=0 THEN          PUT REGCAT '09'x @@;   /* just presentation difference
in htm */
             ELSE                          PUT REGCAT '09'x @@;   /* keeping as is to preserve htm
code structure */
           END;
        %end;
        /*------------------------*/
        /* 2000/11: end xls code   */
        /*------------------------*/

        LREGION=REGION;
    END;


    /*** Column 2+ ***/
    /*******************************************/
    /**** Need to output different formats    ****/
    /*******************************************/
    FILE "&FILEOUT1." MOD ;                  /* 2000/11: refer back to htm file */
    IF REGION IN("Benchmark") THEN DO;      /*** no significance ***/
        IF SCORE=. THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SCORE=.A THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
    END;
    ELSE DO;
      IF SCORE=. THEN DO;
        PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
      END;
      ELSE IF SCORE=.A THEN DO;
        PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
      END;
      ELSE DO;
        IF SIG=1 THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'
color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
        ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE 3.0
"<!CODE= " +(-1) ORDER Z5.  "></font></td>";
      END;
    END;


    /*------------------------*/
    /* 2000/11: begin xls code */
    /*------------------------*/
    %if &outxls.=1 %then %do;
      FILE XLSDATA;
      IF REGION IN("Benchmark") THEN DO;
        IF SCORE=. THEN        PUT "***" '09'x @@;
        ELSE IF SCORE=.A THEN PUT "NA"  '09'x @@;
        ELSE                   PUT SCORE 3.0 '09'x @@;
      END;
      ELSE DO;
        IF SCORE=. THEN DO;
          PUT "***" '09'x @@;
        END;
        ELSE IF SCORE=.A THEN DO;
          PUT "NA" '09'x @@;
        END;
        ELSE DO;
```

```
              IF SIG=1 THEN        PUT SCORE 3.0 '09'x @@;
              ELSE IF SIG=. THEN   PUT "***"  '09'x @@;
              ELSE IF SIG=.A THEN PUT "NA"   '09'x @@;
              ELSE IF SIG=-1 THEN PUT SCORE 3.0 '09'x @@;
              ELSE                PUT SCORE 3.0 '09'x @@;
        END;
      END;
    %end;
    /*-----------------------*/
    /* 2000/11: end xls code   */
    /*-----------------------*/


    IF EOF THEN DO;
        FILE "&FILEOUT1." MOD ;                  /* 2000/11: refer back to htm file */
        PUT "</tr>";  /*** terminate last row ***/


        %BOTTOM_NOTES;  /** Macro with bottom notes **/


        /*-----------------------*/
        /* 2000/11: begin xls code */
        /*-----------------------*/

        %BOTTOM_NOTES_XLS;  /** Macro with bottom notes for XLS **/

        /*-----------------------*/
        /* 2000/11: end xls code   */
        /*-----------------------*/

    END;

RUN;

%end;




/*ÛÛÛÛ Single Regions ÛÛÛÛ*/
/* This code is not applicable for the 2000 report cards */
/*  since not enough data to display sub-region info. */
/*  Will leave in code in case this changes */
%if &var2.^=0 AND &var1.^=0 %then %do;
DATA HTML4;
  SET HTML3 END=EOF;

  LENGTH LREGCAT $ 100 /*HREF $ 250*/;   /*MJS 01/29/04 Commented out HREF statement*/
  RETAIN LREGCAT;                          /*MJS 02/11/04*/

  IF _N_=1 THEN DO;
     LREGCAT=" ";
     ROW=0;
  END;


  IF LREGCAT^=REGCAT THEN DO;                /*** Start new row ***/
        FILE "&FILEOUT1." MOD ;  /* 2000/11: moved inside if stmt */
        ROW+1;
        IF LREGCAT^=" " THEN PUT "</tr>";  /*** terminate previous row ***/
        IF REGCAT IN("Benchmark") THEN PUT "<tr><td><b><font face='&fontface.' size='2'>" REGCAT
"</font></b></td>";
        ELSE IF SUBSTR(REGCAT,1,2) = "US" THEN PUT "<tr bgcolor= &gray.><td><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";
        ELSE IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.' size='2'>"
REGCAT "</font></td>";    /** Shade row **/
        ELSE PUT "<tr><td><font face='&fontface.' size='2'>" REGCAT "</font></td>";


        /*-----------------------*/
```

```
        /* 2000/11: begin xls code */
        /*-----------------------*/
        %if &outxls.=1 %then %do;
          FILE XLSDATA;
          IF LREGCAT^=" " THEN PUT " ";
          IF REGCAT IN("Benchmark") THEN      PUT REGCAT '09'x @@;          /* no logic difference
*/
          ELSE IF SUBSTR(REGCAT,1,2) = "US") THEN PUT REGCAT '09'x @@;
          ELSE IF MOD(ROW,2)=0 THEN            PUT REGCAT '09'x @@;          /* just presentation
difference in htm */
          ELSE                                 PUT REGCAT '09'x @@;          /* keeping as is to
preserve htm code structure */
        %end;
        /*-----------------------*/
        /* 2000/11: end xls code   */
        /*-----------------------*/


        LREGCAT=REGCAT;

    END;




  /*******************************************/
  /**** Need to output different formats    ****/
  /*******************************************/
  FILE "&FILEOUT1." MOD ;               /* 2000/11: refer back to htm file */
  IF REGION IN("Benchmark") THEN DO;     /*** no significance ***/
      IF SCORE=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
      ELSE IF SCORE=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
      ELSE PUT "<td align='center' valign='bottom'><b><font face='&fontface.' color=&blue.
size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
  END;
  ELSE DO;
    IF SCORE=. THEN DO;
      PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
    END;
    ELSE IF SCORE=.A THEN DO;
      PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
    END;
    ELSE DO;
      IF SIG=1 THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'
color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
      ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
      ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
      ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
      ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE 3.0
"<!CODE= " +(-1) ORDER Z5.  "></font></td>";
    END;
  END;

  /*-----------------------*/
  /* 2000/11: begin xls code */
  /*-----------------------*/
  %if &outxls.=1 %then %do;
    FILE XLSDATA;
    IF REGION IN("Benchmark") THEN DO;
        IF SCORE=. THEN        PUT "***" '09'x @@;
        ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
        ELSE                   PUT SCORE 3.0 '09'x @@;
    END;
    ELSE DO;
      IF SCORE=. THEN DO;
        PUT "***" '09'x @@;
      END;
```

```
      ELSE IF SCORE=.A THEN DO;
          PUT "NA" '09'x @@;
      END;
      ELSE DO;
          IF SIG=1 THEN       PUT SCORE 3.0 '09'x @@;
          ELSE IF SIG=. THEN  PUT "***" '09'x @@;
          ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
          ELSE IF SIG=-1 THEN PUT SCORE 3.0 '09'x @@;
          ELSE                PUT SCORE 3.0 '09'x @@;
      END;
    END;
  %end;
  /*------------------------*/
  /* 2000/11: end xls code   */
  /*------------------------*/


  IF EOF THEN DO;
     FILE "&FILEOUT1." MOD ;                 /* 2000/11: refer back to htm file */
     PUT "</tr>";  /*** terminate last row ***/

     %BOTTOM_NOTES;  /** Macro with bottom notes **/


     /*------------------------*/
     /* 2000/11: begin xls code */
     /*------------------------*/

     %BOTTOM_NOTES_XLS;  /** Macro with bottom notes for XLS **/

     /*------------------------*/
     /* 2000/11: end xls code   */
     /*------------------------*/

  END;

RUN;
%end;



/**********************************/
/****  Print out footer info     ****/
/**********************************/
DATA _NULL_;
    FILE "&FILEOUT1." MOD ;
    LENGTH HREF $250;


    /** Determine where back button should link to **/
    %if &var1.=0 %then %do;
       HREFBACK=COMPRESS("&prefix.8-0-0-0.htm");   ***MJS 05/14/03 Changed 8 to 7;
    %end;
    %else %do;
       HREFBACK=COMPRESS("&prefix.&var1.-0-0-0.htm");
    %end;

    /*HERE!*/

    /** MF Changes **/
    PUT "<tr>";
    PUT "    <td colspan='&columns.'>";
    PUT "        <center>";
    PUT "            <a href='..\html\index.htm' &target.><img src=&home_but. border='0' alt='Return
to Main Page'></a>&htmlsp.&htmlsp.";
            /*** 7-17 MAB added JS code to go back ***/
    PUT "&goback.";
    PUT "            <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";

    PUT "            <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a><br>";
    PUT "            <font face='Arial,Helvetica,Swiss,Geneva' size='2'><b>&grpmsg.<br>";
```

```
       PUT "           </b></font>";



    majgrp1=COMPRESS("&prefix.1-&var2.-&var3.-&var4.&q..htm");
    majgrp2=COMPRESS("&prefix.2-&var2.-&var3.-&var4.&q..htm");
    majgrp3=COMPRESS("&prefix.3-&var2.-&var3.-&var4.&q..htm");    ***JSO 10/31/07 Added Civilian
PCM;
    majgrp4=COMPRESS("&prefix.4-&var2.-&var3.-&var4.&q..htm");    ***(majgrp3), and changed 3-7
back to 4-8;
    majgrp5=COMPRESS("&prefix.5-&var2.-&var3.-&var4.&q..htm");    ***JSO 07/28/08 Added Purchased
Care Users;
    majgrp6=COMPRESS("&prefix.6-&var2.-&var3.-&var4.&q..htm");
    majgrp7=COMPRESS("&prefix.7-&var2.-&var3.-&var4.&q..htm");
    majgrp8=COMPRESS("&prefix.8-&var2.-&var3.-&var4.&q..htm");
    majgrp9=COMPRESS("&prefix.9-&var2.-&var3.-&var4.&q..htm");


     /*** Certain major groups are not large enough to show ***/
     /*** catchment level detail. So if we are in html file ***/
     /*** which has this detail then don't link to a html   ***/
     /*** file which doesn't exist                          ***/

    %if &var1.^=0 %then %do;
      %if &var1.^=4 and &var1.^=6 and &var1.^=7 and &var2.^=0 %then %do;   ***JSO 10/31/07 Added
Civilian PCM (&var1.^=3), changed 3,5,6 back to 4,6,7;
                                                                 ***and changed MAJGRP
4&7 below back to 5&8;
         PUT "<a href=""" MAJGRP1 +(-1) """ &target.><font face='&fontface.' size='2'>Prime
Enrollees</font></a>&htmlsp.&htmlsp.";
         PUT "<a href=""" MAJGRP2 +(-1) """ &target.><font face='&fontface.' size='2'>Enrollees
with Military PCM</font></a>&htmlsp.&htmlsp.";
         PUT "<a href=""" MAJGRP6 +(-1) """ &target.><font face='&fontface.' size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
         PUT "<a href=""" MAJGRP9 +(-1) """ &target.><font face='&fontface.' size='2'>All
Users</font></a>";

      %end;
      %else %do;


        PUT "<a href=""" MAJGRP1 +(-1) """ &target.><font face='&fontface.' size='2'>Prime
Enrollees</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP2 +(-1) """ &target.><font face='&fontface.' size='2'>Enrollees
with Military PCM</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP3 +(-1) """ &target.><font face='&fontface.' size='2'>Enrollees
with Civilian PCM</font></a>&htmlsp.&htmlsp.";    ***JSO 10/31/07 Added Civilian PCM;
        PUT "<a href=""" MAJGRP4 +(-1) """ &target.><font face='&fontface.'
size='2'>Standard/Extra Users</font></a>&htmlsp.&htmlsp.";          ***(MAJGRP5), and changed 3-7
back to 4-8;
        PUT "<a href=""" MAJGRP5 +(-1) """ &target.><font face='&fontface.' size='2'>Purchased
Care Users</font></a>&htmlsp.&htmlsp.";          ***JSO 07/28/08 Added Purchased Care Users;
        PUT "<br>";
        PUT "<a href=""" MAJGRP6 +(-1) """ &target.><font face='&fontface.' size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP7 +(-1) """ &target.><font face='&fontface.' size='2'>Active Duty
Dependents</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP8 +(-1) """ &target.><font face='&fontface.' size='2'>Retirees and
Dependents</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP9 +(-1) """ &target.><font face='&fontface.' size='2'>All
Users</font></a>";

      %end;
    %end;

   /*** link to printer friendly version moved C.Rankin 10/25/2001 ***/

   /*** 4-17 MAB added  ***/
   /*** If creating frames need link to printer friendly version of file ***/
   /***DANIELE ADDED BR STATEMENT ON 11/1/01 SO PRINTER ICON WOULD SHOW UP ON SEPARATE LINE ***/
   %if &prefix=f %then %do;
      HREFP=COMPRESS("p&var1.-&var2.-&var3.-&var4.&q..htm");
```

```
      PUT "    <BR><font face='Arial,Helvetica,Swiss,Geneva' size='1'><a href='" HREFP "'
&target.><img src='&imgdir.\printer.gif' alt='Printer Friendly Page' border=0>Printer Friendly
Page</a></font>
   %end;



RUN;


/*** Close HTML page ***/
DATA _NULL_;
  FILE "&FILEOUT1." MOD ;

  PUT "</center></td></tr></table>";
  PUT "</body></html>";

RUN;



/*------------------------------*/
/* 2000/12: begin xls color code */
/*------------------------------*/
%if &outxls.=1 %then %do;

  /* Align 2 titles */
  DATA _NULL_;
     FILE SAS2XL;
     CELL=COMPRESS("[SELECT(""R1C1:R1C"||&columns.||""")]"); PUT CELL;
     PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
     CELL=COMPRESS("[SELECT(""R2C1:R2C"||&columns.||""")]"); PUT CELL;
     PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
  RUN;

  DATA _NULL_;
    FILE SAS2XL;
    SET HTML4(DROP=ROW) END=EOF;

    RETAIN ROW COLUMN;


    /*** Need to initialize row and column pointers ***/
    IF _N_=1 THEN DO;
      ROW=6;
      COLUMN=1;
    END;

    /*** Increment Row and Column pointers ***/
/*    COLUMN=COLUMN+1;
    IF &var3.in (0,6,7,8,9) and COLUMN>&columns. THEN DO;    ***MER 4/21/09 Changed 7/8/9/10 to
6/7/8/9;
       ROW=ROW+1;
       COLUMN=2;
    END;
    ELSE IF COLUMN>&columns.+1 THEN DO;
       ROW=ROW+1;
       COLUMN=2;
    END;
*** RSG/MAB - 10/13/03 - changes for new template format */

   COLUMN=COLUMN+1;
   IF COLUMN>&columns. THEN DO;
      ROW=ROW+1;
      COLUMN=2;
   END;


   CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
   PUT CELL;

   /** Before color cell center data **/
   PUT '[ALIGNMENT(3, False, 3,0, False)]';
```

```
    IF REGION IN("Benchmark") OR MAJGRP IN("Benchmark") THEN PUT
'[FORMAT.FONT("Arial",10,True,False,False,False,9)]';  /*** BOLD & DARK RED ***/
    ELSE IF SCORE NOT IN(.,.A) THEN DO;
      IF SIG=1 THEN PUT '[FORMAT.FONT("Arial",10,True,False,False,False,10)]';          /*** BOLD
& GREEN ***/
        ELSE IF SIG=-1 THEN PUT '[FORMAT.FONT("Arial",10,False,True,False,False,3)]';     /*** RED
***/
        ELSE PUT '[FORMAT.FONT("Arial",10,False,False,False,False,5)]';    /*** BLUE ***/
    END;


    /*** If last record then output footer ***/
    IF EOF THEN DO;
       ROW=ROW+3; COLUMN=1;
       CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
       PUT CELL;
       PUT '[FORMAT.FONT("Arial",10,True,False,False,False,10)]';          /*** BOLD & GREEN ***/
       ROW=ROW+1;
       CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
       PUT CELL;
       PUT '[FORMAT.FONT("Arial",10,False,True,False,False,3)]';     /*** RED ***/
    END;
  RUN;

  DATA _NULL_;
    FILE SAS2XL;
    PUT '[CLOSE(true)]';
  RUN;
%end;
/*-----------------------------*/
/* 2000/12: end xls color code   */
/*-----------------------------*/




%MEND MKHTML;
/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*

%LET PREFIX=p;
%LET OUTXLS=0;

%MKHTML(0,21,2,2,0);
%MKHTML(1,0,1,2,0);
%MKHTML(1,0,2,2,0);
%MKHTML(1,0,4,2,0);
%MKHTML(2,0,2,2,0);
%MKHTML(2,0,4,2,0);
%MKHTML(3,0,11,2,0);
%MKHTML(3,0,2,2,0);
%MKHTML(3,0,4,2,0);
%MKHTML(4,0,1,2,0);
%MKHTML(4,0,2,2,0);
%MKHTML(6,0,11,2,0);
*/



*******************************************;
**** Create macros to call MKHTML macro  ****;
*******************************************;

/*** Create 8 HTML pages (8 Majgrps / All Regions / All Benefits)***/
%MACRO DOALL1();
            %MKHTML(1,0,0,0,0);
            %MKHTML(2,0,0,0,0);
            %MKHTML(6,0,0,0,0);
            %MKHTML(9,0,0,0,0);
```

```
            %MKHTML(3,0,0,0,0);    ***JSO 10/31/07 Added Civilian PCM (Majgrp 3), and changed 3-7
back to 4-8;
            %MKHTML(4,0,0,0,0);
            %MKHTML(5,0,0,0,0);    ***JSO 07/28/08 Added Purchased Care Users;
            %MKHTML(7,0,0,0,0);
            %MKHTML(8,0,0,0,0);
%MEND DOALL1;




/*** Create 322 HTML pages (8 Majgrps / All Regions / 12 Benefits)***/
%MACRO DOALL2();
    %DO J=1 %TO 9;                                    /*** JSO Changed 8 to 9
07/28/2008 ***/
       %DO K=1 %TO 11;       * 11 Sub-benefits ;            /*** MER Changed 12 to 11 04/21/2009
***/
          %MKHTML(&J.,0,&K.,1,0);  ***RSG 08/07/03 Add var4 part of new page numbers;

          /*** Call macro for 2nd page (except for ratings benefits) ***/
          %if &k.^=6 AND &k.^=7 AND &k.^=8 AND &k.^=9 %then %do;
             %IF &K. = 3 OR &K. = 10 %THEN %DO L= 0 %TO 4; ***RSG 08/07/03 There are different
number of
                                      sub-benefits trend pages for each benefit so need a counter
"L"
                                      to do different number of pages for each benefit;
                %MKHTML(&J.,0,&K.,2,&L.);
             %END;
             %ELSE %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 5 %THEN %DO L = 0 %TO 2;
                %MKHTML(&J.,0,&K.,2,&L.);
             %END;
             %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 3;
                %MKHTML(&J.,0,&K.,2,&L.);
             %END;
          %end;
       %END;

    %END;
%MEND DOALL2;




 /*** Create 25 HTML pages (All Majgrps / 25 Regions / All Benefits) ***/
%MACRO DOALL3();
       %DO J=1 %TO 25;
           %MKHTML(0,&J.,0,0,0);
       %END;
%MEND DOALL3;




 /*** Need to populate new table for all majgrps ***/
/*** Create 1150 HTML pages (All Majgrps / 25 Regions / 12 Benefits) ***/
%MACRO DOALL4();
    %DO J=1 %TO 25;
       %DO K=1 %TO 11;
          %MKHTML(0,&J.,&K.,1,0);
          /*** Call macro for 2nd page (except for ratings benefits) ***/
          %if &k.^=6 AND &k.^=7 AND &k.^=8 AND &k.^=9 %then %do;
             %IF &K. = 3 OR &K. = 10 %THEN %DO L = 0 %TO 4; ***RSG 08/07/03 Counter "L" for
different number;
                %MKHTML(0,&J.,&K.,2,&L.);                              *of sub-benefit trend
pages for each benefit;
             %END;
             %ELSE %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 5 %THEN %DO L = 0 %TO 2;
                %MKHTML(0,&J.,&K.,2,&L.);
             %END;
             %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 3;
                %MKHTML(0,&J.,&K.,2,&L.);
             %END;
          %end;
       %END;
    %END;
%MEND DOALL4;
```

```
/*** Create 4 HTML pages (All Majgrps / 4 Region-ConusMHS / All Benefits) ***/
/** RSG 02/2005 - CONUS TREATED AS ANOTHER REGION**/
/*%MACRO DOALL5();
          %DO K=17 %TO 20;
             %MKHTML(0,&K.,0,0,0);
          %END;
%MEND DOALL5;


%MACRO DOALL6();
        %DO J = 17 %TO 20;
           %DO K=1 %TO 12;    ***MJS 4/23/03 Changed 2 to 1 and 12 to 11;
              %MKHTML(0,&J.,&K.,1,0);
              /*** Call macro for 2nd page (except for ratings benefits) ***/
/*          %if &k.^=7 AND &k.^=8 AND &k.^=9 AND &k.^=10 %then %do;
                 %IF &K. = 1 OR &K. = 2 OR &K. = 4 %THEN %DO L = 0 %TO 4; ***RSG 08/07/03 counter
for sub-benefit trend pages;
                    %MKHTML(0,&J.,&K.,2,&L.);            ***MJS 4/23/03 Changed 8/9/10/11 to
7/8/9/10;
                 %END;
                 %ELSE %IF &K. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2;
                    %MKHTML(0,&J.,&K.,2,&L.);
                 %END;
                 %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;
                    %MKHTML(0,&J.,&K.,2,&L.);
                 %END;
                 %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
                    %MKHTML(0,&J.,&K.,2,&L.);
                 %END;
           %end;
         %END;
       %end;

%MEND DOALL6;
*/


/*** Run macro to create Printer Friendly HTML files (non-frames) ***/


%LET PREFIX=p;
%LET OUTXLS=0;
%DOALL1;
%DOALL2;
%DOALL3;
%DOALL4;


/*** Run macro to create Excel files ONLY ***/

%LET PREFIX=p;
%LET OUTXLS=1;
%DOALL1;
%DOALL2;
%DOALL3;
%DOALL4;


/*** Run macro to create Frame HTML files ***/

%LET PREFIX=f;
%LET OUTXLS=0;
%DOALL1;
%DOALL2;
%DOALL3;
%DOALL4;
```

```
%PUT "&number_html_files. HTML files created.";



*******************************************************************;
*******************************************************************;
*******************************************************************;
*******************************************************************;
*******************************************************************;
*******************************************************************;
*******************************************************************;
```

G.9.A   ReportCards\CAHPS_Adult2013\STEP1Q.SAS - Create and recode variables used in Adult Beneficiary Reports - Annual.

```
*****************************************************************************
*
*  PROJECT:  DoD – Quarterly Adult Report Cards
*  PROGRAM:  STEP1Q.SAS
*  PURPOSE:  Create Dummy and Recode Variables used in Adult Report Card
*                    Create a Female dummy variable
*                    Create an Education dummy variable
*                    Create 15 region dummies combining regions.
*                            7 & 8 into region 8. That is, there
*                            isn't a region 7 dummy.
*                    Create 7 age dummy variables.
*
*            We require the most desired code to be the highest value.
*            Recode the dependent variables into:
*                    1 - the least desirable value
*                    2 - the 2nd least desirable value
*                    3 - the most desirable value
*                    . - missing
*
*            Create 7 variables GROUP1 - GROUP7
*                    IF (XINS_COV IN (1,2,6) AND H09004>=2) THEN GROUP1 = 1
*                    IF (XENR_PCM IN (1,2,6) AND H09004>=2) THEN GROUP2 = 1
*                    IF (XENR_PCM = 3,7      AND H09004>=2) THEN GROUP3 = 1
*                    IF XINS_COV IN (3)                     THEN GROUP4 = 1
*                           /*JSO 08/24/2006, Deleted 4,5*/
*                    IF XBNFGRP = 1                         THEN GROUP5 = 1
*                    IF XBNFGRP = 2                         THEN GROUP6 = 1
*                    IF XBNFGRP IN (3,4)                    THEN GROUP7 = 1
*                    GROUP8 is output for all beneficiaries
*
*  MODIFIED: 1) February 2001 By Keith Rathbun, Update for quarterly
*                adult report cards.  Removed permanent dataset ENTIRE.SD2.
*            2) August 2001 By Keith Rathbun, Updated DSN and LIBNAME
*                for 3rd quarter adult report cards.
*            3) OCTOBER 2001 BY DANIELE BEAHM, Because there was no post-
*                stratification done in Q3, changed all references of the
*                POSTSTR variable to ADJ_CELL
*            4) JANUARY 2002 BY DANIELE BEAHM, Modified group3 to include
*                XENR_PCM
*            5) April 2002 By Mike Scott, Updated variable names for 2002
*                survey.
*            6) July 2002 By Mike Scott: See Note #2.  Replaced variable
*                S02S01 with H04075 (new health status variable), deleted
*                code to recode S02S01 to H00077, and changed H00077/R00077
*                rename/recode to H04075/R04075 rename/recode.  The Hispanic/
*                Latino variable is not present.
*            7) January 2003 By Mike Scott, Changed ADJ_CELL to COM_SAMP.
*            8) March 2003 By Mike Scott, Updated variable names for 2003
*                survey.
*            9) June 2003 By Mike Scott, Updated for Q2 2003.
*            10) July 2003 By Mike Scott, Changed COM_SAMP to ADJ_CELL.
*            11) October 2003 By Mike Scott, Updated for Q3 2003.
*            12) January 2004 By Mike Scott, Updated for Q4 2003, and changed
*                DAGEQY to FIELDAGE.
*            13) March 2004 By Mike Scott, Updated for Q1 2004.
*            14) April 2004 By Keith Rathbun, Removed reverse coding for
*                H04031.  2004 survey question wording is 'Within 15 minutes'
*                instead of "More than 15 Minutes".  Added service affiliation
*                variables so only one version of this program is needed to
*                handle the consumer watch processing.
*            15) June 2004 by Regina Gramss, Updated for Q2 2004.
*            16) Sept 2004 by Regina Gramss, changed XRegion to xtenxreg, updated for Q3 2004.
*            17) Jan 2005 by Regina Gramss, changed XTENXREG to XSERVREG to include
*                service affiliation.  Regions have been changed from 4 categories to 16.
*            18) Apr 2005 by Regina Gramss, updated field names for 2005 data.
*            19) Jul 2005 by Regina Gramss, updated for Q2 2005
*            20) Oct 2005 by Regina Gramss, updated for Q3 2005
*            21) Dec 2005 by Regina Gramss, updated for Q4 2005
*            22) March 21, 2006 by Keith Rathbun, updated variable names
```

```
*                 for Q2 FY 2006.  Changed references to ADJ_CELL to be STRATUM.
*          23) July 12, 2006 by Justin Oh, updated for Q3 FY 2006
*          24) Aug 22, 2006 by Justin Oh, changed overseas to 3 regions.
*              Regions have been changed from 16 categories to 24.
*              Added XOCONUS to the Keep statement for Overseas classifications.
*              Changed XSERVREG for Overseas (Europe,Pacific,Latin America).
*              Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                      IF XINS_COV IN (3)     THEN GROUP4 = 1
*              Since only XINS_COV IN (1,2,3,6) is kept, (4,5) not needed.
*          25) Oct 03, 2006 by Justin Oh, changed input data HCS063_1 to HCS064_1
*              for Q4FY2006 reports.
*          26) Apr 05, 2007 by Justin Oh, Added %LET BCHTYPE to select BCH types
*              Benchmark OR PurchasedBenchmark.
*          27) Apr 05, 2007 by Justin Oh, Added changes to select RC types
*              ReportCards OR PurchasedReportCards.
*          28) Apr 26, 2007 by Justin Oh, Added codes, variables for new
*              reservists logic.
*          29) May 15, 2007 by Justin Oh, Changed XINS_COV to NXNS_COV to assign
*              Groups 1,3, and 4 for new reservists logic.
*          30) Jul 30, 2007 by Justin Oh, Added added DBENCAT conditions to assign
*              Groups All, 4, 5, and 6.
*          31) Oct 02, 2007 by Justin Oh, changed input data HCS073_1 to HCS074_1
*              for Q4FY2007 reports.
*          32) January 10, 2008 by Keith Rathbun, updated variable names
*              for Q1 FY 2008.
*          33) Apr 11, 2008 by Justin Oh, changed input data HCS081_1 to HCS082_1
*              for Q2FY2008 reports.
*          34) June 13, 2008 by Keith Rathbun, changed input data HCS082_1 to HCS083_1
*              for Q3FY2008 reports.
*          35) Jan 16, 2009 by Mike Rudacille, changed CONUS variable to USA
*          36) Jan 21, 2009 by Mike Rudacille, changed 2009 questionnaire variables
*              applicable to both V3 and V4 from V3 names to V4 names
*          37) March 11, 2009 by Keith Rathbun, changed input data HCS091_1 to HCS092_1
*              for Q2FY2009 reports.
*          38) April 6, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          39) June 22, 2009 By Keith Rathbun, Change weight variable from
*              FWRWT_V4 back to FWRWT.  Changed input data HCS092_1 to HCS093_1
*              for Q3FY2009 reports.
*          40) Sept 30, 2009 By Mike Rudacille, Changed input data HCS093_1 to HCS094_1
*              for Q4FY2009 reports.
*      41) October 5, 2009 by Emma Ernst for 2009 Reports
*          42) September 7, 2010 by Mike Rudacille for 2010 Reports
*          43) November 2, 2010 by Mike Rudacille Changed input data from HCS10A_1 to HCS10A_2
*          44) October 7, 2011 by Mike Rudacille for 2011 Reports
*          45) November 11, 2012 By Mike Rudacille, Updated for handling of Joint Service
facilities
*
*  INPUTS:   1) HCSyyq_1 - DoD Quarterly HCS Database
*
*  OUTPUTS:  1) GROUP1-8.sas7bdat - DoD Quarterly GROUP files as defined above
*
*  INCLUDES: 1) CONVERT.SAS - Convert item responses to proportional
*                             values for consistency w/ TOPS
*
*  NOTES:    1) Groups 1-3 modified 10/09/2000
*
*            2) In Q1_2002, S02S01 was renamed and recoded to H00077 (health
*               status variable for 2000).  H02077 was the Hispanic/Latino
*               variable.  In Q2_2002, H02077 is health status, and H02079
*               is the Hispanic/Latino variable.  To make the Quarter 2 data
*               file (HSC022_1.sd2) more consistent with the Quarter 1 file,
*               the health status variable which was H02077 is now H04075,
*               and the Hispanic/Latino variable which was H02079 is now
*               H02077.
*
************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards            ***/
%LET RCTYPE = ReportCards;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR NOOVP COMPRESS=YES;
LIBNAME OUT "DATA";
```

```
LIBNAME IN1  "..\..\..\Data";
LIBNAME LIBRARY  "..\..\..\Data\fmtlib";

%LET WGT= CFWT;

TITLE1     'Program Saved as: STEP1Q.SAS';


proc format;
     value servreg 1 = 'North Army'
                    2 = 'North Air Force'
                    3 = 'North Navy'
                    4 = 'North Other'
                    5 = 'North Joint Service'
                    6 = 'South Army'
                    7 = 'South Air Force'
                    8 = 'South Navy'
                    9 = 'South Other'
                   10 = 'South Joint Service'
                   11 = 'West Army'
                   12 = 'West Air Force'
                   13 = 'West Navy'
                   14 = 'West Other'
                   15 = 'West Joint Service'
                   16 = 'Europe Army'
                   17 = 'Europe Air Force'
                   18 = 'Europe Navy'
                   19 = 'Europe Other'
                   20 = 'Europe Joint Service'
                   21 = 'Pacific Army'
                   22 = 'Pacific Air Force'
                   23 = 'Pacific Navy'
                   24 = 'Pacific Other'
                   25 = 'Pacific Joint Service'
                   26 = 'Latin America Army'
                   27 = 'Latin America Air Force'
                   28 = 'Latin America Navy'
                   29 = 'Latin America Other'
                   30 = 'Latin America Joint Service';

DATA ENTIRE;
   SET IN1.HCS13A_2(KEEP=
                 MPRID
                 FIELDAGE   /*MJS 01/26/04*/
                 XTNEXREG
                 SERVAFF    /*KRR 04/09/04*/
                 DBENCAT    /*JSO 04/26/2007, added for reservists logic*/
                 USA
                 ENBGSMPL
                 SREDA
                 XSEXA
           XCATCH
                 XBNFGRP
                 STRATUM    /*KRR 04/03/2006, changed from ADJ_CELL*/
                 XINS_COV
                 XENR_PCM
                 XOCONUS    /*JSO 08/24/2006, Overseas Region Indicator*/
                 &WGT
                 QUARTER
                 /* Getting Needed Care */
                 H13033
                 H13029
                 /* Getting Care Quickly */
                 H13007
                 H13010
                 /* How Well Doctors Communicate */
                 H13021
                 H13022
                 H13023
                 H13024
                 /* Customer Service */
                 H13041
                 H13042
```

```
                   /* Claims Processing */
               H13046
               H13047  /*****************************/
               H13065  /* Health Status            */
               H13018  /* Health Care Rating       */
               H13048  /* Health Plan Rating       */
               H13027  /* Personal Doctor Rating   */
               H13031  /* Specialist Rating        */
               H13003  /* Health Plan Used         *///*JSO 04/26/2007, added for reservists
logic*/
               H13004  /* How Long in Health Plan  */
                       /*****************************/
             );
    FORMAT _ALL_;


    IF SERVAFF='A' THEN XSERVAFF=1;            *Army;
       ELSE IF SERVAFF='F' THEN XSERVAFF=2;    *Air Force;
       ELSE IF SERVAFF='N' THEN XSERVAFF=3;    *Navy;
       ELSE XSERVAFF=4;                        *Other;

    IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

    IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

    IF XTNEXREG = . THEN DELETE;  /* RSG 02/2005 USE CACSMPL TO DELETE MISSING FIELDS*/

    IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 10/07/11
Added 10 and 11 */

    NXNS_COV = XINS_COV;                /*JSO 04/26/2007 added for reservists logic*/
                                        /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
    IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
    IF DBENCAT IN('GRD','IGR') AND H13003 = 3 THEN DO;
       NXNS_COV = 3;
       XENR_PCM = .;
    END;
                       /* Note:  use tmp_cell in step2q.sas */
    LENGTH TMP_CELL XSERVREG 8;
    TMP_CELL = STRATUM; /*KRR 04/03/2006, changed from ADJ_CELL*/

    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
       ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
       ELSE XSERVREG = 5;
    END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 6;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
       ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
       ELSE XSERVREG = 10;
    END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 11;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
       ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
       ELSE XSERVREG = 15;
    END;

    IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
       IF XOCONUS = 1 THEN DO;
          IF      XSERVAFF = 1 THEN XSERVREG = 16;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 17;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 18;
          ELSE IF XSERVAFF = 4 THEN XSERVREG = 19;
          ELSE                      XSERVREG = 20;
       END;
```

```
       IF XOCONUS = 2 THEN DO;
           IF      XSERVAFF = 1 THEN XSERVREG = 21;
           ELSE IF XSERVAFF = 2 THEN XSERVREG = 22;
           ELSE IF XSERVAFF = 3 THEN XSERVREG = 23;
           ELSE IF XSERVAFF = 4 THEN XSERVREG = 24;
           ELSE                     XSERVREG = 25;
       END;
       IF XOCONUS = 3 THEN DO;
           IF      XSERVAFF = 1 THEN XSERVREG = 26;
           ELSE IF XSERVAFF = 2 THEN XSERVREG = 27;
           ELSE IF XSERVAFF = 3 THEN XSERVREG = 28;
           ELSE IF XSERVAFF = 4 THEN XSERVREG = 29;
           ELSE                     XSERVREG = 30;
       END;
    END;

    IF XSERVREG = . THEN DELETE;  /* MER 11/10/10 - Deletes records with imputed TNEXREG = 'O' */
                                  /* and missing XOCONUS.  (Only applies to CACSMPL = 9904)    */

    /* MER 7/27/12 - New logic for handling out of catchment OCONUS */
    IF XCATCH = 9904 THEN DO;
       IF XSERVREG <=5 THEN XCATCH=9901;
       ELSE IF XSERVREG <=10 THEN XCATCH=9902;
       ELSE IF XSERVREG <=15 THEN XCATCH=9903;
       ELSE IF XSERVREG <=20 THEN XCATCH=9905;
       ELSE IF XSERVREG <=25 THEN XCATCH=9906;
       ELSE IF XSERVREG <=30 THEN XCATCH=9907;
    END;


RENAME XCATCH=CACSMPL;
    WRWT=&WGT;


RUN;

*-------------------------------------------------;
* create variable names for catchment area dummies ;
*-------------------------------------------------;

*  create a file of catchment areas (UNIQUE) using the sort to drop;
*  all duplicate catchment areas leaving one record per;
*  unique catctment area code;
PROC SORT DATA=ENTIRE OUT=UNIQUE(KEEP=CACSMPL) NODUPKEY;
    BY CACSMPL;
RUN;

*  create a file (FILEA) with catchment areas codes and a catchment;
*  name consisting of "CAT" concatenated with a 4 digit number;
*  created by ting of "CAT" concatenated with a 4 digit number;
DATA FILEA (RENAME=(CACSMPL=START SERIAL=LABEL));
    SET UNIQUE;
    SERIAL+1;
    LENGTH FMTNAME $7 DUMNAME $7;
    FMTNAME='CACLOOK';
    DUMNAME= 'CAT' || PUT(CACSMPL, Z4.);
RUN;

PROC PRINT DATA=FILEA;
     TITLE2 '1 record per catchment area (use this file to create a format)';
RUN;

* create a format statement to be used to create CATINDX;
PROC FORMAT CNTLIN=FILEA;  RUN;

* create an include file for a complete set of catchment areas.
* Write out to a file (CDUMFILE.INC) of the catchment dummy variables;
DATA _NULL_;
    SET FILEA END=EOF;
    FILE 'CDUMFILE.INC';
    IF _N_ = 1 THEN DO;
       PUT @10  "ARRAY CATDUMS(*) 4";
    END;
    PUT    @15   DUMNAME $7.;
```

```
   IF EOF  THEN  PUT @10 ";";
RUN;



*****************************************************************************
* Create AGE, FEMALE and GROUP (Beneficiary/Enrollment)
* subsets. Create the region dummies.  Recode region 7 to region 8.
*****************************************************************************;
DATA ENTIRE;
   SET ENTIRE;
   LENGTH DEFAULT = 4;
   IF FIELDAGE NE " " THEN DO;   /*MJS 01/26/04*/
      AGE1824=0;
      AGE2534=0;
      AGE3544=0;
      AGE4554=0;
      AGE5564=0;
      AGE6574=0;
      AGE75UP=0;
      IF     ( '018' <= FIELDAGE <= '024' ) THEN AGE1824=1;   /*MJS 01/26/04*/
      ELSE IF ( '025' <= FIELDAGE <= '034' ) THEN AGE2534=1;
      ELSE IF ( '035' <= FIELDAGE <= '044' ) THEN AGE3544=1;
      ELSE IF ( '045' <= FIELDAGE <= '054' ) THEN AGE4554=1;
      ELSE IF ( '055' <= FIELDAGE <= '064' ) THEN AGE5564=1;
      ELSE IF ( '065' <= FIELDAGE <= '074' ) THEN AGE6574=1;
      ELSE IF (          FIELDAGE  > '074' ) THEN AGE75UP=1;
   END;

   *************************************************************************
   * Create the FEMALE dummy variable.
   *************************************************************************;
   IF XSEXA = 2 THEN
      FEMALE = 1;
   ELSE
      FEMALE = 0;

   *************************************************************************
   * Create the beneficiary group/enrollment group subsets.
   *************************************************************************;
   GROUP1 = 0;
   GROUP2 = 0;
   GROUP3 = 0;
   GROUP4 = 0;
   GROUP5 = 0;
   GROUP6 = 0;
   GROUP7 = 0;
   GROUP8 = 1;     * EVERYONE;

   IF (NXNS_COV IN (1,2,6)  AND H13004>=2) THEN GROUP1 = 1;
   IF (XENR_PCM IN (1,2,6)  AND H13004>=2) THEN GROUP2 = 1;
   /* JSO 04/05/2007 conditions to run RC type */
   IF "&RCTYPE" = 'ReportCards' AND (XENR_PCM IN (3,7) AND H13004>=2) THEN GROUP3 = 1;
   ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND ((XENR_PCM IN (3,7) AND H13004>=2) OR NXNS_COV
IN (3,9,10)) THEN GROUP3 = 1;
   IF NXNS_COV IN  (3,9,10)    THEN GROUP4 = 1; /*JSO 08/24/2006, Deleted 4,5*//*JSO 07/30/2007,
Added 9*/ /* MER 10/07/11 Added 10 */
   IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN GROUP5 = 1;
                                        /*JSO 07/30/2007, added DBENCAT conditions*/
   IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN GROUP6 = 1;
                                        /*JSO 07/30/2007, added DBENCAT conditions*/
   IF XBNFGRP IN (3,4)      THEN GROUP7 = 1;

   *************************************************************************
   * Recode variables with Never, Sometimes, Usually and Always:
   *    Recode Never & Sometimes (1 & 2) to 1.
   *    Recode Usually (3) to 2.
   *    Recode Always (4) to 3.
   *************************************************************************;

   IF H13007 = 1     THEN R13007 = 1;
   ELSE IF H13007 = 2 THEN R13007 = 1;
```

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```
ELSE IF H13007 = 3 THEN R13007 = 2;
ELSE IF H13007 = 4 THEN R13007 = 3;
ELSE IF H13007 < 0 THEN R13007 = .;

IF H13010 = 1      THEN R13010 = 1;
ELSE IF H13010 = 2 THEN R13010 = 1;
ELSE IF H13010 = 3 THEN R13010 = 2;
ELSE IF H13010 = 4 THEN R13010 = 3;
ELSE IF H13010 < 0 THEN R13010 = .;

IF H13021 = 1      THEN R13021 = 1;
ELSE IF H13021 = 2 THEN R13021 = 1;
ELSE IF H13021 = 3 THEN R13021 = 2;
ELSE IF H13021 = 4 THEN R13021 = 3;
ELSE IF H13021 < 0 THEN R13021 = .;

IF H13022 = 1      THEN R13022 = 1;
ELSE IF H13022 = 2 THEN R13022 = 1;
ELSE IF H13022 = 3 THEN R13022 = 2;
ELSE IF H13022 = 4 THEN R13022 = 3;
ELSE IF H13022 < 0 THEN R13022 = .;

IF H13023 = 1      THEN R13023 = 1;
ELSE IF H13023 = 2 THEN R13023 = 1;
ELSE IF H13023 = 3 THEN R13023 = 2;
ELSE IF H13023 = 4 THEN R13023 = 3;
ELSE IF H13023 < 0 THEN R13023 = .;

IF H13024 = 1      THEN R13024 = 1;
ELSE IF H13024 = 2 THEN R13024 = 1;
ELSE IF H13024 = 3 THEN R13024 = 2;
ELSE IF H13024 = 4 THEN R13024 = 3;
ELSE IF H13024 < 0 THEN R13024 = .;

IF H13029 = 1      THEN R13029 = 1;
ELSE IF H13029 = 2 THEN R13029 = 1;
ELSE IF H13029 = 3 THEN R13029 = 2;
ELSE IF H13029 = 4 THEN R13029 = 3;
ELSE IF H13029 < 0 THEN R13029 = .;

IF H13033 = 1      THEN R13033 = 1;
ELSE IF H13033 = 2 THEN R13033 = 1;
ELSE IF H13033 = 3 THEN R13033 = 2;
ELSE IF H13033 = 4 THEN R13033 = 3;
ELSE IF H13033 < 0 THEN R13033 = .;

IF H13041 = 1      THEN R13041 = 1;
ELSE IF H13041 = 2 THEN R13041 = 1;
ELSE IF H13041 = 3 THEN R13041 = 2;
ELSE IF H13041 = 4 THEN R13041 = 3;
ELSE IF H13041 < 0 THEN R13041 = .;

IF H13042 = 1      THEN R13042 = 1;
ELSE IF H13042 = 2 THEN R13042 = 1;
ELSE IF H13042 = 3 THEN R13042 = 2;
ELSE IF H13042 = 4 THEN R13042 = 3;
ELSE IF H13042 < 0 THEN R13042 = .;

IF H13046 = 1      THEN R13046 = 1;
ELSE IF H13046 = 2 THEN R13046 = 1;
ELSE IF H13046 = 3 THEN R13046 = 2;
ELSE IF H13046 = 4 THEN R13046 = 3;
ELSE IF H13046 < 0 THEN R13046 = .;

IF H13047 = 1      THEN R13047 = 1;
ELSE IF H13047 = 2 THEN R13047 = 1;
ELSE IF H13047 = 3 THEN R13047 = 2;
ELSE IF H13047 = 4 THEN R13047 = 3;
ELSE IF H13047 < 0 THEN R13047 = .;

**************************************************************************
* Recode variables to one missing condition ".".
* This also renames all the "H0xxxx" to "R0xxxx".
```

```
    *************************************************************************;
    R13027 = H13027;  IF R13027 < 0 THEN R13027 = .;
    R13031 = H13031;  IF R13031 < 0 THEN R13031 = .;
    R13018 = H13018;  IF R13018 < 0 THEN R13018 = .;
    R13048 = H13048;  IF R13048 < 0 THEN R13048 = .;
    R13065 = H13065;  IF R13065 < 0 THEN R13065 = .;


    *************************************************************************
    * Create region and service affiliation dummies.
    *************************************************************************;
    IF XSERVREG NE . THEN DO;  /*JSO 08/24/2006, Changed 16 to 24*/ /*MER 11/11/2012, Changed 24
to 30*/
        ARRAY REGDUMS (30) REG01 REG02 REG03 REG04 REG05 REG06
                           REG07 REG08 REG09 REG10 REG11 REG12
                           REG13 REG14 REG15 REG16 REG17 REG18
                           REG19 REG20 REG21 REG22 REG23 REG24
                           REG25 REG26 REG27 REG28 REG29 REG30;
        DO I = 1 TO 30;
           REGDUMS(I)=0;
        END;
        IF        XSERVREG= 1  THEN REG01  =1;
        ELSE IF   XSERVREG= 2  THEN REG02  =1;
        ELSE IF   XSERVREG= 3  THEN REG03  =1;
        ELSE IF   XSERVREG= 4  THEN REG04  =1;
        ELSE IF   XSERVREG= 5  THEN REG05  =1;
        ELSE IF   XSERVREG= 6  THEN REG06  =1;
        ELSE IF   XSERVREG= 7  THEN REG07  =1;
        ELSE IF   XSERVREG= 8  THEN REG08  =1;
        ELSE IF   XSERVREG= 9  THEN REG09  =1;
        ELSE IF   XSERVREG= 10 THEN REG10  =1;
        ELSE IF   XSERVREG= 11 THEN REG11  =1;
        ELSE IF   XSERVREG= 12 THEN REG12  =1;
        ELSE IF   XSERVREG= 13 THEN REG13  =1;
        ELSE IF   XSERVREG= 14 THEN REG14  =1;
        ELSE IF   XSERVREG= 15 THEN REG15  =1;
        ELSE IF   XSERVREG= 16 THEN REG16  =1;
        ELSE IF   XSERVREG= 17 THEN REG17  =1;
        ELSE IF   XSERVREG= 18 THEN REG18  =1;
        ELSE IF   XSERVREG= 19 THEN REG19  =1;
        ELSE IF   XSERVREG= 20 THEN REG20  =1;
        ELSE IF   XSERVREG= 21 THEN REG21  =1;
        ELSE IF   XSERVREG= 22 THEN REG22  =1;
        ELSE IF   XSERVREG= 23 THEN REG23  =1;
        ELSE IF   XSERVREG= 24 THEN REG24  =1;
        ELSE IF   XSERVREG= 25 THEN REG25  =1;
        ELSE IF   XSERVREG= 26 THEN REG26  =1;
        ELSE IF   XSERVREG= 27 THEN REG27  =1;
        ELSE IF   XSERVREG= 28 THEN REG28  =1;
        ELSE IF   XSERVREG= 29 THEN REG29  =1;
        ELSE IF   XSERVREG= 30 THEN REG30  =1;


        ARRAY SRVDUMS (5) SRV01 SRV02 SRV03 SRV04 SRV05; /*MER 11/11/2012 Changed from 4 to 5*/
        DO I = 1 TO 5;    /*Needed for consumer watch ONLY */
           SRVDUMS(I)=0;
        END;
        IF        XSERVAFF = 1 THEN SRV01 = 1;
        ELSE IF   XSERVAFF = 2 THEN SRV02 = 1;
        ELSE IF   XSERVAFF = 3 THEN SRV03 = 1;
        ELSE IF   XSERVAFF = 4 THEN SRV04 = 1;
        ELSE IF   XSERVAFF = 5 THEN SRV05 = 1;

    END;
   *------------------------;
    * Create catchment dummies;
    *------------------------;
    %INCLUDE 'CDUMFILE.INC';   * this is array statement;
    CATINDX = INPUT(PUT(CACSMPL, CACLOOK.), 3.);
    DO I = 1 TO DIM(CATDUMS);
      CATDUMS(I) = 0;
    END;
    CATDUMS(CATINDX)=1;

RUN;
```

```
*****************************************************************************
* Recode item responses to proportional values using CONVERT.SAS.
*****************************************************************************;
%INCLUDE "CONVERT.SAS";

%CONT2(DSN=ENTIRE, NUM=4,  Y=R13018 R13048 R13027 R13031);
%CONT3(DSN=ENTIRE, NUM=12, Y=R13007 R13010 R13029 R13033
                           R13021 R13022 R13023 R13024
                           R13041 R13042 R13046 R13047);


*****************************************************************************
* Sort the main file to reorder it by MPRID.
*****************************************************************************;
PROC SORT DATA=ENTIRE; BY MPRID; RUN;

*****************************************************************************
* Print the contents of ENTIRE dataset.
*****************************************************************************;
PROC CONTENTS DATA=ENTIRE;
   TITLE2 'Contents of ENTIRE';
RUN;



*****************************************************************************
* Print some of the recoded records.
*****************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE and SEX dummies';
   VAR MPRID
       FIELDAGE   /*MJS 01/26/04*/
       XTNEXREG
       XSERVAFF
       XSERVREG
       USA
       ENBGSMPL
       XSEXA
       STRATUM   /*KRR 04/03/2006 Changed from ADJ_CELL*/
       XINS_COV
       NXNS_COV  /*JSO 04/26/2007, added for reservists logic*/
       DBENCAT   /*JSO 04/26/2007, added for reservists logic*/
       XENR_PCM
       &WGT.
       ;
RUN;

*****************************************************************************
* Print some of the recoded records.
*****************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE and SEX dummies';
   VAR FIELDAGE   /*MJS 01/26/04*/
       AGE1824
       AGE2534
       AGE3544
       AGE4554
       AGE5564
       AGE6574
       AGE75UP

       XSEXA
       FEMALE

       ENBGSMPL
       XINS_COV
       NXNS_COV
       XENR_PCM
       XBNFGRP
       GROUP1
       GROUP2
       GROUP3
       GROUP4
       GROUP5
```

```
            GROUP6
            GROUP7
          ;
RUN;

PROC PRINT DATA=ENTIRE(OBS=60);
    TITLE2 'Print of recoded question variables';
    VAR H13007  R13007
        H13010  R13010
        H13021  R13021
        H13022  R13022
        H13023  R13023
        H13024  R13024
        H13029  R13029
        H13033  R13033
        H13041  R13041
        H13042  R13042
        H13046  R13046
        H13047  R13047
        H13018  R13018
        H13027  R13027
        H13031  R13031
        H13048  R13048
        H13065  R13065
        ;
RUN;


/*JSO 08/24/2006, Changed 16 to 24*/
/*MER 11/11/2012, Changed 24 to 30*/
PROC PRINT DATA=ENTIRE(OBS=60);
    TITLE2 'Print of recoded REGION variables';
    VAR XSERVREG
        REG01
        REG02
        REG03
        REG04
        REG05
        REG06
        REG07
        REG08
        REG09
        REG10
        REG11
        REG12
        REG13
        REG14
        REG15
        REG16
        REG17
        REG18
        REG19
        REG20
        REG21
        REG22
        REG23
        REG24
        REG25
        REG26
        REG27
        REG28
        REG29
        REG30;
RUN;

/*MER 11/03/2012 Changed 4 to 5*/
PROC PRINT DATA=ENTIRE(OBS=60);
    TITLE2 'Print of recoded service affiliation variables';
    VAR XSERVREG
        XSERVAFF
        XOCONUS /*JSO 08/24/2006, Changed Overseas Regions*/
        SRV01
        SRV02
```

```
        SRV03
        SRV04
        SRV05
       ;
RUN;
proc freq data=entire;
table xservreg*cacsmpl/noprint out=temp;
proc sort; by cacsmpl count;
data out.xservind(keep=cacsmpl xservind);
set temp; by cacsmpl;
if last.cacsmpl;
if xservreg in (16,17,18,19,20) then xservreg=16;
else if xservreg in (21,22,23,24,25) then xservreg=17;
else if xservreg in (26,27,28,29,30) then xservreg=18;

rename xservreg=xservind;
proc sort data=entire;
by cacsmpl;
data entire;
merge entire out.xservind; by cacsmpl;

****************************************************************************
* Create the 7 subgroups for processing by STEP2.SAS.
****************************************************************************;
DATA OUT.GROUP1
     OUT.GROUP2
     OUT.GROUP3
     OUT.GROUP4
     OUT.GROUP5
     OUT.GROUP6
     OUT.GROUP7
     OUT.GROUP8;

     SET ENTIRE;

     DROP
        H13007
        H13010
        H13021
        H13022
        H13023
        H13024
        H13029
        H13033
        H13041
        H13042
        H13046
        H13047
        H13018
        H13027
        H13031
        H13048
        H13065
        ;
     IF GROUP1 = 1 THEN OUTPUT OUT.GROUP1;
     IF GROUP2 = 1 THEN OUTPUT OUT.GROUP2;
     IF GROUP3 = 1 THEN OUTPUT OUT.GROUP3;
     IF GROUP4 = 1 THEN OUTPUT OUT.GROUP4;
     IF GROUP5 = 1 THEN OUTPUT OUT.GROUP5;
     IF GROUP6 = 1 THEN OUTPUT OUT.GROUP6;
     IF GROUP7 = 1 THEN OUTPUT OUT.GROUP7;
     OUTPUT OUT.GROUP8;
RUN;
```

G.9.B   ReportCards\CAHPS_Adult2013\Convert.SAS - Convert Item Responses To Proportional Values.

```
*******************************************************************************
*
* PROGRAM:   CONVERT.SAS
* TASK:      DOD HEALTH CARE SURVEY ANALYSIS (8687-330)
* PURPOSE:   CONVERT ITEM RESPONSES TO PROPORTIONAL VALUES FOR CONSISTENCY
*            WITH THE TOPS SURVEY.
* WRITTEN:   October 2000 BY ERIC SCHONE
*
* MODIFIED: October 2000 BY KEITH RATHBUN, Added PROLOG.  Also, added DSN
*            to argument lists.
*
* INPUTS:  1) User-specified SAS Dataset
*
* OUTPUTS: 1) User-specified SAS Dataset with recoded values
*
* NOTES:
*
* 1) Arguments for the CONT1-CONT3 macros are as follows:
*    a) SAS dataset name (dsn)
*    b) Number of variables to be converted (num)
*    c) List of variables to be converted (y)
* 2) These macros assume that the response items have already been
*    converted/recoded to CAHPS scales.
*
*******************************************************************************
* CONT1 - Convert big problem, small problem, not a problem questions to
*         proportional values.
*******************************************************************************;
%macro cont1(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i = 1 to &num;
      if vars(i) ne . and vars(i) ne 3 then vars(i) = 0;
      if vars(i) = 3 then vars(i) = 1;
   end;
run;
%mend cont1;


*******************************************************************************
* CONT2 - Convert rating questions to proportional values.
*******************************************************************************;
%macro cont2(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) < 8 then vars(i) = 0;
      if vars(i) in (8,9,10) then vars(i) = 1;
   end;
run;
%mend cont2;


*******************************************************************************
* CONT3 - Convert Never, Sometimes, Usually, Always questions to
*         proportional values.
*******************************************************************************;
%macro cont3(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) >= 2 then vars(i) = 2;
      vars(i) = vars(i) - 1;
   end;
run;
%mend cont3;
```

G.9.C   ReportCards\CAHPS_Adult2013\STEP2.SAS - Calculate CAHPS Adjusted Scores - Annual.

```
/********************************************************************************
/*  Project:  DoD – 2004 Adult Report Cards
/*  Program:  STEP2Q.SAS
/*  Purpose:  Draft Adult Report Card
/*  Requires program STEP1.SAS to have been run
/*  Programming specifications for adult report card
/*  The adult report card contains a large number of
/*  risk-adjusted scores.  Some scores are
/*  calculated from responses to individual survey questions.
/*  Composite scores are calculated by
/*  combining scores from individual questions.
/*  The scores then are compared with external civilian
/*  benchmarks.  The programming tasks involved in building
/*  the report card are:
/*      1)    preparing data for analyses
/*      2)    estimating risk adjustment models
/*      3)    calculating risk-adjusted values and variances
/*      4)    calculating benchmarks
/*      5)    comparing risk-adjusted values to benchmarks
/*            and hypothesis testing
/*
/*  Modified: 1) December 2001 By Mike Scott: Updated parameters for 2000 survey,
/*               added V612 to support SUDAAN with Version 8 SAS, changed STRATUM to
/*               TMP_CELL, and changed INTERCEP to INTERCEPT to support Version 8 SAS.
/*            2) January 2003 By Keith Rathbun: Added output files for SKELCAT and
/*               SKELREG (No longer permanent datasets... only needed by this program).
/*            3) January 2004 By Mike Scott: Updated for 2003 survey.
/*            4) February 2005 By Regina Gramss: Updated for 2004 survey
/*               changed codes to use XSERVREG for region.  Changed field
/*               names to use macro for year change.
/*               Adjustments were made By Eric Schone because of catchment
/*               areas lining up to multiple regions.
/*            5) January 2006 By Regina Gramss: Updated for 2005 survey.
/*            6) October 2006 By Keith Rathbun: Updated to accomodate the Overseas
/*               reporting updates done by Justin Oh in the quarterly version.
/*            7) November 9, 2007 By Keith Rathbun: Updated parameters for
/*               the 2007 survey.
/*            8) October 28, 2008 By Mike Rudacille: Updated parameters for
/*               the 2008 survey.
/*            9) October 6, 2009 by Emma Ernst: Updated paramters for 2009 survey
/*           10) September 7, 2010 By Mike Rudacille: Updated parameters for
/*               the 2010 survey.
/*           11) October 7, 2011 By Mike Rudacille: Updated parameters for the 2011 survey.
/*           12) August 6, 2012 By Amanda Kudis: Updated parameters for 2012 survey.
/*           13) November 11, 2012 by Mike Rudacille, updated for handling of
/*               Joint Service facilities
/*
/* SUBGROUPS
/* _____
/*    Seven subgroups              Definitions                    Reg or Catch   Macro
/* _____
/* 1. Prime enrollees              XINS_COV IN(1,2,6) AND H08007>=4  Catchment     SCORE1
/* 2. Enrollees w/mil PCM          XENR_PCM IN(1,2,6) AND H08007>=4  Catchment     SCORE1
/* 3. Enrollees w/civ PCM          XENR_PCM = 3       AND H08007>=4  Region        SCORE2
/* 4. Nonenrollees                 XINS_COV IN(3)                    Region        SCORE2
/* 5. Active duty                  XBNFGRP=1                         Catchment     SCORE1
/* 6. Active duty dependents       XBNFGRP=2                         Region        SCORE2
/* 7. Retirees and dependents      XBNFGRP IN (3,4)                  Region        SCORE2
/*
/*  PREV PGM:  STEP1.SAS
/*  NEXT PGM:  COMPOSIT.SAS
/********************************************************************************/
OPTIONS NOCENTER LS=132 PS=78 SOURCE NOOVP STIMER COMPRESS=YES;
LIBNAME    IN1  "DATA";
LIBNAME    OUT  "DATA";
LIBNAME    OUT2 "DATA\ADULTHATFILES";


*------------------------------------;
*-      set the parameters here     -;
*------------------------------------;
```

```
* set the number of Dependent variables to process;
* One does not need to start at 1, but the max must be >= min;
%LET MIN_VAR =  1;
%LET MAX_VAR =  16;

* set the number of subgroups to process;
%LET MIN_GRP = 1;
%LET MAX_GRP = 8;

*******************************************************************************
* These are expected to remain the same for a particular dependent
* variable run.
******************************************************************************;
%LET WGT       = CFWT;
%LET IND_VAR1 = R13065;
%LET IND_VAR2 =  ;  * FEMALE;
%LET IND_VAR3 =  ;  * SREDHIGH;
%LET DEBUGFLG = 0;  * Set to 1 if you want extra printout;

%LET TITL1 = Prime Enrollees;
%LET TITL2 = Enrollees w/military PCM;
%LET TITL3 = Enrollees w/civilian PCM;
%LET TITL4 = Nonenrollees;
%LET TITL5 = Active Duty;
%LET TITL6 = Active Duty Dependents;
%LET TITL7 = Retirees and Dependents;
%LET TITL8 = All Beneficiaries;

*******************************************************************************
* GETTING NEEDED CARE.
******************************************************************************;
/*10/6/09 ERE not using 2008 version of question 11 and 29 anymore*/
%LET DEPVAR1 = R13029;
%LET DEPVAR2 = R13033;


*******************************************************************************
* GETTING NEEDED CARE QUICKLY.
******************************************************************************;
/*10/6/09 ERE not using 2008 version of question 17 and 30 anymore*/
%LET DEPVAR3 = R13010;
%LET DEPVAR4 = R13007;


*******************************************************************************
* HOW WELL DOCTORS COMMUNICATE.
******************************************************************************;
%LET DEPVAR5= R13021;
%LET DEPVAR6= R13022;
%LET DEPVAR7= R13023;
%LET DEPVAR8= R13024;

*******************************************************************************
* COURTEOUS AND HELPFUL OFFICE STAFF.
******************************************************************************;
/*10/6/09 ERE this section is not in the 2009 v4 questionaire*/

*******************************************************************************
* CUSTOMER SERVICE.
******************************************************************************;
%LET DEPVAR9 = R13041;
%LET DEPVAR10 = R13042;

*******************************************************************************
* CLAIMS PROCESSING.
******************************************************************************;
%LET DEPVAR11 = R13046;
%LET DEPVAR12 = R13047;

*******************************************************************************
* RATING ALL HEALTH CARE: 0 - 10.
******************************************************************************;
%LET DEPVAR13 = R13018;
```

```
******************************************************************************
* RATING OF HEALTH PLAN: 0 - 10.
******************************************************************************;
%LET DEPVAR14 = R13048;


******************************************************************************
* RATING OF PERSONAL DR: 0 - 10.
******************************************************************************;
%LET DEPVAR15 = R13027;


******************************************************************************
* SPECIALITY CARE: 0 - 10.
******************************************************************************;
%LET DEPVAR16 = R13031;



proc freq data=in1.group8;   /*MJS 01/23/04 Changed data set*/
   tables cacsmpl /missing list out=skelcat(keep=cacsmpl);
run;
data skelcat;
   set skelcat;
   if cacsmpl = " " then delete;
run;

/*RSG 02/2005 - put in hard code for skelreg vs. doing freq on data
                since xservreg is not in data and must be coded*/

/* MER 11/11/2012, Changed from 24 to 30 Regions */
DATA SKELREG;
   INPUT XSERVREG;
   DATALINES;
      1
      2
      3
      4
      5
      6
      7
      8
      9
      10
      11
      12
      13
      14
      15
      16
      17
      18
      19
      20
      21
      22
      23
      24
      25
      26
      27
      28
      29
      30
;
RUN;


 %MACRO SCORE1;
 *******************************************;
 *     use this macro for groups 1, 2 & 5    *;
 *     catchment variables are to be used    *;
 *******************************************;
 %PUT *******************************************;
 %PUT STARTING MACRO SCORE1;
```

```
 %PUT "GROUP    = " GROUP&IGRP;
 %PUT "TITLE    = " &&DEPVAR&IVAR  &&TITL&IGRP;
 %PUT "DEP_VAR  = " &&DEPVAR&IVAR;
 %PUT "IND_VAR1 = " &IND_VAR1;
 %PUT "IND_VAR2 = " &IND_VAR2;
 %PUT "IND_VAR3 = " &IND_VAR3;
 %PUT "WGT      = " &WGT;
 %PUT **************************************;


 *---------------------------------------------------;
 * If the current group is 1 use the skeleton files;
 * else used the previous groups output file;
 * The mrgfile is added to by each subgroup;
 *---------------------------------------------------;
 %LET CMRGFILE = OUT.C_&&DEPVAR&IVAR;
 %IF "&IGRP" = "1" %THEN %LET CMRGFILE = SKELCAT;



 * run regression using the catchment level variables;
 * output a BETA file (1 record) and the subgroup;
 * file with residuals attached (many records);
 PROC REG DATA = GROUP&IGRP OUTEST=BETAS;
      TITLE2 "Regression Model on catchment areas";
      TITLE3 "Beneficiary group&igrp: &&TITL&IGRP";
      WEIGHT &WGT;
      %INCLUDE 'REGRSCAT.INC';
      OUTPUT OUT = OUT2.H&IGRP&&DEPVAR&IVAR(KEEP=MPRID &WGT TMP_CELL
                        PRED&IGRP RESID&IGRP CACSMPL XSERVREG &&DEPVAR&IVAR)
              P = PRED&IGRP
              R = RESID&IGRP;
 RUN;



 * print of HCSDB file with the residuals and predicted values;
 %IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=OUT2.H&IGRP&&DEPVAR&IVAR (OBS=70);
         TITLE2 "OUT2.H&IGRP&&DEPVAR&IVAR:  file with PRED&IGRP and RESID&IGRP";
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
         VAR MPRID XSERVREG CACSMPL &&DEPVAR&IVAR RESID&IGRP PRED&IGRP;
    RUN;

     PROC PRINT DATA=BETAS;
         TITLE2 "BETAS:  file with coefficients";
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
 %END;



 *--------------------------------;
 *-- get the standard err/variance;
 *--------------------------------;
 %LET DEP = &&DEPVAR&IVAR;
 %C_SUDAAN(OUT2.H&IGRP&&DEPVAR&IVAR);


 * calculate prelim adjusted scores for the risk-adjusters;
 * merge adjuster means with the adjuster coefficients;
 * then sum their products. Finally add in the intercept;
 DATA ADJUST;
      SET MEANFILE;     * CREATED IN THE MACRO  MAKE_DAT;
      IF _N_ = 1 THEN SET BETAS(DROP = _TYPE_);
      %INCLUDE 'RISKARRY.INC';
      %INCLUDE 'RISKMEAN.INC';
      DO I = 1 TO DIM(COEFFS);
        IF COEFFS(I) = . THEN COEFFS(I) = 0;
        IF MEANS(I) = . THEN MEANS(I) = 0;
        ADJUST + ( COEFFS(I) * MEANS(I) );
      END;
      ADJUST = ADJUST + INTERCEPT;
 RUN;


 %IF &DEBUGFLG > 0  %THEN %DO;
```

```
   PROC PRINT DATA=ADJUST;
        TITLE2 'Print of ADJUST';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;


* add the catchment coefficients to the adjusted value from above;
* output one record per catchment area with the catchment;
* level adjusted scores;
DATA COEFFCAC(KEEP=CATAREA NEWADJST);
   SET ADJUST;
   %INCLUDE 'CATARRAY.INC';
   LENGTH NAME $8;
   DO I=1 TO DIM(CATRHS);
     CALL VNAME(CATRHS(I),NAME);
     CATAREA=INPUT(SUBSTR(NAME,4,4),4.);
     IF CATRHS(I) = . THEN CATRHS(I) = 0;
     NEWADJST=ADJUST + CATRHS(I);
     OUTPUT;
   END;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=COEFFCAC;
        TITLE2 'COEFFCAC: Catchment Area Adjusted Scores';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


 * sum of wgts per catchment areas;
 * attach the region id to the output file so;
 * so we can create wgts for each region later;
 PROC MEANS DATA=GROUP&IGRP NWAY NOPRINT ;
   ID    XSERVind ;  * important ;
   CLASS CACSMPL ;
   VAR   &WGT;
   OUTPUT OUT=CAT_WGTS(RENAME=(CACSMPL=CATAREA)) N=CATCNT SUM=CATWGT;
 RUN;


* merge the Coeffcac file with the catchment;
* adjusted scores to the catchment level weight;
* merge by the catchment area. creates a;
* catchment level file with catchment weights;
 DATA COEFFCAC;
   MERGE COEFFCAC(IN=IN1)
         CAT_WGTS(IN=IN2 KEEP=CATAREA XSERVind CATWGT CATCNT);
   BY CATAREA;
   IF IN1;
 RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=CAT_WGTS(OBS=70);
        TITLE2 'CAT_WGTS: Catchment Area Sum of WGTS';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFCAC(OBS=70);
        TITLE2 'Catchment Area Adjusted Scores - with sum of wgts and region';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

%END;


* merge the previous groups catchment results (if any);
* with the catchment level std err and the catchment;
* level results from the current groups and dependent var;
```

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```
%PUT "&CMRGFILE: " &CMRGFILE;
DATA OUT.C_&&DEPVAR&IVAR(RENAME=(NEWADJST=ADJ&IGRP));
     MERGE &CMRGFILE(IN=INS)
           C&IGRP&&DEPVAR&IVAR
           COEFFCAC(RENAME=(CATAREA=CACSMPL CATWGT=CATWGT&IGRP CATCNT=CATCNT&IGRP));
     BY CACSMPL;
     DEPENDNT = "&&DEPVAR&IVAR";
     IF INS;
RUN;

PROC PRINT DATA=OUT.C_&&DEPVAR&IVAR;
     TITLE2 "Print of Catchment variables in C_&&DEPVAR&IVAR";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
RUN;




%MEND SCORE1;




%MACRO SCORE2;
 **************************************;
 * use this macro for groups 3, 4, 6, 7;
 * region variables are to be used      ;
 **************************************;
 %PUT ***************************************;
 %PUT STARTING MACRO SCORE2;
 %PUT "GROUP    = " GROUP&IGRP;
 %PUT "TITLE    = " &&DEPVAR&IVAR  &&TITL&IGRP;
 %PUT "DEP_VAR  = " &&DEPVAR&IVAR;
 %PUT "IND_VAR1 = " &IND_VAR1;
 %PUT "IND_VAR2 = " &IND_VAR2;
 %PUT "IND_VAR3 = " &IND_VAR3;
 %PUT "WGT      = " &WGT;
 %PUT ***************************************;

 %LET RMRGFILE = OUT.R_&&DEPVAR&IVAR;
 %IF "&IGRP" = "1" %THEN %LET RMRGFILE = SKELREG;

* run regression using the region level variables;
* output a BETA file (1 record) and the subgroup;
* file with residuals attached (many records);
PROC REG DATA = GROUP&IGRP OUTEST=BETAS;
     TITLE2 "Regression Model for GROUP&igrp for regions";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
     WEIGHT &WGT;
     %INCLUDE 'REGRSREG.INC';
     OUTPUT OUT = OUT2.H&IGRP&&DEPVAR&IVAR(KEEP=MPRID &WGT TMP_CELL
                      PRED&IGRP RESID&IGRP CACSMPL XSERVREG &&DEPVAR&IVAR)
            P = PRED&IGRP
            R = RESID&IGRP;

RUN;

* print of HCSDB file with the residuals and predicted values;
%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=OUT2.H&IGRP&&DEPVAR&IVAR (OBS=70);
        TITLE2 "OUT2.H&IGRP&&DEPVAR&IVAR:  file with predicted values and the RESID&IGRP";
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
        VAR MPRID XSERVREG CACSMPL &&DEPVAR&IVAR RESID&IGRP PRED&IGRP;
    RUN;

    PROC PRINT DATA=BETAS;
        TITLE2 "BETAS:  file with coefficients";
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


*----------------------------------------;
*----- get the standard err/variance ----;
```

```
*-----------------------------------------;
%LET DEP = &&DEPVAR&IVAR;
%R_SUDAAN(OUT2.H&IGRP&&DEPVAR&IVAR);



* calculate prelim adjusted scores for the risk-adjusters;
* merge adjuster means with the adjuster coefficients;
* then sum their products. Finally add in the intercept;
 DATA ADJUST;
     SET MEANFILE;
     IF _N_ = 1 THEN SET BETAS(DROP = _TYPE_);
     %INCLUDE 'RISKARRY.INC';
     %INCLUDE 'RISKMEAN.INC';
     DO I = 1 TO DIM(COEFFS);
         IF COEFFS(I) = . THEN COEFFS(I) = 0;
         IF MEANS(I) = .  THEN MEANS(I)  = 0;
         ADJUST + ( COEFFS(I) * MEANS(I) );
     END;
     ADJUST = ADJUST + INTERCEPT;
 RUN;



* add the region coefficients to the adjusted value from above;
* output one record per region with the region;
* level adjusted scores;
 DATA COEFFREG(KEEP=XSERVREG NEWADJST);
     SET ADJUST;
     %INCLUDE 'REGARRAY.INC';
     LENGTH NAME $8;
     DO I=1 TO DIM(REGRHS);
         CALL VNAME(REGRHS(I),NAME);
         XSERVREG=INPUT(SUBSTR(NAME,4,2),2.);
         IF REGRHS(I) = . THEN REGRHS(I) = 0;
         NEWADJST=ADJUST + REGRHS(I);
         OUTPUT;
     END;
RUN;



* sum of wgts for each region;
PROC MEANS DATA=GROUP&IGRP NWAY NOPRINT ;
  CLASS XSERVREG;
  VAR   &WGT;
  OUTPUT OUT=REG_WGTS (DROP = _TYPE_ _FREQ_) N=REGCNT SUM=REGWGT;
RUN;



* merge the COEFFREG file with the region;
* adjusted scores to the region level total weight;
* merge by the region.  Creates a region level;
* file with the total sample weight of the region;
DATA COEFFREG;
      MERGE COEFFREG(IN=IN1)
            REG_WGTS(IN=IN2   KEEP=XSERVREG REGCNT REGWGT);
      BY XSERVREG;
      IF IN1;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=MEANFILE;
         TITLE2 'Print of MEANFILE';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=ADJUST;
         TITLE2 'Print of ADJUST';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
         TITLE2 'Print of COEFFREG: Region Adjusted Scores';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
```

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```
    RUN;

    PROC PRINT DATA=REG_WGTS;
         TITLE2 'Print of REG_WGTS: Region Area Sum of WGTS';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
         TITLE2 'Print of COEFFREG: Regions Adjusted Scores - with sum of wgts and region';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


* Calculate region level adjusted scores from the;
* region level adjusted scores in COEFFREG;
/*PROC MEANS DATA=COEFFREG NWAY NOPRINT;
  WEIGHT REGWGT;
  CLASS  XSERVREG;
  VAR    NEWADJST;
  OUTPUT OUT=REGFILE1 (DROP = _TYPE_ _FREQ_) MEAN=ADJ&IGRP;
RUN;
*/

%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=REGFILE1;
        TITLE2 'Print of REGFILE1: Region Scores';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;


* merge the previous groups regional results (if any);
* with the region level std err and the region;
* level results from the current group/dependent var;
%PUT "&RMRGFILE: " &RMRGFILE;
DATA OUT.R_&&DEPVAR&IVAR;
    MERGE &RMRGFILE(IN=INS)
          R&IGRP&&DEPVAR&IVAR     /*KRR - removed perm dataset ref to OUT2 */
          coeffreg(rename=(newadjst=adj&igrp));
    BY XSERVREG;
    RENAME REGCNT = REGCNT&IGRP;
    RENAME REGWGT = REGWGT&IGRP;
    DEPENDNT = "&&DEPVAR&IVAR";
    IF INS;
RUN;

PROC PRINT DATA=OUT.R_&&DEPVAR&IVAR;
     TITLE2 "Print of REGION variables in &&DEPVAR&IVAR";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
RUN;



 %MEND SCORE2;


 *
;
 %MACRO MAKE_INC;
 **************************************;
 * creates include files for later Procs;
 * Needs to be run each time.  Called   ;
 * in the outer (beneficiary loop).     ;
 * I chose this method because it was   ;
 * clearer(to me at least).             ;
 * This macro needs to be run once per  ;
 * Dep var per subgroup.                ;
 **************************************;

* Drop records where the dependent var is missing;
* Drop records with missing catchment or region values;
```

```
   DATA GROUP&IGRP;
        SET IN1.GROUP&IGRP;
        IF &&DEPVAR&IVAR NOT = .;

   RUN;

 DATA _NULL_;
        SET GROUP&IGRP END = EOF;
        IF &&DEPVAR&IVAR NOT = .;

        ARRAY AGECNT(7) 8 aCNT1 - aCNT7;
        RETAIN AGECNT 0;
        RETAIN CNT 0;
        ARRAY AGENAM(7)  $8 AGENAM1 - AGENAM7;
        ARRAY AGENAMX(7) $8 AGENAMX1 - AGENAMX7;
        RETAIN AGENAM;
        RETAIN AGENAMX;
        ARRAY CATCNT(9998) 8 CCNT0001 - CCNT9998;
        ARRAY REGCNT(30)   8 REGCNT01 - REGCNT30; *KRR 10/24/2006 - Changed from 16 to 24; *MER
11/11/2012, Changed from 24 to 30;
        RETAIN CATCNT 0;
        RETAIN REGCNT 0;

        * create a name array for the age dummies;
        IF _N_ = 1 THEN DO;
           AGENAM(1) = "AGE1824";
           AGENAM(2) = "AGE2534";
           AGENAM(3) = "AGE3544";
           AGENAM(4) = "AGE4554";
           AGENAM(5) = "AGE5564";
           AGENAM(6) = "AGE6574";
           AGENAM(7) = "AGE75UP";
        END;

        * total record count;
        CNT + 1;

        * count records in each age group;
        * we will use only age groups with more;
        * than 2 obs;
        IF AGE1824 = 1 THEN AGECNT(1) + 1;
        IF AGE2534 = 1 THEN AGECNT(2) + 1;
        IF AGE3544 = 1 THEN AGECNT(3) + 1;
        IF AGE4554 = 1 THEN AGECNT(4) + 1;
        IF AGE5564 = 1 THEN AGECNT(5) + 1;
        IF AGE6574 = 1 THEN AGECNT(6) + 1;
        IF AGE75UP = 1 THEN AGECNT(7) + 1;

        * count records in each catchment group;
        * we will only use catchment areas ;
        * with more than than 2 obs;
        * I am using the catchment area as the subscript;
        * to make the code simpler and more readable;
        IF CACSMPL >= 1 AND CACSMPL <= 9998 THEN DO;
           CATCNT(CACSMPL) = CATCNT(CACSMPL) + 1;
        END;

        * count records in each REGION group;
        * we will only use REGIONS ;
        * with more than than 2 obs;
        * I am using the region value as the subscript;
        * to make the code simpler and more readable;
        IF XSERVREG >= 1 AND XSERVREG <=30  THEN DO; *KRR 10/24/2006 - Changed from 16 to 24; *MER
11/11/12 24 to 30;
           REGCNT(XSERVREG) = REGCNT(XSERVREG) + 1;
        END;

        IF EOF THEN GOTO ENDFILE;
        RETURN;
```

```
   ENDFILE:
       * create a title common to all procs in the current group;
       TITLE  " &&DEPVAR&IVAR  &&TITL&IGRP";

       * display counts in the log;
       %IF &DEBUGFLG > 0  %THEN %DO;
          PUT ' ';
          PUT 'AT EOF:';
          PUT "TOTAL CNT = "    CNT;
          PUT AGENAM(1) "  " AGECNT(1)=;
          PUT AGENAM(2) "  " AGECNT(2)=;
          PUT AGENAM(3) "  " AGECNT(3)=;
          PUT AGENAM(4) "  " AGECNT(4)=;
          PUT AGENAM(5) "  " AGECNT(5)=;
          PUT AGENAM(6) "  " AGECNT(6)=;
          PUT AGENAM(7) "  " AGECNT(7)=;
          PUT " ";

          DO I = 1 TO 30; *KRR 10/24/2006 - Changed from 16 to 24; *MER 11/11/12 24 to 30;
             IF(REGCNT(I) > 0) THEN DO;
                PUT  'REG' I Z2. REGCNT(I) 6.;
             END;
          END;
          PUT ' ';

          DO I = 1 TO 9998;
             IF(CATCNT(I) > 0) THEN DO;
                PUT  'CAT' I Z4. CATCNT(I) 6.;
             END;
          END;
          PUT ' ';
       %END;    *** of debug test;


       *---------------------------------------------------------;
       * create an include file for the regression model;
       * it is inconvient, but SAS requires that the;
       * include file start after a complete statement;
       * i.e. after a semicolon;
       * This include is for the regression using catchment areas;
       FILE 'REGRSCAT.INC';
       PUT @6  "MODEL &&DEPVAR&IVAR = ";
       IF "&IND_VAR1" NE "" THEN PUT @12 "&IND_VAR1"; /* KRR - only output when present */
       IF "&IND_VAR2" NE "" THEN PUT @12 "&IND_VAR2"; /* KRR - only output when present */
       IF "&IND_VAR3" NE "" THEN PUT @12 "&IND_VAR3"; /* KRR - only output when present */

       CNT2 = 0;
       * setup an array of those age groups that have > 1 obs;
       DO I = 1 TO 7;
          IF AGECNT(I) > 1 THEN DO;
             CNT2 +1;
             AGENAMX(CNT2) = AGENAM(I);
          END;
       END;
       * drop the last category to create;
       * an omitted category which is required;
       * to solve the regression properly;
       DO I = 1 TO CNT2-1;
          PUT @12 AGENAMX(I);
       END;


       * ditto for the catchment areas with > 0 obs;
       * in this case we drop the last non-zero cnt;
       * this is not consistent with Portias code which;
       * unintentionally omitted several catchment area codes;
       LAST_REC = 0;
       DO I = 1 TO 9998;
          IF CATCNT(I) > 0 THEN LAST_REC = I;
       END;

       * skip the last cacsmpl with > 1 obs;
       DO I = 1 TO LAST_REC-1;
```

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```
      IF CATCNT(I) > 0 THEN DO;
          PUT @12 'CAT' I Z4.;
      END;
   END;
   PUT @11 ';';


   *-----------------------------------------------------------;
   * This include is for the regression using regions;
   * in this case we drop the last REGION;
   FILE 'REGRSREG.INC';
   PUT @6  "MODEL  &&DEPVAR&IVAR = ";
   IF "&IND_VAR1" NE "" THEN PUT @12 "&IND_VAR1"; /* KRR - only output when present */
   IF "&IND_VAR2" NE "" THEN PUT @12 "&IND_VAR2"; /* KRR - only output when present */
   IF "&IND_VAR3" NE "" THEN PUT @12 "&IND_VAR3"; /* KRR - only output when present */

   CNT2 = 0;
   * setup an array of those age groups that have > 1 obs;
   DO I = 1 TO 7;
      IF AGECNT(I) > 1 THEN DO;
          CNT2 +1;
          AGENAMX(CNT2) = AGENAM(I);
      END;
   END;

   * now drop the last category to create;
   * an omitted category which is required;
   * to solve the regression properly;
   DO I = 1 TO CNT2-1;
      PUT @12 AGENAMX(I);
   END;

   * ditto for the catchment areas with > 0 obs;
   * in this case we drop the the first USABLE category;
   * this is not consistent with the catchment area code;
   * but this is the method that Portia used;
   FIRST = 0;          *KRR 10/24/2006 - Changed from 16 to 24; *MER 11/11/12 - 24 to 30;
   DO I = 1 TO 30;    * skip the 1st region with 1+ obs;
      IF REGCNT(I) > 0 THEN DO;
          IF FIRST = 1 THEN PUT @12 'REG' I Z2.;
          FIRST = 1;
      END;
   END;
   PUT @11 ';';


   *-----------------------------------------------------------;
   * now create the complete var statement;
   * for the Proc MEANS used to replace the;
   * independent variables missing values;
   * we assume the age groups will always be used;
   * These are also called the RISK FACTORS;
   FILE 'RISKVARS.INC';
   PUT @10  "VAR";
   DO I = 1 TO CNT2;
      PUT @12 AGENAMX(I);
   END;

   * not all the other dependent variables will be used;
   * only write them out if they are not null;
   CNT3 = 0;
   IF "&IND_VAR1" NE "" THEN DO;
       CNT3 + 1;
       PUT @12 "&IND_VAR1";
   END;

   IF "&IND_VAR2" NE "" THEN DO;
       CNT3 + 1;
       PUT @12 "&IND_VAR2";
   END;

   IF "&IND_VAR3" NE "" THEN DO;
       CNT3 + 1;
```

```
            PUT @12 "&IND_VAR3";
        END;
        PUT @11 ';';


        *--------------------------------------------------------;
        * create an ARRAY statement of the desired risk factors;
        * called adjusters in the specs and in the code;
        FILE 'RISKARRY.INC';
        PUT @10  "ARRAY COEFFS(*) $8";
        DO I = 1 TO CNT2;
            PUT @12 AGENAMX(I);
        END;

        CNT3 = 0;
        IF "&IND_VAR1" NE "" THEN DO;
            CNT3 + 1;
            PUT @12 "&IND_VAR1";
        END;

        IF "&IND_VAR2" NE "" THEN DO;
            CNT3 + 1;
            PUT @12 "&IND_VAR2";
        END;

        IF "&IND_VAR3" NE "" THEN DO;
            CNT3 + 1;
            PUT @12 "&IND_VAR3";
        END;
        PUT @11 ';';


        *--------------------------------------------------------;
        * create an ARRAY of mean names for the output;
        * from a proc MEANS of the Risk Factors in RISKARRY;
        FILE 'RISKMEAN.INC';
        IND_CNT = CNT2 + CNT3;
        PUT @6 "ARRAY MEANS(*) $8";
        DO I = 1 TO IND_CNT;
            PUT @12 "MEAN" I Z2.;
        END;
        PUT @11 ';';
    *   ---------------------------------------------------;
    *   create the equivalent of the following statement;
    *   OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN=MEAN1-MEAN&MEAN_CNT;
        FILE 'MEANFILE.INC';
        PUT @6 "OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN = ";
        DO I = 1 TO IND_CNT;
            PUT @12 "MEAN" I Z2.;
        END;
        PUT @11 ';';

        *--------------------------------------------------------;
        * create a catchment area array for all catchment areas;
        * with 1+ obs.
        * the missing value = 9999 was dropped in STEP1;  ** rlc 4/29/00;
        FILE 'CATARRAY.INC';
        PUT @10  "ARRAY CATRHS(*) $8";
        DO I = 1 TO 9998;              *** rlc 4/29/00 changed "9999" to "9998";
           IF CATCNT(I) > 0 THEN DO; *** ems 7/12/00 changed "> 1" to "> 0";
               PUT  @16 'CAT' I Z4.;
           END;
        END;
        PUT @11 ';';

        *--------------------------------------------------------;
        * create a region area array;
        * with at least ONE obs;
        FILE 'REGARRAY.INC';
        PUT @10  "ARRAY REGRHS(*) $8";
        DO I = 1 TO 30; *KRR 10/24/2006 – Changed from 16 to 24; *MER 11/11/12 24 to 30;
           IF REGCNT(I) > 0 THEN DO; *** ems 7/12/00 changed "> 1" to "> 0";
```

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```
            PUT  @16 'REG' I Z2.;
         END;
      END;
      PUT @11 ';';
 file print;
 RUN;


 * Create the means of the adjuster variables;
 * They will be used to replace missing adjuster variables;
 * calculate weighted means;
 PROC MEANS DATA=group&igrp;

    WEIGHT &WGT;
    %INCLUDE 'RISKVARS.INC';
    %INCLUDE 'MEANFILE.INC';
     RUN;

DATA GROUP&IGRP;
      SET GROUP&IGRP;
      IF _N_ = 1 THEN SET MEANFILE;
      %INCLUDE 'RISKARRY.INC';
      %INCLUDE 'RISKMEAN.INC';
      DO I = 1 TO DIM(COEFFS);
         IF COEFFS(I) = . THEN DO;
            COEFFS(I) = MEANS(I);
         END;
      END;
RUN;

%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=MEANFILE;
        TITLE2 "Print of MEANFILE for Risk Adjuster variables";
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;




 %MEND MAKE_INC;



 *
;
 %MACRO R_SUDAAN(INFILE);
 ****************************************************;
 * use this macro to create standard err (variances);
 * FOR: REGIONS                                     ;
 ****************************************************;
 %PUT **************************************;
 %PUT STARTING MACRO R_SUDAAN (REGIONS);
 %PUT **************************************;



DATA &INFILE;
   SET &INFILE;
   IF XSERVREG > 0;
RUN;


* Sort data by TMP_CELL;
PROC SORT DATA=&INFILE;
   BY TMP_CELL;
RUN;

%IF &DEBUGFLG > 5  %THEN %DO;
   PROC PRINT DATA=&INFILE(OBS=5);
        TITLE2 'Print of the input file to SUDAAN (REGION)';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;
```

```
* Calculate values for regions;
PROC DESCRIPT DATA=&INFILE DESIGN=STRWR NOPRINT;
    WEIGHT &WGT;
    SETENV DECWIDTH=4;
    NEST TMP_CELL / missunit;
    VAR RESID&IGRP;
    TABLES XSERVREG;
    SUBGROUP XSERVREG;
    LEVELS 30; *KRR 10/24/2006 - Changed from 16 to 24; *MER 11/11/12 24 to 30;
    OUTPUT  SEMEAN
          / TABLECELL=DEFAULT REPLACE
            FILENAME=RS&DEP;
    RUN;

    DATA R&IGRP&&DEPVAR&IVAR;
        SET RS&DEP;
        KEEP XSERVREG SEMEAN;
        IF SEMEAN NE .;
        RENAME SEMEAN = SEMEAN&IGRP;
    RUN;


    PROC PRINT DATA=R&IGRP&&DEPVAR&IVAR;
       TITLE2 "Print REGION DESCRIPT DATA=R&IGRP&&DEPVAR&IVAR";
       TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

 %MEND  R_SUDAAN;


 %MACRO C_SUDAAN(INFILE);
 *****************************************************;
 * use this macro to create standard err (variances);
 * FOR: CATCHMENT AREAS                             ;
 *****************************************************;
 %PUT ***************************************;
 %PUT STARTING MACRO C_SUDAAN (CATCHMENT);
 %PUT ***************************************;

DATA &INFILE;
    SET &INFILE;
    IF CACSMPL > 0;
RUN;


* Sort data by TMP_CELL;
PROC SORT DATA=&INFILE;
    BY TMP_CELL;
RUN;

%IF &DEBUGFLG > 5  %THEN %DO;
    PROC PRINT DATA=&INFILE(OBS=5);
        TITLE2 'Print of the input file to SUDAAN for CATCHMENT';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


* Calculate values for regions;
PROC DESCRIPT DATA=&INFILE DESIGN=STRWR NOPRINT;
    WEIGHT &WGT;
    SETENV DECWIDTH=4;
    NEST TMP_CELL / missunit;
    VAR RESID&IGRP;
    TABLES CACSMPL;
    SUBGROUP CACSMPL;
    LEVELS 9998;
    OUTPUT  SEMEAN
          / TABLECELL=DEFAULT REPLACE
            FILENAME=CS&DEP;
    RUN;
```

```
   DATA C&IGRP&&DEPVAR&IVAR;
        SET CS&DEP;
        IF SEMEAN NE .;
        KEEP CACSMPL SEMEAN;
        RENAME SEMEAN = SEMEAN&IGRP;
   RUN;


   PROC PRINT DATA=C&IGRP&&DEPVAR&IVAR;
      TITLE2 "Print CATCHMENT DESCRIPT DATA=C&IGRP&&DEPVAR&IVAR";
      TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;

 %MEND  C_SUDAAN;


 *
;
%*********************************;
%*  call the macros;
%*********************************;

%MACRO MAINLOOP(MIN_VAR,MAX_VAR,MIN_GRP,MAX_GRP);
     %* loop over the set of dependent variables;
        %DO IVAR = &MIN_VAR %TO &MAX_VAR;
           %DO IGRP = &MIN_GRP %TO &MAX_GRP;
              %MAKE_INC;
              %IF &IGRP = 1 OR &IGRP = 2 OR &IGRP = 5 or &igrp = 8 %THEN %do;
                 %SCORE1;
                 %SCORE2; %end;
              %ELSE
                 %SCORE2;
           %END;
        %END;

%MEND;

%MAINLOOP(&MIN_VAR,&MAX_VAR,&MIN_GRP,&MAX_GRP);
```

G.9.D   ReportCards\CAHPS_Adult2013\REGRSREG.INC - Include file1 in step2.sas.

```
MODEL  R13031 =
       R13065
       AGE1824
       AGE2534
       AGE3544
       AGE4554
       REG02
       REG03
       REG04
       REG05
       REG06
       REG07
       REG08
       REG09
       REG11
       REG12
       REG13
       REG14
       REG16
       REG17
       REG18
       REG19
       REG21
       REG22
       REG23
       REG24
       REG26
       REG28
       REG29
       ;
```

G.9.E   ReportCards\CAHPS_Adult2013\RISKARRY.INC - Include file2 in step2.sas.

```
ARRAY COEFFS(*) $8
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R13065
 ;
```

G.9.F   ReportCards\CAHPS_Adult2013\RISKMEAN.INC - Include file3 in step2.sas.

```
ARRAY MEANS(*) $8
       MEAN01
       MEAN02
       MEAN03
       MEAN04
       MEAN05
       MEAN06
     ;
```

G.9.G   ReportCards\CAHPS_Adult2013\REGARRAY.INC - Include file4 in step2.sas.

```
ARRAY REGRHS(*) $8
        REG01
        REG02
        REG03
        REG04
        REG05
        REG06
        REG07
        REG08
        REG09
        REG11
        REG12
        REG13
        REG14
        REG16
        REG17
        REG18
        REG19
        REG21
        REG22
        REG23
        REG24
        REG26
        REG28
        REG29
    ;
```

G.9.H   ReportCards\CAHPS_Adult2013\RISKVARS.INC - Include file5 in step2.sas.

```
VAR
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R13065
 ;
```

G.9.I ReportCards\CAHPS_Adult2013\MEANFILE.INC - Include file6 in step2.sas.

```
OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN =
      MEAN01
      MEAN02
      MEAN03
      MEAN04
      MEAN05
      MEAN06
   ;
```

G.9.J   ReportCards\CAHPS_Adult2013\COMPOSIT.SAS - Calculate CAHPS Composite Scores - Annual.

```
****************************************************************************
* Project:  DoD - Quarterly Adult Report Cards
* Program:  COMPOSIT.SAS
* Purpose:  Generate Quarterly Adult Report Card composite scores
* Requires: Programs STEP1Q.SAS and STEP2Q.SAS must be run prior
*           to this program.
*
* Modified: 1) 02/27/2001 By Keith Rathbun, Small changes to input DSNs to
*              accommodate the move of ALLSCORE.SAS functionality into the
*              STEP2Q.SAS program.
*           2) 01/08/2002 By Daniele Beahm, Changed versions in libname statements
*              so program can be run with SAS v8 and still produce SAS v612 datasets.
*           3) 04/10/2002 By Mike Scott, Updated variable names for 2002
*              survey.
*           4) 02/04/2004 By Mike Scott, Updated for the 2003 Annual Report.
*           5) 02/2004 By Regina Gramss, Updated for 2004 Annual Report.  Added
*              in conditions to avoid exponential of negative numbers.  In case
*              of negative trend, error list is printed out - composit.lst file
*              should be evaluated (search for "ERROR") to make sure number of
*              obs is less than 30 for those with negative trend (field: tv).
*           6) 01/2006 By Regina Gramss, updated for 2005.
*           7) 10/2006 By Keith Rathbun, updated for 2006. Use FWRWT.
*           8) 10/6/09 by Emma Ernst, updated for 2009 database.  Use annual weights
*           9) 09/07/10 by Mike Rudacille, updated for 2010 database.  Use annual weights
*          10) 10/07/11 by Mike Rudacille, updated for 2011 database.  Use annual weights
*          11) 08/06/12 by Amanda Kudis, updated for 2012 database.
*          12) 08/01/13 by Amanda Kudis, updated for 2013 database.
****************************************************************************;
OPTIONS NOCENTER NOFMTERR LS=132 PS=78 SOURCE SOURCE2 NOOVP COMPRESS=YES;
libname in  "data";
libname in2 "data\adulthatfiles";
libname out "data";


 %MACRO COMPOSIT (TYPE=,COMPOS=,VAR1=,VAR2=,VAR3=,VAR4=,QCOUNT=);

  DATA _NULL_;
   %IF "&TYPE" = "R" %THEN %DO;
       CALL SYMPUT ('BYVAR','XSERVREG');
   %END; %ELSE
   %IF "&TYPE" = "C" %THEN %DO;
       CALL SYMPUT ('BYVAR','CACSMPL');
   %END;

 ****************************************;
 *   Create a Composite Score           ;
 ****************************************;
 DATA _NULL_;
     FILE 'FILES.INC';
     PUT @6 'SET';
     IF "&VAR1" NE '' THEN PUT @8 "IN.&TYPE._&VAR1";
     IF "&VAR2" NE '' THEN PUT @8 "IN.&TYPE._&VAR2";
     IF "&VAR3" NE '' THEN PUT @8 "IN.&TYPE._&VAR3";
     IF "&VAR4" NE '' THEN PUT @8 "IN.&TYPE._&VAR4";
     PUT @8 ';';
 RUN;


 DATA COMPOS&COMPOS;
     LENGTH DEPENDNT $ 8;
     %INCLUDE 'FILES.INC';
     DEPENDNT = "&TYPE.COMPOS&COMPOS";
 RUN;

 PROC SORT DATA=COMPOS&COMPOS;
     BY &BYVAR;
 RUN;

 PROC PRINT DATA=COMPOS&COMPOS(OBS=60);
     TITLE "Print of COMPOS&COMPOS after sort";
```

```
    RUN;

  DATA COMPOS&COMPOS;
      SET COMPOS&COMPOS;
      BY &BYVAR;
    %IF "&TYPE" = "R" %THEN %DO;
        ARRAY N(*) REGCNT1 - REGCNT8;
        ARRAY W(*) REGWGT1 - REGWGT8;
        ARRAY TN(*) TOTCNT1 - TOTCNT8;
        ARRAY TW(*) TOTWGT1 - TOTWGT8;
    %END; %ELSE
    %IF "&TYPE" = "C" %THEN %DO;
        ARRAY N(*) CATCNT1 - CATCNT8;
        ARRAY W(*) CATWGT1 - CATWGT8;
        ARRAY TN(*) TOTCNT1 - TOTCNT8;
        ARRAY TW(*) TOTWGT1 - TOTWGT8;
    %END;
        ARRAY ADJ(*)    ADJ1 - ADJ8;
        ARRAY TOTADJ(*) TOTADJ1 - TOTADJ8;
        ARRAY AVGADJ(*) AVJADJ1 - AVJADJ8;
        RETAIN TOTADJ TN TW;
        RETAIN AVGADJ;

        IF FIRST.&BYVAR THEN DO;
            DO I = 1 TO DIM(TOTADJ);
                TOTADJ(I) = 0; TN(I)=0; TW(I)=0;
            END;
        END; DROP I;

        PUT ' ';
        PUT ' --- STARTING LOOP1: ' &BYVAR=;
        DO I = 1 TO DIM(TOTADJ);
            PUT I= ADJ(I)=;
            IF ADJ(I) NE . THEN DO;
                TOTADJ(I) = TOTADJ(I) + ADJ(I);
                TN(I)=TN(I)+N(I);
                TW(I)=TW(I)+W(I);
            END;
            PUT I= ADJ(I)= TOTADJ(I)=;
        END;


        PUT ' ';
        PUT ' --- STARTING LOOP2: ' &BYVAR=;
        IF LAST.&BYVAR THEN DO;
            DO I = 1 TO DIM(TOTADJ);
                PUT I= ADJ(I)= TOTADJ(I)= AVGADJ(I)=;
                AVGADJ(I) = TOTADJ(I)/&QCOUNT;
                adj(i)=avgadj(i);
                N(I)=TN(I)/&QCOUNT;
                W(I)=TW(I)/&QCOUNT;
            END;
            OUTPUT;
        END;

  RUN;

%do i=1 %to 8;
/* Collect Standard Errors and residuals from variables in composite */
 %if &type=R|(&i=1|&i=2|&i=5|&i=8) %then %do;
  %if &var1~= %then %do;
    %let n=r_&var1;
    %let m=s_&var1;

    data s_&var1(rename=(semean&i=s_&var1));
    set in.&type._&var1(keep=semean&i &byvar);
    proc sort; by &byvar;
    data r_&var1;

    set in2.h&i.&var1(rename=(resid&i=r_&var1));

    proc sort data=r_&var1; by mprid;
  %end;
```

```
    %if &var2~= %then %do;
     %let n=%str(&n r_&var2);
     %let m=%str(&m s_&var2);
     data s_&var2(rename=(semean&i=s_&var2));
     set in.&type._&var2(keep=semean&i &byvar);
     proc sort; by &byvar;
     data r_&var2;

     set in2.h&i.&var2(rename=(resid&i=r_&var2));

     proc sort data=r_&var2; by mprid;
    %end;
    %if &var3~= %then %do;
     %let n=%str(&n r_&var3);
     data s_&var3(rename=(semean&i=s_&var3));
     set in.&type._&var3(keep=semean&i &byvar);
     proc sort; by &byvar;
     data r_&var3;

     set in2.h&i.&var3(rename=(resid&i=r_&var3));

     proc sort data=r_&var3; by mprid;
     %let m=%str(&m s_&var3); %end;

   %if &var4~= %then %do;
     %let n=%str(&n r_&var4);
     data s_&var4(rename=(semean&i=s_&var4));
     set in.&type._&var4(keep=semean&i &byvar);
     proc sort; by &byvar;
     data r_&var4;

     set in2.h&i.&var4(rename=(resid&i=r_&var4));


     %let m=%str(&m s_&var4);
     proc sort data=r_&var4; by mprid;
    %end;
/* Merge residual files and estimate correlations */
   data infile;
   merge &n; by mprid;
   proc sort; by &byvar;
   proc corr  outp=outf noprint;
   by &byvar;
   var &n;
   weight cfwt;
   data outf;
   set outf; by &byvar;
   where _type_='CORR';
/*  sum standard error of a row variable times correlation times standard error of each column
variable, then sum sums and take square root, divide by number of variables */
   data final;
   merge &m outf; by &byvar;
   data final;
   set final; by &byvar;
   array r_val &n;
   array s_val &m;
   sde=0;
   do i=1 to dim(s_val);
    %do j=1 %to &qcount;
     if upcase(_name_)=upcase("R_&&var&j") then
     sde=sum(sde,r_val(i)*s_&&var&j*s_val(i));
    %end;
   end;
   run;

   data sefin&compos._&i errd;
   set final; by &byvar;
   if first.&byvar then tv=0;
   tv+sde;
   if last.&byvar then do;
/**RSG 02/2005 Changed to only do exponential if tv value is non-negative -
   those with negative trend is set aside to print out and determine whether from
   nonmissing data of 30 or more*/
```

```
     if tv >= 0 then sde&i=(tv**.5)/&qcount;
     else if tv <= 0 then do;
      output errd;
      sde&i=.;
     end;
     output sefin&compos._&i;
    end;
   run;
/**RSG 02/2005 Count how many nonmissing values are in the trend dataa
   to determine if negative trend is something to be concerned about*/
   proc means data=infile noprint;
   by &byvar;
   var &n;
   output out=missing (drop=_type_ _freq_) n=;
   data errd2;
   merge errd(in=a drop=&n) missing (in=b);
   by &byvar;
   if a;
   run;
   proc print data=errd2;
   var &byvar tv &n;
title "ERROR: NEGATIVE TREND FOR &N IN GROUP=&I. AND COMPOSE=&COMPOS";
   run;
title ' '; /*RSG 02/2005 blank out title for next loop*/

   %if &i=1 %then %do;
    data sefin&compos;
    set sefin&compos._1(keep=&byvar sde&i); by &byvar;
    rename sde&i=semean&i;
    run;
   %end;
   %else %do;
    data sefin&compos;
    merge sefin&compos sefin&compos._&i(keep=&byvar sde&i); by &byvar;
    rename sde&i=semean&i;
    run;
   %end;


 %end;
%end;

data out.&type.compos&compos;
merge compos&compos sefin&compos; by &byvar;
run;
PROC PRINT DATA=OUT.&TYPE.COMPOS&COMPOS;
     TITLE1 COMPTITL;
 RUN;
%MEND COMPOSIT;

*------------------------------------;
*-       set the parameters here     -;
*------------------------------------;
************************************;
*  call the macro for each composite;
************************************;   /*MJS 02/04/04*/
%COMPOSIT (type=R,compos=1,var1=R13029,var2=R13033,qcount=2);
%COMPOSIT (type=R,compos=2,var1=R13007,var2=R13010,qcount=2);
%COMPOSIT (type=R,compos=3,var1=R13021,var2=R13022,var3=R13023,var4=R13024,qcount=4);
%COMPOSIT (type=R,compos=4,var1=R13041,var2=R13042,qcount=2);
%COMPOSIT (type=R,compos=5,var1=R13046,var2=R13047,qcount=2);

%COMPOSIT (type=C,compos=1,var1=R13029,var2=R13033,qcount=2);
%COMPOSIT (type=C,compos=2,var1=R13007,var2=R13010,qcount=2);
%COMPOSIT (type=C,compos=3,var1=R13021,var2=R13022,var3=R13023,var4=R13024,qcount=4);
%COMPOSIT (type=C,compos=4,var1=R13041,var2=R13042,qcount=2);
%COMPOSIT (type=C,compos=5,var1=R13046,var2=R13047,qcount=2);
```

G.9.K   ReportCards\CAHPS_Adult2013\FILES.INC - Include file in composit.sas.

```
SET
  IN.C_R13046
  IN.C_R13047
  ;
```

G.10.A LOADWEB\LOADCAHP.SAS - Convert CAHPS Scores into WEB layout - Annual.

```
*****************************************************************************
*
* PROGRAM:  LOADCAHP.SAS
* TASK:     2007 DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Convert the CAHPS Scores Database into the WEB layout
*
* WRITTEN:  06/01/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 01/28/2002 BY KEITH RATHBUN, Updated to support the 2000 survey.
*           2) 01/07/2003 BY KEITH RATHBUN, Updated to support the 2002 survey.
*           3) 02/06/2004 BY MIKE SCOTT, Updated for the 2003 Annual Report.
*           4) 02/2005   BY REGINA GRAMSS, Updated for 2004 Annual Report. Change
*                          region variable to XSERVREG
*           5) 11/01/2006 BY KEITH RATHBUN, Updated for 2006 Annual Report.
*           6) 11/09/2007 BY KEITH RATHBUN, Updated for 2007 Annual Report.
*           7) 10/29/2008 BY MIKE RUDACILLE, Updated for 2008 Annual Report.
*           8) 10/6/09 by Emma Ernst, updated for 2009 annual report.
*           9) 09/07/10 by Mike Rudacille, updated for 2010 annual report.
*          10) 10/07/11 by Mike Rudacille, updated for 2011 annual report.
*          11) 08/01/11 by Amanda Kudis, updated for 2012 annual report.
*
* INPUTS:   1) CAHPS Individual and Composite data sets with adjusted scores
*
* OUTPUT:   1) LOADCAHP.sas7bdat - Combined CAHPS Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1.SAS - Recode questions and generate group files
*    - STEP2.SAS - Calculate individual adjusted scores for group 1-8
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*
* 2) The output file (LOADCAHP.sas7bdat) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
*****************************************************************************
* Assign data libraries and options
*****************************************************************************;
LIBNAME IN  "..\REPORTCARDS\CAHPS_ADULT2013\DATA";
LIBNAME OUT ".";
LIBNAME LIBRARY "..\..\DATA\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER NOFMTERR;

*****************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*****************************************************************************;
%INCLUDE "LOADCAHQ.INC";

*****************************************************************************
*****************************************************************************
*
* Process Macro Input Parameters:
*
* 1) QUESTION = Variable Question Name (DSN).
*    - For individual Questions it is the variable name
*    - For composite Questions it is called xCOMPOSn
*      where n = a predefined composite # and
*            x = R (Region) or C (Catchment)
* 2) TYPE = Type of Score (COMPOSITE or INDIVIDUAL)
* 3) REGCAT = Region/Catchment Area
*
*****************************************************************************
*****************************************************************************;
%MACRO PROCESS(QUESTION=,TYPE=,REGCAT=);
*****************************************************************************
* Assign value for BENTYPE composite year
```

```
*****************************************************************************;
%LET YEAR = 2013;

*****************************************************************************
* Assign prefix for weighted/unweighted count variables.
* Unweighted counts are REGCNTn or CATCNTn where n=group number.
* Weighted counts are REGWGTn or CATWGTn where n=group number.
*****************************************************************************;
%IF "&REGCAT" = "Region" %THEN %DO;
   %LET PREFIX = REG;
%END;
%ELSE %IF "&REGCAT" = "Catchment" %THEN %DO;
   %LET PREFIX = CAT;
%END;
%ELSE %DO;
   %PUT "ERROR: Invalid Type = &TYPE";
%END;


*****************************************************************************
*
* Convert the CAHPS individual Scores Record into WEB layout.
* There are 8 logical records (adjusted scores) per physical record:
*
* _____
*    Adjusted Score            Definitions
*    Group Number
* _____
* 1. Prime enrollees           XINS_COV IN (1,2,6) AND H08007>=2
* 2. Enrollees w/mil PCM       XENR_PCM IN (1,2,6) AND H08007>=2
* 3. Enrollees w/civ PCM       XENR_PCM = 3   AND H08007>=2
* 4. Nonenrollees              XINS_COV IN (3)
* 5. Active duty               BFGROUPP=1
* 6. Active duty dependents    BFGROUPP=2
* 7. Retirees and dependents   BFGROUPP IN (3,4)
* 8. All beneficiaries         All beneficiaries
*
*****************************************************************************;
DATA &QUESTION;
   SET IN.&QUESTION;

   LENGTH MAJGRP   $30;
   LENGTH REGION   $30;  /*RSG 02/2005 Increased length to accommodate new region*/
   LENGTH REGCAT   $42;   **MER 11/11/2012 - Changed REGION to be large enough for Joint Services;
   LENGTH BENTYPE  $50;
   LENGTH BENEFIT  $34;
   LENGTH TIMEPD   $5;  /*RSG 02/2005*/
   *****************************************************************;
   * Assign Region;
   *****************************************************************;
   %IF &REGCAT = Region %THEN %DO;
       REGION  = PUT(XSERVREG,SERVREGF.);
   %END;
   %ELSE %IF &REGCAT = Catchment %THEN %DO;
       REGION  = PUT(XSERVIND,SERVREGo.);
   %END;
   *****************************************************************;
   * Assign benefit and benefit type;
   *****************************************************************;
   IF "&TYPE" = "INDIVIDUAL" THEN DO;
      IF DEPENDNT IN("R13018", "R13048", "R13027", "R13031") THEN
         BENTYPE = "Composite";
      ELSE
            BENTYPE = PUT(DEPENDNT,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
      TIMEPD = "&YEAR";
   END;
   ELSE IF "&TYPE" = "COMPOSITE" THEN DO;
      BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
      TIMEPD = "&YEAR";
   END;
   ELSE PUT "ERROR: Invalid TYPE = &TYPE";
   *****************************************************************;
```

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```
* For now, Initialize Significance test to zero.;
********************************************************************;
SIG = 0;
********************************************************************;
* Assign Region/Catchment Area;
********************************************************************;
%IF &REGCAT = Region %THEN %DO;
   REGCAT = PUT(XSERVREG,SERVREGF.);
%END;
%ELSE %IF &REGCAT = Catchment %THEN %DO;
   REGCAT = PUT(CACSMPL,CACR.);
%END;
%ELSE %DO;
   PUT "ERROR: Invalid REGCAT = &REGCAT";
%END;
********************************************************************;
* 1 = Prime Enrollees   ;
********************************************************************;
MAJGRP = PUT(1,MAJGRPF.);
SCORE = ADJ1;
SEMEAN = SEMEAN1;
N_OBS = &PREFIX.CNT1;
N_WGT = &PREFIX.WGT1;
OUTPUT;
********************************************************************;
* 2 = Enrollees with military PCM  ;
********************************************************************;
MAJGRP = PUT(2,MAJGRPF.);
SCORE = ADJ2;
SEMEAN = SEMEAN2;
N_OBS = &PREFIX.CNT2;
N_WGT = &PREFIX.WGT2;
OUTPUT;
********************************************************************;
* 3 = Enrollees with civilian PCM  ;
********************************************************************;
%IF &REGCAT = Region %THEN %DO;
   MAJGRP = PUT(3,MAJGRPF.);
   SCORE = ADJ3;
   SEMEAN = SEMEAN3;
   N_OBS = &PREFIX.CNT3;
   N_WGT = &PREFIX.WGT3;
   OUTPUT;
%END;
********************************************************************;
* 4 = Non-enrolled beneficiaries    ;
********************************************************************;
%IF &REGCAT = Region %THEN %DO;
   MAJGRP = PUT(4,MAJGRPF.);
   SCORE = ADJ4;
   SEMEAN = SEMEAN4;
   N_OBS = &PREFIX.CNT4;
   N_WGT = &PREFIX.WGT4;
   OUTPUT;
%END;
********************************************************************;
* 5 = Active duty;
********************************************************************;
MAJGRP = PUT(5,MAJGRPF.);
SCORE = ADJ5;
SEMEAN = SEMEAN5;
N_OBS = &PREFIX.CNT5;
N_WGT = &PREFIX.WGT5;
OUTPUT;
********************************************************************;
* 6 = Active duty dependents;
********************************************************************;
%IF &REGCAT = Region %THEN %DO;
   MAJGRP = PUT(6,MAJGRPF.);
   SCORE = ADJ6;
   SEMEAN = SEMEAN6;
   N_OBS = &PREFIX.CNT6;
   N_WGT = &PREFIX.WGT6;
```

```
        OUTPUT;
    %END;
    **********************************************************************;
    * 7 = Retirees and dependents;
    **********************************************************************;
    %IF &REGCAT = Region %THEN %DO;
        MAJGRP = PUT(7,MAJGRPF.);
        SCORE = ADJ7;
        SEMEAN = SEMEAN7;
        N_OBS = &PREFIX.CNT7;
        N_WGT = &PREFIX.WGT7;
        OUTPUT;
    %END;
    **********************************************************************;
    * 8 = All Beneficiaries ;
    **********************************************************************;
    MAJGRP = PUT(8,MAJGRPF.);
    SCORE  = ADJ8;
    SEMEAN = SEMEAN8;
    N_OBS = &PREFIX.CNT8;
    N_WGT = &PREFIX.WGT8;
    OUTPUT;

KEEP MAJGRP
     REGION
     REGCAT
     BENTYPE
     BENEFIT
     TIMEPD
     SCORE
     SEMEAN
     N_OBS
     N_WGT
     SIG
    ;
RUN;

%MEND;

***************************************************************************;
* COMPOSITE # 1.;
* GETTING NEEDED CARE VARIABLES.;
***************************************************************************;
%PROCESS(QUESTION=RCOMPOS1,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R13029,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R13033,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS1,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R13029,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R13033,TYPE=INDIVIDUAL,REGCAT=Catchment);


***************************************************************************;
* COMPOSITE # 2.;
* GETTING CARE QUICKLY VARIABLES.;
***************************************************************************;
%PROCESS(QUESTION=RCOMPOS2,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R13007,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R13010,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS2,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R13007,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R13010,TYPE=INDIVIDUAL,REGCAT=Catchment);



***************************************************************************;
* COMPOSITE # 3.;
* HOW WELL DOCTORS COMMUNICATE.;
***************************************************************************;
%PROCESS(QUESTION=RCOMPOS3,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R13021,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R13022,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R13023,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R13024,TYPE=INDIVIDUAL,REGCAT=Region);
```

```
%PROCESS(QUESTION=CCOMPOS3,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R13021,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R13022,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R13023,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R13024,TYPE=INDIVIDUAL,REGCAT=Catchment);


*************************************************************************;
* COMPOSITE # .;
* COURTEOUS AND HELPFUL OFFICE STAFF.;
*************************************************************************;



*************************************************************************;
* COMPOSITE # 4.;
* CUSTOMER SERVICE.;
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS4,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R13041,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R13042,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS4,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R13041,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R13042,TYPE=INDIVIDUAL,REGCAT=Catchment);


*************************************************************************;
* COMPOSITE # 5.;
* CLAIMS PROCESSING.;
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS5,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R13046,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R13047,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS5,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R13046,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R13047,TYPE=INDIVIDUAL,REGCAT=Catchment);


*************************************************************************;
* INDIVIDUAL # 1.;
* RATING OF ALL HEALTH CARE: 0 - 10.;
*************************************************************************;
%PROCESS(QUESTION=R_R13018,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=C_R13018,TYPE=INDIVIDUAL,REGCAT=Catchment);


*************************************************************************;
* INDIVIDUAL # 2.;
* RATING OF HEALTH PLAN: 0 - 10.;
*************************************************************************;
%PROCESS(QUESTION=R_R13048,TYPE=INDIVIDUAL,REGCAT=Region)
%PROCESS(QUESTION=C_R13048,TYPE=INDIVIDUAL,REGCAT=Catchment)


*************************************************************************;
* INDIVIDUAL # 3.;
* RATING OF PERSONAL DOCTOR: 0 - 10.;
*************************************************************************;
%PROCESS(QUESTION=R_R13027,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=C_R13027,TYPE=INDIVIDUAL,REGCAT=Catchment);


*************************************************************************;
* INDIVIDUAL # 4.;
* SPECIALTY CARE: 0 - 10.;
*************************************************************************;
%PROCESS(QUESTION=R_R13031,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=C_R13031,TYPE=INDIVIDUAL,REGCAT=Catchment);


*************************************************************************;
*************************************************************************;
* STACK up all of the files into one final output dataset.;
*************************************************************************;
*************************************************************************;
DATA OUT.LOADCAHP;
   SET R_R13029 C_R13029
       R_R13033 C_R13033
```

```
         R_R13007 C_R13007
         R_R13010 C_R13010
         R_R13021 C_R13021
         R_R13022 C_R13022
         R_R13023 C_R13023
         R_R13024 C_R13024
         R_R13041 C_R13041
         R_R13042 C_R13042
         R_R13046 C_R13046
         R_R13047 C_R13047
         R_R13018 C_R13018
         R_R13048 C_R13048
         R_R13027 C_R13027
         R_R13031 C_R13031
         RCOMPOS1 CCOMPOS1
         RCOMPOS2 CCOMPOS2
         RCOMPOS3 CCOMPOS3
         RCOMPOS4 CCOMPOS4
         RCOMPOS5 CCOMPOS5

      ;
      IF SCORE = . THEN DELETE;
   RUN;

   TITLE1 "2013 DOD Health Survey Scores/Report Cards (6663-410)";
   TITLE2 "Program Name: LOADCAHP.SAS By Keith Rathbun";
   TITLE3 "Program Inputs: CAHPS Individual and Composite data sets with adjusted scores";
   TITLE4 "Program Outputs: LOADCAHP.sas7bdat - Combined CAHPS Scores Database in WEB layout";

   PROC FREQ;
   TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
          REGION*REGCAT
         /MISSING LIST;
   RUN;
```

G.10.B LOADWEB\LOADCAHQ.INC - Format definitions for converting the Scores Database into the WEB layout - Annual.

```
******************************************************************************
*
* PROGRAM:  LOADCAHQ.INC
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Format definitions for converting the CAHPS Scores Database
*           into the WEB layout.
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.INC.
*
* MODIFIED: 1) 08/13/2001 BY KEITH RATHBUN, Added XSERVAFF format to
*              accommodate the short reports.
*           2) 01/24/2002 BY KEITH RATHBUN, Added BENTYPF = 1998,1999,2000
*              added catchment composites.
*           3) 04/10/2002 BY KEITH RATHBUN, Added parameters for 2002 survey.
*           4) 04/03/2003 BY MIKE SCOTT, Added parameters for 2003 survey.
*           5) 07/08/2003 BY MIKE SCOTT, Added formats GETNCARE, GETCAREQ,
*              CRTSHELP, HOWWELL, CUSTSERV, CLMSPROC, and PREVCARE.
*           6) 03/22/2004 BY KEITH RATHBUN, Added parameters for 2004 survey.
*              Changed R04031 to be "Wait Less than 15 Minutes For Appointment".
*           7) 05/06/2004 BY MIKE SCOTT, Changed R04031 back to 2003 version of
*              the label ("Wait More than 15 Minutes Past Appointment") so that
*              the Q1 2004 version of the question is consistent with past
*              versions.  The label will be changed to the new version ("Waiting
*              in the Doctor's Office") in Makehtmq.sas.
*           8) 02/2006 BY REGINA GRAMSS, Changed date format to fielding dates.
*           9) 03/21/2006 BY KEITH RATHBUN, Added parameters for 2006 survey.
*           10) 08/22/2006 BY JUSTIN OH, Changed SERVREGF format for Overseas.
*           11) 12/15/2006 BY JUSTIN OH, Added parameters for 2007 survey.
*           12) 02/02/2007 BY JUSTIN OH, Added "s" in Healthy Behaviors in VALUE BEN.
*           13) 01/10/2008 BY KEITH RATHBUN, Added parameters for 2008 survey.
*           14) 01/09/2009 BY MIKE RUDACILLE, Added parameters for 2009 survey.
*           14) 01/16/2009 BY MIKE RUDACILLE, Changed CONUS to USA.
*           15) 04/11/2009 by Mike Rudacille - Changed formats to reflect
*              modifications to beneficiary reports necessary for V4
*           16) 12/17/09 by Emma Ernst, Added parameters for 2010 survey.
*           17) 12/02/10 by Mike Rudacille, Added parameters for 2011 survey.
*              Also removed 2000 parameters for space considerations.
*           18) 12/10/11 by Mike Rudacille, Added parameters for 2012 survey.
*              Also removed 2002 parameters for space considerations.
*           19) 11/03/12 by Mike Rudacille, Updated for handling of
*              Joint Service facilities
*           20) 12/27/12 by Aimee Valenzuela, Added parameters for 2013 survey.
*
*
* INPUTS:   No direct input
*
* OUTPUT:   No direct output
*
* NOTES:    1) Under the new contract (8860), the survey year was changed
*              to be based on the year the survey is administered (2002)
*              as opposed to the questioning reference frame (2001).  This
*              include file contains variable names for both the 2001
*              survey administration year and the the 2002 administration
*              year surveys.
*
******************************************************************************
;
******************************************************************************
* FORMAT Definitions
******************************************************************************;
PROC FORMAT;
   VALUE MAJGRPF
      1 = "Prime Enrollees          "
      2 = "Enrollees with Military PCM"
      3 = "Enrollees with Civilian PCM"
      4 = "Non-enrolled Beneficiaries "
      5 = "Active Duty              "
      6 = "Active Duty Dependents     "
      7 = "Retirees and Dependents    "
```

```
      8 = "All Beneficiaries        "
   ;
   VALUE XSERVAFF
      1 = "ARMY"
      2 = "AIR FORCE"
      3 = "NAVY"
      4 = "OTHER"
      5 = "JOINT SERVICE"
   ;
   VALUE REGIONF
      0 = "USA MHS "
      1 = "North"
      2 = "South"
      3 = "West"
      4 = "Overseas"
   ;

/*JSO 08/24/2006, Changed Overseas to Service for Europe,Pacific,Latin*/
   VALUE SERVREGF
      1 = "North Army"
      2 = "North Air Force"
      3 = "North Navy"
      4 = "North Other"
      5 = "North Joint Service"
      6 = "South Army"
      7 = "South Air Force"
      8 = "South Navy"
      9 = "South Other"
     10 = "South Joint Service"
     11 = "West Army"
     12 = "West Air Force"
     13 = "West Navy"
     14 = "West Other"
     15 = "West Joint Service"
     16 = "Europe Army"
     17 = "Europe Air Force"
     18 = "Europe Navy"
     19 = "Europe Other"
     20 = "Europe Joint Service"
     21 = "Pacific Army"
     22 = "Pacific Air Force"
     23 = "Pacific Navy"
     24 = "Pacific Other"
     25 = "Pacific Joint Service"
     26 = "Latin America Army"
     27 = "Latin America Air Force"
     28 = "Latin America Navy"
     29 = "Latin America Other"
     30 = "Latin America Joint Service"
     31 = "USA ARMY"
     32 = "USA AIR FORCE"
     33 = "USA NAVY"
     34 = "USA OTHER";

/*JSO 08/24/2006, Changed Overseas to Europe,Pacific,Latin*/
   VALUE SERVREGO
      1 = "North Army"
      2 = "North Air Force"
      3 = "North Navy"
      4 = "North Other"
      5 = "North Joint Service"
      6 = "South Army"
      7 = "South Air Force"
      8 = "South Navy"
      9 = "South Other"
     10 = "South Joint Service"
     11 = "West Army"
     12 = "West Air Force"
     13 = "West Navy"
     14 = "West Other"
     15 = "West Joint Service"
     16 = "Overseas Europe"
     17 = "Overseas Pacific"
```

```
      18 = "Overseas Latin America";

    VALUE $BENTYPF
     "2004 Q2 " = "April, 2003 to March, 2004                    "
     "2004 Q3 " = "Quarter 3, CY 2004                            "
     "2004 Q4 " = "Quarter 4, CY 2004                            "
     "2005 Q1 " = "January, 2005                                 "
     "2005 Q2 " = "April, 2005                                   "
     "2005 Q3 " = "July, 2005                                    "
     "2005 Q4 " = "October, 2005                                 "
     "2006 Q1 " = "January, 2006                                 "
     "2006 Q2 " = "April, 2006                                   "
     "2006 Q3 " = "July, 2006                                    "
     "2006 Q4 " = "October, 2006                                 "
     "2007 Q1 " = "January, 2007                                 "
     "2007 Q2 " = "April, 2007                                   "
     "2007 Q3 " = "July, 2007                                    "
     "2007 Q4 " = "October, 2007                                 "
     "2008 Q1 " = "January, 2008                                 "
     "2008 Q2 " = "April, 2008                                   "
     "2008 Q3 " = "July, 2008                                    "
     "2008 Q4 " = "October, 2008                                 "
     "2009 Q1 " = "January, 2009                                 "
     "2009 Q2 " = "April, 2009                                   "
     "2009 Q3 " = "July, 2009                                    "
     "2009 Q4 " = "October, 2009                                 "
     "2010 Q1 " = "January, 2010                                 "
     "2010 Q2 " = "April, 2010                                   "
     "2010 Q3 " = "July, 2010                                    "
     "2010 Q4 " = "October, 2010                                 "
     "2011 Q1 " = "January, 2011                                 "
     "2011 Q2 " = "April, 2011                                   "
     "2011 Q3 " = "July, 2011                                    "
     "2011 Q4 " = "October, 2011                                 "
     "2012 Q1 " = "January, 2012                                 "
     "2012 Q2 " = "April, 2012                                   "
     "2012 Q3 " = "July, 2012                                    "
     "2012 Q4 " = "October, 2012                                 "
     "2013 Q1 " = "January, 2013                                 "
     "2013 Q2 " = "April, 2013                                   "
     "2013 Q3 " = "July, 2013                                    "
     "2013 Q4 " = "October, 2013                                 "

/********************************************************************************************
********/
    /* Admin. Year Defn.
*/
    /* 2004       2005       2006       2007       2008       2009       2010       2011       2012
2013        */

/********************************************************************************************
*********/
    "R04013", "R05013", "R06013", "R07013", "R08013", "R09029", "R10029", "R11029", "R12029",
"R13029" = "Getting to See a Specialist       "
    "R04028", "R05027", "R06027", "R07027", "R08027", "R09033", "R10033", "R11033", "R12033",
"R13033" = "Getting Treatment                 "
    "R04020", "R05019", "R06019", "R07019", "R08019", "R09007", "R10007", "R11007", "R12007",
"R13007" = "Wait for Urgent Care              "
    "R04023", "R05022", "R06022", "R07022", "R08022", "R09010", "R10010", "R11010", "R12010",
"R13010" = "Wait for Routine Visit            "
    "R04034", "R05033", "R06033", "R07033", "R08033", "R09021", "R10021", "R11021", "R12021",
"R13021" = "Listens Carefully                 "
    "R04035", "R05034", "R06034", "R07034", "R08034", "R09022", "R10022", "R11022", "R12022",
"R13022" = "Explains so You Can Understand     "
    "R04036", "R05035", "R06035", "R07035", "R08035", "R09023", "R10023", "R11023", "R12023",
"R13023" = "Shows Respect                     "
    "R04037", "R05036", "R06036", "R07036", "R08036", "R09024", "R10024", "R11024", "R12024",
"R13024" = "Spends Time with You              "
    "R04045", "R05043", "R06043", "R07043", "R08043", "R09040", "R10040", "R11041", "R12041",
"R13041" = "Getting Information               "
    "R04047", "R05045", "R06045", "R07045", "R08045", "R09041", "R10041", "R11042", "R12042",
"R13042" = "Courteous Customer Service        "
```

```
    "R04041", "R05040", "R06040", "R07040", "R08040", "R09045", "R10045", "R11046", "R12046",
"R13046" = "Claims Handled in a Reasonable Time"
    "R04042", "R05041", "R06041", "R07041", "R08041", "R09046", "R10046", "R11047", "R12047",
"R13047" = "Claims Handled Correctly          "
    "R04038", "R05037", "R06037", "R07037", "R08037", "R09018", "R10018", "R11018", "R12018",
"R13018" = "Health Care                       "
    "R04054", "R05048", "R06048", "R07048", "R08048", "R09047", "R10047", "R11048", "R12048",
"R13048" = "Health Plan                       "
    "R04009", "R05009", "R06009", "R07009", "R08009", "R09027", "R10027", "R11027", "R12027",
"R13027" = "Primary Care Manager              "
    "R04015", "R05015", "R06015", "R07015", "R08015", "R09031", "R10031", "R11031", "R12031",
"R13031" = "Specialty Care                    "
                              "PHYSIC  " = "Physical                                "
                              "MENTAL  " = "Mental                                  "
   ;
   VALUE $BENEF
    "RCOMPOS1","CCOMPOS1","R04013","R04028",
                          "R05013","R05027",
                          "R06013","R06027",
                          "R07013","R07027",
                          "R08013","R08027",
                          "R09029","R09033",
                          "R10029","R10033",
                          "R11029","R11033",
                          "R12029","R12033",
                          "R13029","R13033"
     = "Getting Needed Care   "

    "RCOMPOS2","CCOMPOS2","R04020","R04023",
                          "R05019","R05022",
                          "R06019","R06022",
                          "R07019","R07022",
                          "R08019","R08022",
                          "R09007","R09010",
                          "R10007","R10010",
                          "R11007","R11010",
                          "R12007","R12010",
                          "R13007","R13010"
     = "Getting Care Quickly "

    "RCOMPOS3","CCOMPOS3","R04034","R04035","R04036","R04037",
                          "R05033","R05034","R05035","R05036",
                          "R06033","R06034","R06035","R06036",
                          "R07033","R07034","R07035","R07036",
                          "R08033","R08034","R08035","R08036",
                          "R09021","R09022","R09023","R09024",
                          "R10021","R10022","R10023","R10024",
                          "R11021","R11022","R11023","R11024",
                          "R12021","R12022","R12023","R12024",
                          "R13021","R13022","R13023","R13024"
     = "How Well Doctors Communicate "

    "RCOMPOS4","CCOMPOS4","R04045","R04047",
                          "R05043","R05045",
                          "R06043","R06045",
                          "R07043","R07045",
                          "R08043","R08045",
                          "R09040","R09041",
                          "R10040","R10041",
                          "R11041","R11042",
                          "R12041","R12042",
                          "R13041","R13042"
     = "Customer Service        "

    "RCOMPOS5","CCOMPOS5","R04041","R04042",
                          "R05040","R05041",
                          "R06040","R06041",
                          "R07040","R07041",
                          "R08040","R08041",
                          "R09045","R09046",
                          "R10045","R10046",
                          "R11046","R11047",
                          "R12046","R12047",
```

```
                              "R13046","R13047"
    = "Claims Processing
               "
    "RCOMPOS11","COMPOS11","MENTAL","PHYS"
    = "Health Status                 "

/*********************************************************************************************
***/
    /* Admin. Year Defn.
*/
    /* 2004      2005      2006      2007      2008      2009      2010      2011      2012
2013  */

/*********************************************************************************************
***/
    "R04038", "R05037", "R06037", "R07037", "R08037", "R09018", "R10018", "R11018", "R12018",
"R13018" = "Health Care                                  "
    "R04054", "R05048", "R06048", "R07048", "R08048", "R09047", "R10047", "R11048", "R12048",
"R13048" = "Health Plan                                  "
    "R04009", "R05009", "R06009", "R07009", "R08009", "R09027", "R10027", "R11027", "R12027",
"R13027" = "Primary Care Manager                         "
    "R04015", "R05015", "R06015", "R07015", "R08015", "R09031", "R10031", "R11031", "R12031",
"R13031" = "Specialty Care                               "
    ;
VALUE BEN
/*  0 = 'Total'  deleted no longer calculating total 04/2005 RSG ***/
  1 = 'Getting Needed Care'
  2 = 'Getting Care Quickly'
  3 = 'How Well Doctors Communicate'
  4 = 'Customer Service'
  5 = 'Claims Processing'
  6 = 'Health Plan'
  7 = 'Health Care'
  8 = 'Primary Care Manager'
  9 = 'Specialty Care'
 10 = 'Preventive Care'
 11 = 'Healthy Behaviors';

  VALUE MAJOR
  1 = "Prime Enrollees            "
  2 = "Enrollees with Military PCM"
  3 = "Enrollees with Civilian PCM"
  4 = "Non-enrolled Beneficiaries "
  5 = "Active Duty                "
  6 = "Active Duty Dependents     "
  7 = "Retirees and Dependents    "
  8 = "All Beneficiaries          ";

  VALUE GETNCARE
  1 = "Getting to See a Specialist"
  2 = "Getting Treatment"
  3 = "Composite";

  VALUE GETCAREQ
  1 = "Wait for Routine Visit"
  2 = "Wait for Urgent Care"
  3 = "Composite";

  VALUE HOWWELL
  1 = "Listens Carefully"
  2 = "Explains so You Can Understand"
  3 = "Shows Respect"
  4 = "Spends Time with You"
  5 = "Composite";

  VALUE CUSTSERV
  1 = "Getting Information"
  2 = "Courteous Customer Service"
  3 = "Composite";

  VALUE CLMSPROC
  1 = "Claims Handled in a Reasonable Time"
  2 = "Claims Handled Correctly"
```

```
     3 = "Composite";

   VALUE PREVCARE
   1 = "Mammography"
   2 = "Pap Smear"
   3 = "Hypertension"
   4 = "Prenatal Care"
   5 = "Composite";

   VALUE SMOKEF
   1 = "Non-Smoking Rate"
   2 = "Counselled To Quit"
   3 = "Percent Not Obese"
   4 = "Composite";
RUN;
```

G.11.A Benchmark\BENCHA03.SAS - Calculate CAHPS Benchmark data for HCSDB - Annual.

```
******************************************************************************
*
* PROGRAM:  BENCHA03.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Adjust Adult CAHPS Benchmarks
*
* WRITTEN:  June 2000 BY ERIC SCHONE
*
* INPUTS:   1) BENCHA02.SD2 - 2005 Adult CAHPS Questions Renamed to be
*              consistent with the 2006 MPR DOD Survey.
*           2) GROUP8.SD2 - CAHPS Group8 (all beneficiaries) Dataset
*
* OUTPUTS:  1) Benchmark Composite Scores Data Sets
*
* MODIFIED: 1) Nov 2000 BY ERIC SCHONE - Output permanent datasets with
*              scores and standard errors and process the rest of the
*              composites and ratings.
*           2) Dec 2000 BY KEITH RATHBUN - Update variable names for
*              Q1 2000 Survey.
*           3) Jan 2002 BY KEITH RATHBUN - Updated to run under SAS
*              version 8 (changed INTERCEP to INTERCEPT).
*           4) Apr 2002 BY MIKE SCOTT - Updated variable names for Q1
*              2002 Survey.
*           5) Jul 2002 BY MIKE SCOTT - Changed R00077 to R04075, since
*              H02077 (health status) is back and was renamed to R04075
*              in HSC022_1.sd2.
*           6) Mar 2003 BY MIKE SCOTT - Updated for 2003 survey.
*           7) May 2003 BY MIKE SCOTT - Changed ac03_01 to ac03_02.
*           8) Jun 2003 BY MIKE SCOTT - Updated for Q2 2003.
*           9) Oct 2003 BY MIKE SCOTT - Updated for Q3 2003.
*          10) Mar 2004 BY MIKE SCOTT - Updated for Q1 2004.
*          11) April 2004 BY KEITH RATHBUN - Updated to use the CAHPS 2003
*              variable ac03_03.
*          12) June 2004 BY REGINA GRAMSS - Updated to use for Q2 2004
*          13) Sept 2004 BY REGINA GRAMSS - Update for Q3 2004
*          14) May 2005 BY REGINA GRAMSS - Updated for Q1 2005
*          15) Jul 2005 BY REGINA GRAMSS - Updated for Q2 2005
*          16) Oct 2005 BY REGINA GRAMSS - Updated for Q3 2005
*          17) Dec 2005 BY REGINA GRAMSS - Updated for Q4 2005
*          18) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*              Changed variable names to match the 2006 HCSDB survey.
*          19) 07/12/2006 by Justin Oh - Updated for Q3 FY 2006.
*          20) 10/03/2006 by Justin Oh - Changed libname in2 for Q4FY2006.
*              Change the INCLUDE path to CONVERT.sas file.
*          21) 12/18/2006 by Justin Oh - Changed libname in2 for Q1FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          22) 04/05/2007 by Justin Oh - Changed libname in2 for Q2FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          23) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*              ReportCards OR PurchasedReportCards.
*          24) 04/05/2007 by Keith Rathbun - Changed libname in2 for Q3FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          25) 09/04/2007 by Justin Oh - Changed libname in2 for Q4FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          26) 01/10/2008 BY KEITH RATHBUN, Updated for Q1 FY 2008.
*              Changed variable names to match the 2008 HCSDB survey.
*          27) 04/11/2008 by Justin Oh - Changed libname in2 for Q2FY2008.
*              Change the INCLUDE path to CONVERT.sas file.
*          28) 06/13/2008 by Keith Rathbun - Changed libname in2 for Q3FY2008.
*              Change the INCLUDE path to CONVERT.sas file.
*          29) April 10, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          30) Sept 30, 2009 by Mike Rudacille - Changed libname in2 for Q4FY2009.
*              Change the INCLUDE path to CONVERT.sas file.
*       31) October 9, 2009 by Emma Ernst- Updated for 2009 database
*          32) Sept 10, 2010 by Mike Rudacille - Updated for 2010 annual report
*          33) Oct 7, 2011 by Mike Rudacille - Updated for 2011 annual report
*          34) Aug 2, 2012 by Amanda Kudis - Updated for 2012 and removed insurnace restriction.
*          35) Aug 1, 2013 by Amanda Kudis - Updated for 2013.
*
```

```
* NOTES:
*
* 1) Run this program after BENCHA01.SAS and BENCHA02.SAS.
* 2) This program will generate the input for BENCHA04.SAS.
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards              ***/
%LET RCTYPE = ReportCards;

libname in      "..\..\..\Q1FY2013\Programs\Benchmark\Data";
libname in2     "..\&RCTYPE\CAHPS_Adult2013\Data";
libname out     "Data";
LIBNAME LIBRARY "..\..\..\DATA\FMTLIB";

%let wgt=CFWT;

OPTIONS MLOGIC MPRINT NOCENTER MERGENOBY=WARN LS=132 PS=79;


%macro comb(f,t,q,l);

proc summary data=&f;
 var &t;
 where &q~=.;
 weight &wgt;
 output out=temp mean=&t;
run;

data temp;
 set temp;
 array old &t;
 call symput('z',left(dim(old)));
run;

data temp(drop=_type_ &t);
 set temp;
 array old &t;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;

data &q._&l;
 merge temp c_&q;
 array coeffs &t;
 array means var1-var&z;
  DO I = 1 TO DIM(COEFFS);
   IF COEFFS(I) = . THEN COEFFS(I) = 0;
   IF MEANS(I) = . THEN MEANS(I) = 0;
   ADJUST + ( COEFFS(I) * MEANS(I) );
  END;

 ADJUST = ADJUST + intercept;
 &q._&l=adjust;

run;

%mend comb;

%macro adjust(x,y);



proc summary data=setup;
where &x>.;
 class product;

 output out=count;
run;
```

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```
data count count2(rename=(_freq_=denom));
 set count;
 if _type_=0 then output count2;
 else output count;
run;

data count(keep=pweight product);
 if _n_=1 then set count2;
 set count;
 pweight=denom/_freq_;
run;

data temp;
 merge count  setup; by product;

run;
proc summary data=temp;
where &x>.;
weight pweight;
var &y;
output out=temp2 mean=&y;
data temp2;
 set temp2;
 array old &y;
 call symput('z',left(dim(old)));
run;
data temp2(keep=var1-var&z);
 set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;
data temp;
set temp;
if _n_=1 then set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
  if old(i)=. then
   old(i)=new(i);
  end;
run;
proc reg data=temp outest=c_&x noprint;
 model &x=&y;
 weight pweight;
 output out=r_&x r=r_&x;
run;

proc sort data=r_&x; by product;
run;

PROC DESCRIPT DATA=r_&x DESIGN=STRWR NOPRINT;
 WEIGHT pweight;
 SETENV DECWIDTH=4;
 NEST product / missunit;
 VAR R_&x;
 OUTPUT  SEMEAN / TABLECELL=DEFAULT
 FILENAME=s_&x;
RUN;

data s_&x(rename=(semean=s_&x));
 set s_&x(keep=semean);
 %do i=1 %to 8;
  %if &i=8 %then %do;

   data group8;
    set in2.group5 in2.group6 in2.group7;
   run;
   %comb(group8,&y,&x,8);
  %end;
```

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```
   %else %do;
    %comb(in2.group&i,&y,&x,&i);
   %end;
  %end;


%mend adjust;

/* adjust all the variables */

%macro comp(compno,a,b,c,d);
 %if &a~= %then %do;
   %let n=r_&a;
   %let m=s_&a;
   %do i=1 %to 8;
    %let p&i=&a._&i;
   %end;
   %let grpnum=1;
    proc sort data=r_&a;
     by mpid;
    run;
 %end;
 %if &b~= %then %do;
   %let n=%str(&n r_&b);
   %let m=%str(&m s_&b);
   %do i=1 %to 8;
    %let p&i=%str(&&p&i &b._&i);
   %end;
   %let grpnum=2;
    proc sort data=r_&b;
     by mpid;
    run;
 %end;
 %if &c~= %then %do;
  proc sort data=r_&c;
   by mpid;
  run;
  %let grpnum=3;
  %let n=%str(&n r_&c);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &c._&i);
  %end;
  %let m=%str(&m s_&c); %end;

  %if &d~= %then %do;
   proc sort data=r_&d;
    by mpid;
   run;
   %let grpnum=4;
   %let n=%str(&n r_&d);
    %do i=1 %to 8;
     %let p&i=%str(&&p&i &d._&i);
    %end;

    %let m=%str(&m s_&d);
  %end;

data infile;
 merge &n;
 by mpid;
run;

proc corr outp=outf noprint;
 var &n;
 weight pweight;
run;

data final;
 if _n_=1 then do;
  %if &a~= %then %do;
   set s_&a;
  %end;
  %if &b~= %then %do;
```

```
   set s_&b;
  %end;
  %if &c~= %then %do;
   set s_&c;
  %end;
  %if &d~= %then %do;
   set s_&d;
  %end;
 end;
 set  outf;
 call symput('s'||compress(_n_),substr(_name_,3));
 where _type_='CORR';
run;

data final;
 set final;
 array r_val &n;
 array s_val &m;
 sde=0;
 do i=1 to dim(s_val);
  %do i=1 %to &grpnum;
   if _name_="r_&&s&i" then
   sde=sde+r_val(i)*s_&&s&i*s_val(i);
  %end;
 end;
run;

data sefin&compno;
 set final end=last;
 tv+sde;
 if last then do;
 sde=(tv**.5)/&grpnum;
 output;
end;

%do i=1 %to 8;
 data temp(keep=&&p&i);
  merge &&p&i;
 run;

data output;
 set &&p&i;
 totadj+adjust;
run;

data output(keep=totadj);
 set output end=last;
 if last then do;
  totadj=totadj/&grpnum;
  output;
 end;
run;

data out&compno._&i;
 merge output temp;
run;

data out.comp&compno._&i;
   merge out&compno._&i
        sefin&compno;
run;

%end;

%mend comp;

/* create composites */
proc sort data=in.bencha02 out=setup;
 by product;
run;
data setup;
set setup;
/*if ^(model in (2,4)); */  **AMK removed restriction 9/20/12;
```

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```
if disp in ('M10','I10')  ;   ***KRR 04/19/04 Changed _02 to _03;
data setup;
 set setup; by product;
 mpid=_n_;
 if agegroup ne . then do;
 age1824=0; age2534=0; age3544=0; age4554=0; age5564=0; age6574=0;

      if agegroup=1 then age1824=1;
 else if agegroup=2 then age2534=1;
 else if agegroup=3 then age3544=1;
 else if agegroup=4 then age4554=1;
 else if agegroup=5 then age5564=1;
 else if agegroup=6 then age6574=1;
 end;
 if agegroup<6;



run;
%INCLUDE "..\REPORTCARDS\CAHPS_Adult2013\CONVERT.SAS";

%CONT2(DSN=SETUP, NUM=4,  Y=R13018 R13048 R13027 R13031);
%CONT3(DSN=SETUP, NUM=12, Y=R13007 R13010 R13029 R13033
                            R13021 R13022 R13023 R13024
                            R13041 R13042 R13046 R13047);
/* GETTING NEEDED CARE */
%adjust(R13029,age1824 age2534 age3544 age4554  R13065);
%adjust(R13033,age1824 age2534 age3544 age4554  R13065);
%comp(1,R13029,R13033);

/* GETTING NEEDED CARE QUICKLY */
%adjust(R13007,age1824 age2534 age3544 age4554  R13065);
%adjust(R13010,age1824 age2534 age3544 age4554  R13065);
%comp(2,R13007,R13010);

/* HOW WELL DOCTORS COMMUNICATE */
%adjust(R13021,age1824 age2534 age3544 age4554  R13065);
%adjust(R13022,age1824 age2534 age3544 age4554  R13065);
%adjust(R13023,age1824 age2534 age3544 age4554  R13065);
%adjust(R13024,age1824 age2534 age3544 age4554  R13065);
%comp(3,R13021,R13022,R13023,R13024);

/* CUSTOMER SERVICE */
%adjust(R13041,age1824 age2534 age3544 age4554  R13065);
%adjust(R13042,age1824 age2534 age3544 age4554  R13065);
%comp(4,R13041,R13042);

/* CLAIMS PROCESSING */
%adjust(R13046,age1824 age2534 age3544 age4554  R13065);
%adjust(R13047,age1824 age2534 age3544 age4554  R13065);
%comp(5,R13046,R13047);

/* RATING ALL HEALTH CARE: 0 - 10 */
%adjust(R13018,age1824 age2534 age3544 age4554  R13065);
%comp(6,R13018);

/* RATING OF HEALTH PLAN: 0 - 10 */
%adjust(R13048,age1824 age2534 age3544 age4554  R13065);
%comp(7,R13048);

/* RATING OF PERSONAL DR: 0 - 10 */
%adjust(R13027,age1824 age2534 age3544 age4554  R13065);
%comp(8,R13027);

/* SPECIALTY CARE */
%adjust(R13031,age1824 age2534 age3544 age4554  R13065);
%comp(9,R13031);
```

G.11.B Benchmark\BENCHA04.SAS - Convert the Benchmark Scores Database into the WEB layout - Annual.

```
****************************************************************************
*
* PROGRAM:  BENCHA04.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6401-904)
* PURPOSE:  Convert the Benchmark Scores Database into the WEB layout
*
* WRITTEN:  06/01/2000 BY KEITH RATHBUN
*
* INPUTS:   1) Benchmark data sets with adjusted scores
*              (COMPn_i.SD2 where n = composite number and i = group number)
*
* OUTPUT:   1) BENCHA04.SD2 - Combined Benchmark Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* MODIFIED: 1) Dec 2000 bY Keith Rathbun: Updated variable names for
*              Q1 2000 Survey.  For the quarterly survey group 8 (all benes)
*              is being used as the benchmark for all groups (1-8).  Thus,
*              this group is copied and output to each of the other 7 groups.
*           2) 01/23/2002 by Mike Scott: Updated variable names to be consistent
*              with 2000 survey.
*           4) 04/15/2002 by Mike Scott - Updated variable names for
*              Q1 2002 Survey.
*           5) 03/21/2003 by Mike Scott - Updated for 2003 survey.
*           6) 06/26/2003 by Mike Scott - Updated for Q2 2003.
*           7) 07/03/2003 by Mike Scott - Added TIMEPD variable to be set to the period
*              or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*              setting to 'Composite'.
*           8) 07/18/2003 by Mike Scott - Added TIMEPD to FREQ.
*           9) 10/21/2003 by Mike Scott - Updated for Q3 2003.
*          10) 03/23/2004 by Mike Scott - Updated for Q1 2004.
*          11) 06/15/2004 by Regina Gramss - Updated for Q2 2004.
*          12) 09/2004    by Regina Gramss - Updated for Q3 2004.
*          13) 05/2005    by Regina Gramss - Updated for Q1 2005.
*          14) 10/2005    by Regina Gramss - Updated for Q3 2005.
*          15) 03/24/2006 by Keith Rathbun - Updated for Q2 FY 2006.
*              Added MACRO loop to process the 8 groups.
*          16) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3.
*          17) 12/18/2007 by Justin Oh - Updated BENTYPE composite year to 2006 Q4.
*          18) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1.
*          19) 04/05/2007 by Justin Oh - Updated LIBNAME IN2 to be used for purchase RC programs.
*          20) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3.
*          21) 01/10/2008 by Keith Rathbun - Updated for Q1 FY 2008.
*          22) 04/11/2008 by Justin Oh - Updated BENTYPE composite year to 2008 Q1.
*          23) 06/13/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q2.
*          24) 09/29/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q3.
*          25) 04/10/2009 by Mike Rudacille - Changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          26) 09/30/2009 by Mike Rudacille - Updated BENTYPE composite year to 2009 Q3.
*          27) 09/10/2010 by Mike Rudacille - Updated for 2010 annual report
*          28) 10/07/2011 by Mike Rudacille - Updated for 2011 annual report
*          29) 08/02/2012 by Amanda Kudis - Updated for 2012 annual report
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - BENCHA01.SAS - Extract Benchmark variables
*    - BENCHA02.SAS - Recode Benchmark variables
*    - BENCHA03.SAS - Construct Scores and SEMEAN datasets
*
* 2) The output file (BENCHA04.SAS7BDAT) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
****************************************************************************
* Assign data libraries and options
**************************************************************************;
LIBNAME IN  "DATA";
LIBNAME IN2 "apredtest";
```

```
LIBNAME OUT "DATA";
LIBNAME LIBRARY  "..\..\..\DATA\FMTLIB";


OPTIONS PS=79 LS=132 COMPRESS=NO NOCENTER;

*****************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*****************************************************************************;
%INCLUDE "..\LOADWEB\LOADCAHQ.INC";

*****************************************************************************
*****************************************************************************
*
* Process Macro Input Parameters:
*
* 1) CNUM = Composite or rating variable number (1-10)
* 2) GNUM = Group number (1-8)
* 3) NVAR = Number of variables in the composite
* 4) VARS = List of individual variables for composite
* 5) SE   = List of individual standard error variables
*
* _____
*    Adjusted Score            Definitions
*    Group Number
* _____
* 1. Prime enrollees          XINS_COV IN (1,2,6) AND H09004_R>=7
* 2. Enrollees w/mil PCM       XENR_PCM IN (1,2,6) AND H09004_R>=7
* 3. Enrollees w/civ PCM       XENR_PCM = 3        AND H09004_R>=7
* 4. Nonenrollees             XINS_COV IN (3,4,5)
* 5. Active duty              BFGROUPP = 1
* 6. Active duty dependents   BFGROUPP = 2
* 7. Retirees and dependents  BFGROUPP IN (3,4)
* 8. All Beneficiaries
*
*****************************************************************************;
%MACRO PROCESS(CNUM=, GNUM=, NVAR=, VARS=, SE=);
*****************************************************************************
* Assign value for BENTYPE composite year
*****************************************************************************;
%LET YEAR = "2013"; * Note that this is based on Calendar Year here;


*****************************************************************************
* Convert benchmark scores datasets into WEB layout.
*****************************************************************************;
%IF &CNUM<6 %THEN %DO;

  DATA INP;
    SET IN2.COMP&CNUM;
      WHERE X=&GNUM;



    DATA INP;
     SET INP  IN2.PROJERR&GNUM;
     RENAME SE=SESX;
RUN;
%END;
%ELSE %DO;

   DATA INP;
     SET IN2.PROJERR&GNUM;
     RENAME SE=SESX;
RUN;
%END;



   DATA COMP&CNUM._&Gnum;
      SET INP;
     IF _N_=1 THEN
     SET IN.COMP&CNUM._&GNUM;
      LENGTH MAJGRP  $30;
```

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```
      LENGTH REGION  $25;
      LENGTH REGCAT  $26;
      LENGTH BENTYPE $50;
      LENGTH BENEFIT $34;
      LENGTH TIMEPD  $35;   ***MJS 07/03/03 Added line;

      **********************************************************************
      * For now, assign SIG = 0
      **********************************************************************;
      SIG = 0;

      **********************************************************************
      * Assign major group
      **********************************************************************;
      MAJGRP  = PUT(&Gnum,MAJGRPF.);

      **********************************************************************
      * Assign Region and Regcat
      **********************************************************************;
      REGION  = "Benchmark";
      REGCAT  = "Benchmark";

      **********************************************************************
      * Assign benefit and benefit type
      **********************************************************************;
      IF      &CNUM = 1  THEN BENEFIT = "Getting Needed Care";
      ELSE IF &CNUM = 2  THEN BENEFIT = "Getting Care Quickly";
      ELSE IF &CNUM = 3  THEN BENEFIT = "How Well Doctors Communicate";
      ELSE IF &CNUM = 4  THEN BENEFIT = "Customer Service";
      ELSE IF &CNUM = 5  THEN BENEFIT = "Claims Processing";
      ELSE IF &CNUM = 6  THEN BENEFIT = "Health Care";
      ELSE IF &CNUM = 7  THEN BENEFIT = "Health Plan";
      ELSE IF &CNUM = 8  THEN BENEFIT = "Primary Care Manager";
      ELSE IF &CNUM = 9  THEN BENEFIT = "Specialty Care";

      BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
      TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
       IF &CNUM<6 THEN DO;
          IF X=&GNUM THEN DO;
      **********************************************************************
      * Assign composite score and SEMEAN
      **********************************************************************;
            SCORE = TOTADJ;
            SEMEAN = SQRT(SDE**2+SESX**2);

      **********************************************************************
      * Output composite score record for each REGION
      **********************************************************************;
            OUTPUT;
          END;
       END;
      **********************************************************************
      * Now, output the individual score records
      **********************************************************************;
      IF &NVAR GT 1|&CNUM>5 THEN DO;
         ARRAY ITEMS &VARS;
         ARRAY SE    &SE;
         LENGTH NAME $8;
         DO I = 1 TO DIM(ITEMS); DROP I;
            CALL VNAME(ITEMS(I),NAME);
            NAME = SUBSTR(NAME,1,6);
            SCORE  = ITEMS(I);
            SEMEAN = SQRT(SE(I)**2+SESX**2);
            IF &NVAR GT 1 THEN
            BENTYPE = PUT(NAME,$BENTYPF.);
            TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
           IF COMPRESS(UPCASE(NAME))=COMPRESS(UPCASE(VAR)) THEN OUTPUT;
         END;
      END;

   KEEP MAJGRP
       REGION
       REGCAT
```

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```
            BENTYPE
            BENEFIT
            TIMEPD   /*MJS 07/03/03 Added*/
            SEMEAN
            SCORE
            SIG
        ;
    RUN;

%MEND;

*******************************************************************************
*******************************************************************************
* Process each of the 8 Groups.
*******************************************************************************
*******************************************************************************;
%MACRO DOIT;
%DO I = 1 %TO 8;
    *******************************************************************************
    * COMPOSITE # 1.
    * GETTING NEEDED CARE VARIABLES.
    *******************************************************************************;
    %PROCESS(CNUM=1, GNUM=&I, NVAR=2, VARS=R13029_&I R13033_&I,
            SE=S_R13029 S_R13033);

    *******************************************************************************
    * COMPOSITE # 2.
    * GETTING CARE QUICKLY VARIABLES.
    *******************************************************************************;
    %PROCESS(CNUM=2, GNUM=&I, NVAR=2, VARS=R13007_&I R13010_&I,
            SE=S_R13007 S_R13010);

    *******************************************************************************
    * COMPOSITE # 3.
    * HOW WELL DOCTORS COMMUNICATE.
    *******************************************************************************;
    %PROCESS(CNUM=3, GNUM=&I, NVAR=4, VARS=R13021_&I R13022_&I R13023_&I R13024_&I,
            SE=S_R13021 S_R13022 S_R13023 S_R13024);

    *******************************************************************************
    * COMPOSITE # 4.
    * CUSTOMER SERVICE.
    *******************************************************************************;
    %PROCESS(CNUM=4, GNUM=&I, NVAR=2, VARS=R13041_&I R13042_&I,
            SE=S_R13041 S_R13042);

    *******************************************************************************
    * COMPOSITE # 5.
    * CLAIMS PROCESSING.
    *******************************************************************************;
    %PROCESS(CNUM=5, GNUM=&I, NVAR=2, VARS=R13046_&I R13047_&I,
            SE=S_R13046 S_R13047);

    *******************************************************************************
    * INDIVIDUAL # 1.
    * RATING OF ALL HEALTH CARE: 0 - 10.
    *******************************************************************************;
    %PROCESS(CNUM=6, GNUM=&I, NVAR=1, VARS=R13018_&I, SE=S_R13018);

    *******************************************************************************
    * INDIVIDUAL # 2.
    * RATING OF HEALTH PLAN: 0 - 10.
    *******************************************************************************;
    %PROCESS(CNUM=7, GNUM=&I, NVAR=1, VARS=R13048_&I, SE=S_R13048);

    *******************************************************************************
    * INDIVIDUAL # 3.
    * RATING OF PERSONAL DOCTOR: 0 - 10.
    *******************************************************************************;
    %PROCESS(CNUM=8, GNUM=&I, NVAR=1, VARS=R13027_&I, SE=S_R13027);

    *******************************************************************************
    * INDIVIDUAL # 4.
```

```
   * SPECIALTY CARE: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=9, GNUM=&I, NVAR=1, VARS=R13031_&I, SE=S_R13031);
%END;
%MEND DOIT;
%DOIT;


******************************************************************************
******************************************************************************
* STACK up all of the files into one final output dataset.
******************************************************************************
******************************************************************************;
/*Comp4 was from questions 40 and 41 and there is no 2007 equivalent*/
DATA OUT.BENCHA04;
   SET COMP1_1  COMP1_2  COMP1_3  COMP1_4  COMP1_5  COMP1_6  COMP1_7  COMP1_8
       COMP2_1  COMP2_2  COMP2_3  COMP2_4  COMP2_5  COMP2_6  COMP2_7  COMP2_8
       COMP3_1  COMP3_2  COMP3_3  COMP3_4  COMP3_5  COMP3_6  COMP3_7  COMP3_8
       COMP4_1  COMP4_2  COMP4_3  COMP4_4  COMP4_5  COMP4_6  COMP4_7  COMP4_8
       COMP5_1  COMP5_2  COMP5_3  COMP5_4  COMP5_5  COMP5_6  COMP5_7  COMP5_8
       COMP6_1  COMP6_2  COMP6_3  COMP6_4  COMP6_5  COMP6_6  COMP6_7  COMP6_8
       COMP7_1  COMP7_2  COMP7_3  COMP7_4  COMP7_5  COMP7_6  COMP7_7  COMP7_8
       COMP8_1  COMP8_2  COMP8_3  COMP8_4  COMP8_5  COMP8_6  COMP8_7  COMP8_8
       COMP9_1  COMP9_2  COMP9_3  COMP9_4  COMP9_5  COMP9_6  COMP9_7  COMP9_8
   ;
   IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6663-410)";
TITLE2 "Program Name: BENCHA04.SAS By Keith Rathbun";
TITLE3 "Program Inputs: Benchmark Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: BENCHA04.SAS7BDAT - Combined Benchmark Scores Database in WEB layout";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES TIMEPD BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
     /MISSING LIST;
RUN;
```

G.12.A ReportCards\MPR_Adult2013\PRVCOMP.SAS - Calculate Preventive Care Composite Scores - Annual.

```
******************************************************************
*  Project:    DoD Reporting and Analysis 6077-410
*  Program:    PRVCOMPQ.SAS
*  Author:     Chris Rankin
*  Date:       12/22/2000
*  Modified:   4/19/2001 By Keith Rathbun: Restrict population to
*              xins_cov in(1,2,3,6).  Use POSTSTR instead of
*              adj_cell.
*  Modified:   10/25/01 By Daniele Beahm: Because no poststratification
*              was done for q3 2000, changed POSTSTR back to ADJ_CELL
*              04/09/02 modified macros the first three macros to create
*              temporary datasets (instead of writing permanent datasets)
*              07/15/02 By Mike Scott: Changed HCS021 to HCS022 for Q2 2002.
*              01/12/03 By Mike Scott: Changed ADJ_CELL to COM_SAMP.
*              03/21/03 By Mike Scott: Changed HCS024 to HCS031 for Q2 2002.
*              04/01/03 By Mike Scott: Replaced HP_FLU with HP_CHOL.
*              04/30/03 By Mike Scott: Changed COM_SAMP to ADJ_CELL.  Changed
*              CMPNUM1 from 4 to 5 and CMPNUM2 from 4 to 3.
*              06/13/03 By Eric Schone.  Changed composite mean & std err calculations
*              to use weights from 2000 input data.
*              07/23/03 By Mike Scott: Removed ..\PROGRAMS\ from INCLUDE.
*              10/21/03 By Mike Scott: Updated for Q3 2003.
*              01/07/04 By Mike Scott: Updated for Q4 2003.
*              02/02/04 By Mike Scott: Set PRVVAR6, PRVVAR7, and PRVVAR8 in DATA NORMDATA
*              to H04023, H04020, and H04031.
*              03/24/04 By Mike Scott: Updated for Q1 2004.
*              04/09/04 By Keith Rathbun: Added Service Affiliation variables to
*              accomodate the consumer watch.
*              06/22/04 By Regina Gramss: Updated for Q2 2004.
*              09/2004  By Regina Gramss: Updated for Q3 2004, to use XTNEXREG
*                                        vs. XREGION
*              01/2005 By Regina Gramss: Updated to create "Last USA_q" for
*                      Q4 2004, replace XTNEXREG with XSERVREG
*              04/2005 By Regina Gramss: Updated for Q1 2005 (update 2004 field names)
*              07/2005 By Regina Gramss: updated for Q2 2005
*              10/2005 By Regina Gramss: Updated for Q3 2005
*              12/2005 By Regina Gramss: Updated for Q4 2005
*              03/24/2006 By Keith Rathbun: Updated for Q2 FY 2006.  Changed reference
*              to ADJ_CELL in 2006 data to be STRATUM.
*              07/2006 By Justin Oh: updated for Q2 FY 2006
*              08/22/2006 By Justin Oh
*                      Changed XSERVREG for Overseas
*                      Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                              IF XINS_COV IN (3)     THEN GROUP4 = 1
*                              Since only XINS_COV IN (1,2,3,6) is kept.
*                      Create XOUSA for 2005 data.
*                      Added XREGION in the keep statement for NORMDATA.
*              10/04/2006 By Justin Oh Updated %LET INDATA and YRDATA.
*              11/15/2006 By Justin Oh Added FIELDAGE in 4 keep statements
*              12/22/2006 By Justin Oh Updated %LET INDATA and YRDATA HCS071_1.
*              04/05/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS072_1.
*              04/05/2007 By Justin Oh Added conditions for RC types
*                      ReportCards OR PurchasedReportCards.
*              05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*                      both Norm and Quarter datasets.
*              05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*                      Groups 1,3, and 4 for new reservists logic.
*              07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*                      Groups All, 4, 5, and 6.
*              09/04/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS074_1.
*              01/10/2008 By Keith Rathbun, Updated %LET INDATA and YRDATA HCS081_1.
*                      Also changed H07 variable names to be H08 to match 2008 survey
*              04/11/2008 By Justin Oh Updated %LET INDATA and YRDATA HCS082_1.
*              06/13/2008 By Keith Rathbun Updated %LET INDATA and YRDATA HCS083_1.
*              04/20/2009 By Mike Rudacille Changed RCTYPE and certain variable names for
*                      transition to V4 questionnaire.
*              06/22/2009 By Keith Rathbun Updated %LET INDATA and YRDATA HCS093_1.
*              09/30/2009 By Mike Rudacille Updated %LET INDATA and YRDATA HCS094_1.
*              09/10/2010 By Mike Rudacille, Updated for 2010 annual report
```

```
*               11/02/2010 By Mike Rudacille, Changed input dataset from HCS10A_1 to HCS10A_2.
*               10/21/2012 By Mike Rudacille, Updated for 2012 annual report
*               11/11/2012 By Mike Rudacille Updated for handling of
*                       Joint Service facilities
*
*  Purpose:   Calculate MPR Preventive Care Composites
*  Input:     HCSyyq_1.sas7bdat
*  Output:    RFINAL.sas7bdat
*             CFINAL.sas7bdat
*             MFINAL.sas7bdat
*             SFINAL.sas7bdat
*
*  Include
*  Files:     LOADCAHPQ.INC
*  Notes:     Next program is Loadmprq.sas
*
*               ***CHECK PARAMETER ASSIGNMENTS***
******************************************************************;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 MLOGIC MPRINT
        NOFMTERR COMPRESS=YES;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards           ***/
%LET RCTYPE = ReportCards;

LIBNAME IN              "..\..\..\Data";
LIBNAME INNORM          "..\..\..\..\2011\Data";
LIBNAME CACLIB          "..\CAHPS_Adult2013\Data";
LIBNAME OUT             ".";
LIBNAME LIBRARY         "..\..\..\Data\fmtlib";

%LET WGT=CFWT;
%LET NORMWGT = CFWT;
%LET NORMDAT = HCS11A_2;

%LET DEBUG=N;       /** Set to Y for Debug print of datasets **/
%LET INDATA=HCS13A_2;

%LET YRDATA=HCS13;
%LET YR=13;

/***** The following parameters are used in the Variance ****/
/***** calcuation macro for region and catchment area    ****/

%LET GRPNUM=8;      /** number of groups          **/
%LET COMPNUM=6;     /** number of variables       **/  /* RSG - 04/2005 changed from 8 to 7
(eliminate cholesterol*/
%LET REGNUM=18;     /** number of regions         **/  /* RSG - 01/2005 CHANGED TO FIT THE 16
CATEGORIES OF XSERVREG */
                                                       /* JSO 08/24/2006 (16 TO 15) Changed
Overseas Regions*/
                                                       /* MER 11/11/2012 (15 TO 18) Joint Service
*/
%LET CATCHNUM=9999; /** number of catchment areas **/

%LET CMPNUM1=4;   /** number of variables in first composite  **/   /*RSG 04/2005 Changed
CMPNUM1 from 5 to 4*/
%LET CMPNUM2=2;   /** number of variables in second composite **/   /*MJS 04/30/03 Changed
CMPNUM2 from 4 to 3*/

%LET COMPCNT=2;   /** number of composites                 **/

**** set up benchmarks for preventive services ;
**** MER 3/31/11 - updated to hp 2020 goals    ;

%LET GOALVAR1= .78;   /** HP Goal for prenatal care       **/
%LET GOALVAR2= .81;   /** HP Goal for Mammography         **/
%LET GOALVAR3= .93;   /** HP Goal for Papsmear            **/
%LET GOALVAR4= .95;   /** HP Goal for Blood Pressure check **/
%LET GOALVAR5= .90;   /** access goals                   **/ /*04/2005 - RSG: DELETED
CHOLESTEROLE GOAL*/
%LET GOALVAR6= .90;
```

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```
%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";

*****************************************************************;
* Beneficiary group note
*     Eight groups               Definitions
*     _____;
* 1. Prime enrollees             XINS_COV IN (1,2,6) AND H09004>=2
* 2. Enrollees w/mil PCM         XENR_PCM IN (1,2,6) AND H09004>=2
* 3. Enrollees w/civ PCM         XENR_PCM IN (3,7)   AND H09004>=2
* 4. Nonenrollees                XINS_COV IN (3) /*JSO 08/24/2006, Deleted 4,5*/
* 5. Active duty                 XBNFGRP = 1
* 6. Active duty dependents       XBNFGRP = 2
* 7. Retirees                    XBNFGRP IN (3,4)
* 8. All beneficiaries           ALL
*****************************************************************;


*----------------------------------------------------
* Add cacsmpl from group8.sd2 dataset - CDR 2/05/2004
*----------------------------------------------------;

PROC SORT DATA=CACLIB.GROUP8 OUT=GROUP8(KEEP=MPRID CACSMPL XSERVIND);
   BY MPRID;
RUN;

PROC SORT DATA=IN.&INDATA(KEEP=MPRID XINS_COV HP_BP HP_MAMOG
                              HP_PAP HP_PRNTL   /*ES 02/04/04*/
                              XTNEXREG XENR_PCM XBNFGRP ENBGSMPL &WGT FIELDAGE DBENCAT
                              STRATUM H13010 H13007 H13004 H13003 SERVAFF XREGION)
   OUT= &YRDATA; BY MPRID;
RUN;

/**** note -- output all data to a single dataset for macro */
/**** call                                                 */
/**** MACROS are no longer called for catchment areas      */

/* 08/24/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
*LIBNAME LIBRARY '..\..\..\..\2005\Data\fmtlib';

DATA NORMDATA(KEEP=XTNEXREG XSERVREG &WGT PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
                  DENV1-DENV&COMPNUM XSERVAFF FIELDAGE);
                  /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

  set INNORM.&NORMDAT(KEEP=MPRID XINS_COV HP_BP HP_MAMOG HP_PAP HP_PRNTL XTNEXREG
                          XENR_PCM XBNFGRP ENBGSMPL &NORMWGT DBENCAT
                          H11010 H11007 H11003 SERVAFF XREGION FIELDAGE XCATCH);
                  /* 08/24/2006 JSO Added XREGION in the keep statement to get XOCONUS */
                  /* 11/15/2006 JSO Added FIELDAGE in the keep statement */
                  /* 05/10/2007 JSO Added H05006, DBENCAT in the keep statement */
                  /* 12/21/2011 MER For switch to 2011 norm data mapped the following vars:
*/
                  /* H05006 -> H11003                                                   */
                  /* H05007 -> H11004 (subsequently taken out due to not being necessary */
                  /* H05019 -> H11007                                                   */
                  /* H05022 -> H11010                                                   */
                  /* H05030 and ADJ_CELL were dropped                                   */

*****************************************************************************
* For quarterly reports, catchment level reporting is not done
* so the value of cellp is set to 1.
* For annual reporting purposes, cellp will need to be assigned
* to geocell
*****************************************************************************;

/*RSG 02/2005 Added codes to define XTNEXREG & XSERVAFF*/

  IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
  ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
  ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
  ELSE XSERVAFF = 4;                         *Other/unknown;

  IF XCATCH = 37 THEN XCATCH = 67; /* Recode for combining of Walter Reed facilities */

  IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;
```

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```
   IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

   IF XTNEXREG = . THEN DELETE;

   IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

   NXNS_COV = XINS_COV;                /*JSO 04/26/2007 added for reservists logic*/
                                       /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
   IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
   IF DBENCAT IN('GRD','IGR') AND H11003 = 3 THEN DO;
      NXNS_COV = 3;
      XENR_PCM = .;
   END;

   PRVVAR1=HP_PRNTL;         /** prenatal care  **/
   PRVVAR2=HP_MAMOG;         /** mammography    **/
   PRVVAR3=HP_PAP;           /** papsmear       **/
   PRVVAR4=HP_BP;            /** blood pressure **/
   PRVVAR5=H11010;           /** access var 1   **/
   PRVVAR6=H11007;           /** access var 2   **/

/**** set up numerator and denominator for proportions ****/

   ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
   ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
   ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

   DO I = 1 TO &COMPNUM;
      IF I LE  &CMPNUM1 THEN DO;
         IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
         ELSE NUMER(I)=0;
         IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
      END;
      ELSE IF I GT &CMPNUM1 THEN DO;
         IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
         ELSE NUMER(I)=0;
         IF PRVVAR(I) > 0 THEN DENOM(I)=1;
      END;
   END;
   DROP I;
   DENV4=1;


 /*RSG 02/2005 Added codes to define XSERVREG CACSMPL*/

   IF XTNEXREG = 1 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 1;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
      ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
      ELSE XSERVREG = 5;
   END;

   IF XTNEXREG = 2 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 6;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
      ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
      ELSE XSERVREG = 10;
   END;

   IF XTNEXREG = 3 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 11;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
      ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
      ELSE XSERVREG = 15;
   END;

   IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
      IF     XREGION = 13 THEN XSERVREG = 16;
      ELSE IF XREGION = 14 THEN XSERVREG = 17;
```

```
      ELSE IF XREGION = 15 THEN XSERVREG = 18;
   END;


   /* AMK 8/02/12 - New logic for handling out of catchment OCONUS */
   IF XCATCH = 9904 THEN DO;
      IF XSERVREG <=5 THEN XCATCH=9901;
      ELSE IF XSERVREG <=10 THEN XCATCH=9902;
      ELSE IF XSERVREG <=15 THEN XCATCH=9903;
      ELSE IF XSERVREG = 16 THEN XCATCH=9905;
      ELSE IF XSERVREG = 17 THEN XCATCH=9906;
      ELSE IF XSERVREG = 18 THEN XCATCH=9907;
   END;



   RENAME XCATCH=CACSMPL &NORMWGT = &WGT;
run;

PROC SORT DATA=CACLIB.GROUP8 OUT=GROUP8(KEEP=MPRID CACSMPL XSERVIND);
    BY MPRID;
RUN;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
*LIBNAME LIBRARY  "..\..\..\Data\Afinal\fmtlib";

DATA &YRDATA(KEEP=BGROUP MHS USA XSERVAFF CACSMPL &WGT. TMP_CELL
                  PRVVAR1-PRVVAR&COMPNUM. NUM&YR.V1-NUM&YR.V&COMPNUM.
                  DEN&YR.V1-DEN&YR.V&COMPNUM IN_GROUP8
                  XTNEXREG XSERVREG XSERVIND);
                  /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

   MERGE &YRDATA.(IN=IN_1) GROUP8(IN=IN_2); /*CDR 2/05/2004 */
   BY MPRID;
   IF IN_1;
   IF IN_2=1 THEN IN_GROUP8=1;
   ELSE IN_GROUP8=0;



*******************************************************************************
* For quarterly reports, catchment level reporting is not done
* so the value of cellp is set to 1.
* For annual reporting purposes, cellp will need to be assigned
* to geocell
*******************************************************************************;
   IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
   ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
   ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
   ELSE XSERVAFF = 4;                         *Other/unknown;

   IF PUT(CACSMPL, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

   CELLP = 1;
   LENGTH TMP_CELL 8;
   TMP_CELL = STRATUM;   /* Make STRATUM a numeric variable */

   IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

   IF XTNEXREG = . THEN DELETE;

   IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

   NXNS_COV = XINS_COV;   /*JSO 05/14/2007 added for reservists logic*/
                          /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
   IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
   IF DBENCAT IN('GRD','IGR') AND H13003 = 3 THEN DO;
      NXNS_COV = 3;
      XENR_PCM = .;
   END;

   PRVVAR1=HP_PRNTL;         /** prenatal care  **/
   PRVVAR2=HP_MAMOG;         /** mammography    **/
   PRVVAR3=HP_PAP;           /** papsmear       **/
   PRVVAR4=HP_BP;            /** blood pressure **/
```

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```
  /*RSG 04/2005 - delete cholesterol, renumber PRVVAR below*/
  PRVVAR5=H13010;          /** access var 1   **/
  PRVVAR6=H13007;          /** access var 2   **/


/**** set up numerator and denominator for proportions ****/

  ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
  ARRAY  NUMER(*) NUM&YR.V1-NUM&YR.V&COMPNUM;
  ARRAY  DENOM(*) DEN&YR.V1-DEN&YR.V&COMPNUM;

  DO I = 1 TO &COMPNUM;
     IF I LE  &CMPNUM1 THEN DO;
        IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
     END;
     ELSE IF I GT &CMPNUM1 THEN DO;
        IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) > 0 THEN DENOM(I)=1;
     END;
  END;
  DROP I;
  DENV4=1;

  MHS= 1;   /* set up dummy for MHS-- include all observations */

 /* 08/22/2006, JSO Create XOUSA for 2005 data */


  IF XTNEXREG = 1 THEN DO;
     IF XSERVAFF = 1 THEN XSERVREG = 1;
     ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
     ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
     ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
     ELSE XSERVREG = 5;
  END;

  IF XTNEXREG = 2 THEN DO;
     IF XSERVAFF = 1 THEN XSERVREG = 6;
     ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
     ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
     ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
     ELSE XSERVREG = 10;
  END;

  IF XTNEXREG = 3 THEN DO;
     IF XSERVAFF = 1 THEN XSERVREG = 11;
     ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
     ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
     ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
     ELSE XSERVREG = 15;
  END;

  IF XTNEXREG = 4 THEN DO;
     IF XREGION = 13 THEN XSERVREG = 16;
     ELSE IF XREGION = 14 THEN XSERVREG = 17;
     ELSE IF XREGION = 15 THEN XSERVREG = 18;

  END;

  IF XSERVREG = . THEN DELETE;  /* MER 11/10/10 - Deletes records with imputed TNEXREG = 'O' */
                                /* and missing XOCONUS.  (Only applies to CACSMPL = 9904)    */

/* AMK 8/02/12 - New logic for handling out of catchment OCONUS
   USING CACSMPL INSTEAD OF XCATCH B/C NO RENAME STATEMENT AFTERWARD, AS IN
   SMK_BMI AND STEP1*/

  IF CACSMPL = 9904 THEN DO;
     IF XSERVREG <=5 THEN CACSMPL=9901;
     ELSE IF XSERVREG <=10 THEN CACSMPL=9902;
     ELSE IF XSERVREG <=15 THEN CACSMPL=9903;
```

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```
     ELSE IF XSERVREG = 16 THEN CACSMPL=9905;
     ELSE IF XSERVREG = 17 THEN CACSMPL=9906;
     ELSE IF XSERVREG = 18 THEN CACSMPL=9907;
  END;

****************************************************************************
* Assign indicator of USA based on XTNEXREG.  USA stands for
* Contential United States it but includes both Alaska and Hawaii.
* 1/16/09 Changed USA to USA.
****************************************************************************;
  IF XTNEXREG IN (1,2,3) THEN USA=1;                              /*RSG 01/2005 OVERALL USA*/

  ELSE IF XTNEXREG = 4 THEN USA=2;

* Prime enrollees      *;

  IF (NXNS_COV IN (1,2,6) AND H13004>=2) THEN DO;
     BGROUP=1;
     OUTPUT;
  END;

* Enrollees with military PCMs *;
  IF (XENR_PCM IN (1,2,6) AND H13004>=2) THEN DO;   /*ES 02/04/04*/
     BGROUP=2;
     OUTPUT;
  END;


* Enrollees with civilian PCMs *; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
     (XENR_PCM IN (3,7) AND H13004>=2) THEN DO;
     BGROUP=3;
     OUTPUT;
  END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
     ((XENR_PCM IN (3) AND H13004>=2) OR NXNS_COV IN (3,9,10)) THEN DO;  /*JSO 07/30/2007, Added
9*/
     BGROUP=3;
     OUTPUT;
  END;

* Nonenrollees *;

  IF NXNS_COV IN (3,9,10) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
     BGROUP=4;                /*JSO 07/30/2007, Added 9*/
     OUTPUT;
  END;

* Active duty      *;

  IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
     BGROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
     OUTPUT;
  END;

* Active duty dependents  *;

  IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
     BGROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
     OUTPUT;
  END;

* Retirees  *;

  IF XBNFGRP IN (3,4) THEN DO;
     BGROUP=7;
     OUTPUT;
  END;

* All beneficiaries *;

  BGROUP=8;
  OUTPUT;
```

```
                RUN;


                PROC FREQ DATA=&YRDATA;
                   TABLES IN_GROUP8/MISSING LIST;
                   TITLE "OVERLAP BETWEEN &INDATA AND GROUP8 DATA";
                RUN;

                **** Next, check catchment areas for requisite number of observations ;
                **** for the macro calls (exclude cacsmpl w/ <2 obs)                  ;
                **** also, keep list of region/catchment area combinations            ;


                PROC FREQ  DATA=&YRDATA;
                    TABLE BGROUP*MHS*USA*XSERVind*CACSMPL/MISSING LIST
                    OUT=OBSCNT(DROP=PERCENT);
                RUN;


                PROC SORT DATA=&YRDATA; BY BGROUP MHS USA XSERVind CACSMPL;
                RUN;

                DATA HCSDB /*FAILED*/;
                   MERGE &YRDATA(IN=IN_ALL) OBSCNT(IN=IN_OBS);
                   BY BGROUP MHS USA XSERVind CACSMPL;
                   IF COUNT < 2 THEN DO;
                       PUT "Failed obs # criterion: XSERVREG=" XSERVREG "CACSMPL=" CACSMPL;
                       *OUTPUT FAILED;
                   END;
                *   ELSE OUTPUT HCSDB;
                RUN;

                DATA OBSCNT;
                   SET OBSCNT;
                   RENAME BGROUP=GROUP;
                RUN;

                PROC SORT NODUPKEY DATA=OBSCNT; BY GROUP CACSMPL;
                RUN;




                ******************************************************
                *** First, calculate standard errors and create    ***
                *** a file for each analytical unit                 ***
                ******************************************************;

                PROC SORT DATA=HCSDB; BY TMP_CELL;
                RUN;

                ******************************************************
                ***** Sudaan macro to calculate standard errors  *****
                ***** there are three output datasets created     *****
                ***** (XTNEXREG, XSERVREG, MHS, XSERVAFF)                   *****
                ***** Note:  7/10/2000 use USA for MHS        *****
                ***** Note:   there are 8 variables and 8 groups   *****
                ***** Note:  1/16/09 Changed USA to USA        *****
                ******************************************************;

                %MACRO A_SUDAAN(TABLEVAR);

                *** set the number of levels in the proc descript ***;
                *** for region or catchment                       ***;

                 %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
                     %LET ENDNUM=4;
                     %LET PREF=S;         /** dataset prefix for service affiliation data    **/
                 %END;
                 %IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
                     %LET ENDNUM=&REGNUM;
                     %LET PREF=R;         /** dataset prefix for region data    **/
                 %END;
```

```
 %ELSE %IF %UPCASE(&TABLEVAR)=USA %THEN %DO;
      %LET ENDNUM=1;
      %LET PREF=C;           /** dataset prefix for catchement area data **/
 %END;
 %ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
      %LET ENDNUM=5;        /** RSG 01/2005 Change level of USA to 4 **/
      %LET PREF=M;          /** MER 11/11/2012 Change from 4 to 5 for Joint Service **/
 %END;
%ELSE %IF %UPCASE(&TABLEVAR)=CACSMPL %THEN %DO;
      %LET ENDNUM=&CATCHNUM;
      %LET PREF=D;           /** dataset prefix for catchement area data **/
 %END;

 %DO I=1 %TO &GRPNUM;     /** 8 groups     **/

      %DO J=1 %TO &COMPNUM;   /** 6 variables **/

            DATA INDATA&I.&J(KEEP=&WGT MHS USA XTNEXREG XSERVREG XSERVAFF
                             CACSMPL NUM&YR.V&J DEN&YR.V&J TMP_CELL);
            SET HCSDB;
            WHERE XSERVREG > 0 AND BGROUP=&I AND DEN&YR.V&J > 0;
            %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
                IF XSERVAFF > 5 OR XSERVAFF = . THEN DELETE;  /*RSG 01/2005 Delete USA greater
than 4 which are not USA */
            %END;                                        /*MER 11/11/2012 Changed from 4 to 5
for Joint Service */
            %IF %UPCASE(&TABLEVAR)=USA %THEN %DO;
                IF USA NE 1 THEN DELETE;
            %END;
            %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
                IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
            %END;
          RUN;

*** Calculate values for regions, catchment areas ****;


            PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
                WEIGHT &WGT;
                SETENV DECWIDTH=4;
                NEST TMP_CELL / MISSUNIT;
                VAR NUM&YR.V&J;
                TABLES &TABLEVAR;
                SUBGROUP &TABLEVAR;
                LEVELS &ENDNUM;
                OUTPUT SEMEAN/ TABLECELL=DEFAULT REPLACE
                FILENAME=&PREF.GRP&I.V&J;
            RUN;


***** first, put all variables into one dataset for each group *****;

         DATA &PREF.GRP&I.V&J;
            SET &PREF.GRP&I.V&J;
            IF SEMEAN NE .;
            MHS=1;
          RUN;

         %IF &J=1 %THEN %DO;
            DATA &PREF.SEGRP&I;
                SET &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
                GROUP=&I;
                IF SEMEAN NE .;
                RENAME SEMEAN = SERR&YR.V&J;
            RUN;
         %END;
         %ELSE %DO;
            DATA &PREF.SEGRP&I;
                MERGE &PREF.SEGRP&I &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
                BY &TABLEVAR;
                GROUP=&I;
                RENAME SEMEAN = SERR&YR.V&J;
            RUN;
```

```
        %END;
      %END;


***** Put all data into one dataset  *****
***** Note:  changed output dataset  *****
***** to include group               *****;

      %IF &I=1 %THEN %DO;

         DATA &PREF.SERR;
            SET &PREF.SEGRP&I;
            KEEP GROUP &TABLEVAR SERR&YR.V1-SERR&YR.V&COMPNUM;
         RUN;
      %END;
      %ELSE %DO;

         DATA &PREF.SERR;
            SET &PREF.SERR
            &PREF.SEGRP&I;
         RUN;
      %END;

******** DEBUG PRINT   *******;

      %IF &DEBUG=Y %THEN %DO;
         %IF &I=&GRPNUM AND &PREF=R %THEN %DO;
              PROC PRINT DATA=&PREF.SERR;
                 VAR &TABLEVAR GROUP SERR&YR.V1-SERR&YR.V&COMPNUM;
              RUN;
         %END;
      %END;

 %END;

%MEND A_SUDAAN;

%A_SUDAAN (USA);
%A_SUDAAN (XSERVAFF);
%A_SUDAAN (XSERVREG);
%A_SUDAAN (XTNEXREG);
%A_SUDAAN (CACSMPL);


*********************************************************
*** Next, calculate correlation coefficients       ***
*** and create a file for each analytical unit      ***
*********************************************************;

%MACRO GETCORR(BYVAR);

 %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=USA %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=CACSMPL %THEN %LET PREF=D;

 PROC SORT DATA=HCSDB; BY &BYVAR;
 RUN;

 %DO I = 1 %TO &GRPNUM;

    PROC CORR NOPRINT DATA=HCSDB OUTP=&PREF.CORRC&I;
       %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %DO;
          WHERE BGROUP=&I AND 1 <= XSERVAFF <= 5;    /** RSG 0/2005 Change USA values to keep to
be between 1-4 **/
       %END;                                         /*MER 11/11/2012 Changed from 4 to 5 for
Joint Service */
       %IF %UPCASE(&BYVAR)=USA %THEN %DO;
          WHERE BGROUP=&I AND USA = 1;
       %END;
       %ELSE %DO;
          WHERE BGROUP=&I;
       %END;
       BY &BYVAR;
```

```
            VAR PRVVAR1-PRVVAR&COMPNUM;
            WITH PRVVAR1-PRVVAR&COMPNUM;
            WEIGHT &WGT;
         RUN;

         DATA &PREF.CORRC&I;
            SET &PREF.CORRC&I;
            WHERE _TYPE_="CORR";
            GROUP=&I;
            ARRAY OLD PRVVAR1-PRVVAR&COMPNUM;
            ARRAY NEW COR&YR.V1-COR&YR.V&COMPNUM;
            DO J = 1 TO &COMPNUM;
               NEW(J)=OLD(J);
            END;
            DROP J PRVVAR1-PRVVAR&COMPNUM;
         RUN;

         %IF &I=1 %THEN %DO;

            DATA &PREF.CORRC;
               SET &PREF.CORRC&I;
            RUN;

         %END;
         %ELSE %DO;

            DATA &PREF.CORRC;
               SET &PREF.CORRC
               &PREF.CORRC&I;
            RUN;

         %END;
         %IF &DEBUG=Y %THEN %DO;
            %IF &I=&COMPNUM AND &PREF=R %THEN %DO;
               PROC PRINT DATA=&PREF.CORRC;
                  WHERE GROUP=1;
               RUN;
            %END;
         %END;
      %END;
   %END;

*** Flatten dataset(for each region, condense matrix to one row) ***;

   %DO K=1 %TO &COMPNUM;

      DATA &PREF.CORR&K;
         SET &PREF.CORRC;
         WHERE _NAME_ = "PRVVAR&K";
         ARRAY CORR   (&COMPNUM) COR&YR.V1-COR&YR.V&COMPNUM;
         ARRAY CORR&K (&COMPNUM) COR&YR.V&K.1-COR&YR.V&K.&COMPNUM;
         DO L=1 TO &COMPNUM;
            CORR&K(L)=CORR(L);
         END;
         KEEP GROUP &BYVAR COR&YR.V&K.1-COR&YR.V&K.&COMPNUM;
      RUN;
      %IF &K=1 %THEN %DO;
         DATA &PREF.CORR;
            SET &PREF.CORR&K;
         RUN;
      %END;
      %ELSE %DO;
         DATA &PREF.CORR;
            MERGE &PREF.CORR(IN=IN_1) &PREF.CORR&K(IN=IN_2);
            BY GROUP &BYVAR;
         RUN;
      %END;
      %IF &DEBUG=Y %THEN %DO;
         %IF &PREF=R %THEN %DO;
            PROC PRINT DATA=&PREF.CORR;
               WHERE GROUP=1;
            RUN;
         %END;
      %END;
```

```
 %END;

%MEND GETCORR;

%GETCORR(USA);
%GETCORR(XSERVAFF);
%GETCORR(XSERVREG);
%GETCORR(XTNEXREG);
%GETCORR(CACSMPL);

********************************************************
***  Macro to derive composites for each        *******
***  beneficiary group, level                   *******
***  output one dataset for each group          *******
********************************************************;

%MACRO GETPROP(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);

 %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=USA %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
 %ELSE %IF %UPCASE(&BYVAR)=CACSMPL %THEN %LET PREF=D;

 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR NUM&YR.V1-NUM&YR.V&COMPNUM
        DEN&YR.V1-DEN&YR.V&COMPNUM;
    WEIGHT &WGT;
    OUTPUT OUT= &PREF.CMPSUM(DROP = _TYPE_)
    SUM =  ;
 RUN;
 PROC MEANS NWAY NOPRINT DATA=normdata;
 *   CLASS &BYVAR;
    VAR
        DENV1-DENV&COMPNUM;
    WEIGHT &wgt.;
    OUTPUT OUT= &PREF.norms(DROP = _TYPE_)
    SUM =  nrmv1-nrmv&compnum;
 RUN;

 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR DEN&YR.V1-DEN&YR.V&COMPNUM;
    OUTPUT OUT=&PREF.DGFR(DROP=_TYPE_ _FREQ_)
    SUM= NOBS&YR.V1-NOBS&YR.V&COMPNUM;
 RUN;

data &pref.cmpsum;

if _n_=1 then set &pref.norms;
set &pref.cmpsum;
proc sort data=&pref.cmpsum; by bgroup &byvar;
 DATA &PREF.CMPSUM;
    MERGE &PREF.CMPSUM(RENAME=(_FREQ_=N_OBS&YR.))
          &PREF.DGFR;
    BY BGROUP &BYVAR;
    %IF &PREF=M %THEN %DO;   /** added 7/10/2000 **/
        WHERE 1 <= XSERVAFF <= 5;         /** RSG 01/2005 Change USA values to keep to be between
1-4 **/
    %END;                                 /*MER 11/11/2012 Changed from 4 to 5 for Joint Service
*/
    %ELSE %IF &PREF=C %THEN %DO;
        WHERE USA = 1;
    %END;

   **** set up group variable  **;

    RENAME BGROUP=GROUP;;

   **** set up proportions, and composites **;
```

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```
   ARRAY PROPORT PROP&YR.V1-PROP&YR.V&COMPNUM;
   ARRAY NUMER   NUM&YR.V1-NUM&YR.V&COMPNUM;
   ARRAY DENOM   DEN&YR.V1-DEN&YR.V&COMPNUM;
   array norm    nrmv1-nrmv&compnum;

   DO J=1 TO DIM(PROPORT);
      PROPORT(J) = NUMER(J)/DENOM(J);
   END;
   DROP J;

  **** composites **;


** added goalvars to datastep, 5/30/2000                    ;
** taken out of temporary array for variance calculations;
** and used, kept as variables                             ;

  GOALVAR1=&GOALVAR1;
  GOALVAR2=&GOALVAR2;
  GOALVAR3=&GOALVAR3;
  GOALVAR4=&GOALVAR4;
  GOALVAR5=&GOALVAR5;
  GOALVAR6=&GOALVAR6;
/*RSG 04/2005 - delete goal8 since chol eliminated*/

** the weight for preventive service is defined as the      ;
** proportion of the denominator for that service to the    ;
;
** composite denominator                                    ;
** healthy people 2000 goals -- used as benchmarks          ;

  ARRAY    SVCWGT(&COMPNUM) WGT&YR.V1-WGT&YR.V&COMPNUM;
  ARRAY     BMARK(&COMPNUM) GOALVAR1-GOALVAR&COMPNUM;
  ARRAY WGTBMARK(&COMPNUM) WTD&YR.V1-WTD&YR.V&COMPNUM;
  array comp(&compnum) cmp&yr.v1-cmp&yr.v&compnum;
cpden1=sum(of nrmv1-nrmv&cmpnum1);
cpden2=sum(of nrmv&start-nrmv&compnum);
  DO K = 1 TO &COMPNUM;
     IF K < &START THEN SVCWGT(K)= norm(K)/CPDEN1;
     ELSE SVCWGT(K) = norm(K)/CPDEN2;
     WGTBMARK(K) = SVCWGT(K)*BMARK(K);
     comp(k)=svcwgt(k)*proport(k);
  END;
  DROP K;
  CP&YR.BMK1=SUM(OF WTD&YR.V1-WTD&YR.V&CMPNUM1);
  CP&YR.BMK2=SUM(OF WTD&YR.V&START-WTD&YR.V&COMPNUM);
  comp&yr.1=sum(of cmp&yr.v1-cmp&yr.v&cmpnum1);
  comp&yr.2=sum(of cmp&yr.v&start-cmp&yr.v&compnum);
  DROP WGT&YR.V1-WGT&YR.V&COMPNUM WTD&YR.V1-WTD&YR.V&COMPNUM
       NUM&YR.V1-NUM&YR.V&COMPNUM;

 RUN;

 %IF &DEBUG=Y AND &PREF=R %THEN %DO;
     PROC PRINT DATA=&PREF.CMPSUM;  /* print out final dataset */
     RUN;                           /* for region to check    */
 %END;

%MEND GETPROP;

%GETPROP(USA);
%GETPROP(XSERVAFF);
%GETprop(XSERVREG);
%GETPROP(XTNEXREG);
%GETProp(CACSMPL);

********************************************************
** since MHS benchmarks will be displayed        ****
** set up adjustment factor to apply to          ****
** each analytical unit's composite benchmarks   ****
********************************************************;
```

```
DATA ADJUST;
   SET MCMPSUM(KEEP=GROUP CP&YR.BMK1 CP&YR.BMK2);
   WHERE GROUP=8;             /** use all beneficiaries **/
   RENAME CP&YR.BMK1=MHS&YR.BM1;
   RENAME CP&YR.BMK2=MHS&YR.BM2;
   DROP GROUP;
RUN;


********************************************************
***   Macro to merge 3 datasets for each       *******
***   called by analytical unit                *******
***   output final dataset for                 *******
***   XSERVAFF, XSERVREG, XTNEXREG, MHS (USA)   *******
********************************************************;

PROC FORMAT;  /*RSG 02/2005 - hardcoded in prog to have caps vs format in loadcahq.inc*/
   VALUE REGIONF
      0 = "USA MHS "
      1 = "NORTH"
      2 = "SOUTH"
      3 = "WEST"
      4 = "OVERSEAS"
   ;
%MACRO GETSIG(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);
 %LET NEXT  = %EVAL(&CMPNUM1+2);

 %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=USA %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
 %ELSE %IF %UPCASE(&BYVAR)=CACSMPL %THEN %LET PREF=D;


 DATA OUT.&PREF.FINAL (KEEP= MAJGRP REGION REGCAT GOALVAR1-GOALVAR&COMPNUM
                  SIG&YR.V1-SIG&YR.V&COMPNUM SCOR&YR.V1-SCOR&YR.V&COMPNUM
                  CP&YR.SIG1-CP&YR.SIG&COMPCNT CP&YR.1SE CP&YR.2SE
                  CP&YR.BMK1-CP&YR.BMK&COMPCNT
                  SERR&YR.V1-SERR&YR.V&COMPNUM CP&YR.1SE CP&YR.2SE
                  COMP&YR.1 COMP&YR.2 PROP&YR.V1-PROP&YR.V&COMPNUM
                  DF&YR.SCR1-DF&YR.SCR&COMPNUM DF&YR._CP1 DF&YR._CP2
                  NOBS&YR.V1-NOBS&YR.V&COMPNUM CP&YR.OBS1-CP&YR.OBS&COMPCNT
                  DEN&YR.V1-DEN&YR.V&COMPNUM CP&YR.DEN1-CP&YR.DEN&COMPCNT);


  /** output a dataset to check **/

   /* OUT.&PREF.CHECK(DROP=DROP=SESQ&YR.V1-SESQ&YR.V&COMPNUM
                        PROP&YR.V1-PROP&YR.V&COMPNUM
                        SEM&YR.V11-SEM&YR.V&COMPNUM.&COMPNUM);*/

   FORMAT MAJGRP $30. REGION $30. REGCAT $42.; /* MER 11/11/12 - Updated REGION for Joint Service
facilities */

   %IF &PREF=D %THEN %DO;

      MERGE OBSCNT(IN=IN_OBS) &PREF.CMPSUM(IN=IN_PROP) &PREF.CORR
            &PREF.SERR;
      BY GROUP &BYVAR;
      IF IN_OBS;

   %END;
   %ELSE %DO;

      MERGE &PREF.CMPSUM(IN=IN_PROP) &PREF.CORR
            &PREF.SERR;
      BY GROUP &BYVAR;
      IF IN_PROP;

   %END;
```

```
    /**  MAJGRP -- text field for group   **/

        IF GROUP=1 THEN MAJGRP="Prime Enrollees            ";
   ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
   ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
   ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
   ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
   ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
   ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
   ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";


    /**** REGION AND REGCAT SETUP         **/

    %IF &PREF=D %THEN %DO;
       REGCAT=PUT(CACSMPL, CACR.);
       REGION=PUT(XSERVind, SERVREGo.);
    %END;
    %IF &PREF=S %THEN %DO;
       REGCAT=PUT(XTNEXREG,REGIONF.);
       REGION=PUT(XTNEXREG,REGIONF.);
    %END;
    %else %IF &PREF=C %THEN %DO;
       REGION="USA MHS";
       REGCAT="USA MHS";
    %END;
    %ELSE %IF &PREF=R %THEN %DO;
       REGION=PUT(XSERVREG, SERVREGo.);
       REGCAT=PUT(XSERVREG, SERVREGo.);
    %END;
    %ELSE %IF &PREF=M %THEN %DO;                     /** RSG 1/2005 Add codes for service grouping
**/
       REGION=PUT(XSERVAFF,XSERVAFF.);
       REGCAT=PUT(XSERVAFF,XSERVAFF.);
    %END;

    /**** setup t statistics, degreees of freedom   **/

    ARRAY    TSTAT{&COMPNUM} T_&YR.V1-T_&YR.V&COMPNUM;
    ARRAY     BMARK{&COMPNUM} GOALVAR1-GOALVAR&COMPNUM;
    ARRAY  STNDERR{&COMPNUM} SERR&YR.V1-SERR&YR.V&COMPNUM;
    ARRAY  SERRSQR{&COMPNUM} SESQ&YR.V1-SESQ&YR.V&COMPNUM;
    ARRAY     DEGF{&COMPNUM} DF&YR.SCR1-DF&YR.SCR&COMPNUM;
    ARRAY    DENOM{&COMPNUM} DEN&YR.V1-DEN&YR.V&COMPNUM;
    ARRAY  PROPORT{&COMPNUM} PROP&YR.V1-PROP&YR.V&COMPNUM;
    ARRAY    SCORE{&COMPNUM} SCOR&YR.V1-SCOR&YR.V&COMPNUM;
    ARRAY   PVALUE{&COMPNUM} PVAL&YR.V1-PVAL&YR.V&COMPNUM;
    ARRAY      SIG{&COMPNUM} SIG&YR.V1-SIG&YR.V&COMPNUM;
    ARRAY    N_OBS{&COMPNUM} NOBS&YR.V1-NOBS&YR.V&COMPNUM;
    array     norm{&compnum} nrmv1-nrmv&compnum;
    /** get the item variance, t-statistics, df, p-values **/
    /** and whether significant                          **/

    DO I=1 TO &COMPNUM;
       SERRSQR{I}=STNDERR{I}**2;  /* Item variance */
       SCORE{I}=PROPORT{I}*100;    /* Score (prop. * 100) */
       IF STNDERR{I} > 0 THEN TSTAT{I}=(PROPORT{I}-BMARK{I})/STNDERR{I};
       ELSE TSTAT{I}=.;
       DEGF{I}=N_OBS{I}-1;
       PVALUE{I}=(1-PROBT(ABS(TSTAT{I}),DEGF{I}))*2;
       IF PVALUE{I} GE .05 THEN SIG{I}=0;
       ELSE IF PVALUE{I} < .05 THEN DO;
          IF PROPORT{I} > BMARK{I} THEN SIG{I}=1;
          IF PROPORT{I} < BMARK{I} THEN SIG{I}=-1;
       END;
    END;
    DROP I;

    /** multiply each item pair std. errors and correlation coefficients **/
    /** preventive care composite                                        **/

    ARRAY SERRC1{&CMPNUM1} SERR&YR.V1-SERR&YR.V&CMPNUM1;
```

```
    ARRAY SEwC1{&CMPNUM1} SEw&YR.V1-SEw&YR.V&CMPNUM1;
    %DO J = 1 %TO &CMPNUM1;
        ARRAY  SMEAN&J{&CMPNUM1} SEM&YR.V&J.1-SEM&YR.V&J.&CMPNUM1;
        ARRAY CORVAR&J{&CMPNUM1} COR&YR.V&J.1-COR&YR.V&J.&CMPNUM1;
        DO K=1 TO &CMPNUM1;
            SMEAN&J{K}=SERR&YR.V&J*SERRC1{K}*CORVAR&J{K}*norm{K}*nrmV&J;
        END;
        SEM&YR.V&J.&J=0; /** don't count in final standard error calculation **/
        sew&yr.v&j= (nrmV&j**2)*SESQ&YR.V&j;
        %END;
    DROP K;
    /** multiply each item pair std. errors and correlation coefficients **/
    /** access to care composite                                         **/

    ARRAY SERRC2{&CMPNUM2} SERR&YR.V&START-SERR&YR.V&COMPNUM;

    %DO L = &START %TO &COMPNUM;
        ARRAY  SMEAN&L{&CMPNUM2} SEM&YR.V&L.&START-SEM&YR.V&L.&COMPNUM;
        ARRAY CORVAR&L{&CMPNUM2} COR&YR.V&L.&START-COR&YR.V&L.&COMPNUM;
        DO M=1 TO &CMPNUM2;
            SMEAN&L{M}=SERR&YR.V&L*SERRC2{M}*CORVAR&L{M};
        END;
        SEM&YR.V&L.&L=0;  /** don't coun't in final standard error calculation **/
     %END;
     DROP M;
  /** calculate composite t-statistic, pvalue, and whether significant **/
  /** for composites                                                   **/

    %DO P=1 %TO &COMPCNT;
        %IF &P=1 %THEN %DO;

           /** composite standard error comprised of two parts **/
           CP&YR.&P.SE1=SUM(OF SEw&YR.V1-SEw&YR.V&CMPNUM1);
           CP&YR.&P.SE2=SUM(OF SEM&YR.V11-SEM&YR.V&CMPNUM1.&CMPNUM1.);
           cp&yr.obs&p=sum(of nobs&yr.v1-nobs&yr.v&cmpnum1);
           cp&yr.den&p=sum(of nrmv1-nrmv&cmpnum1);
        %END;
        %ELSE %DO;
           CP&YR.&P.SE1=SUM(OF SESQ&YR.V&START-SESQ&YR.V&COMPNUM);
           CP&YR.&P.SE2=SUM(OF SEM&YR.V&START.&START.-SEM&YR.V&COMPNUM.&COMPNUM.);

        %END;

    /** add the two parts of the composite standard error  **/
    /** calculate the composite t statistics and p-values   **/
    /** determine whether differences re sigificant         **/

    /**RSG - 02/2005 Some of the following codes will produce some
             "error" (e.g., fields that are not initialized) - these
             are "leftover" codes from previous versions of the survey
             where 2 composite scores were produced.  Now since we only
             use 1 composite score, these are basically calculations that
             are not used...but kept in "just in case"**/
        IF CP&YR.DEN&P > 0 THEN CP&YR.&P.SE=SQRT(CP&YR.&P.SE2+CP&YR.&P.SE1)/cp&yr.den&P;  /*RSG
02/2005 prevent division by zero*/
        ELSE CP&YR.&P.SE = .;
        IF CP&YR.&P.SE > 0 THEN CP&YR._T&P.=(COMP&YR.&P.-CP&YR.BMK&P.)/CP&YR.&P.SE;
        ELSE CP&YR._T&P.= .;
        DF&YR._CP&P.=CP&YR.OBS&P. - 1;
        CP&YR._P&P.=(1-PROBT(ABS(CP&YR._T&P.),DF&YR._CP&P.))*2;
        IF CP&YR._P&P GE .05 THEN CP&YR.SIG&P=0;
        ELSE IF CP&YR._P&P < .05 THEN DO;
           IF COMP&YR.&P. > CP&YR.BMK&P THEN CP&YR.SIG&P= 1;
           ELSE IF COMP&YR.&P. < CP&YR.BMK&P THEN CP&YR.SIG&P=-1;
        END;

    %END;

    OUTPUT OUT.&PREF.FINAL;

    /*%IF &PREF=M %THEN %DO;
       OUTPUT OUT.&PREF.CHECK;
    %END; */
```

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```
 RUN;

%MEND GETSIG;

/** RSG 02/2005 - Any errors relating to unintialized fields such as
    cp&yr.den2 or cp&yr.obs2 can be ignored - these (as well as field
    that uses these fields for calculations, e.g. df&yr._cp2, are not
    used **/
%GETSIG(USA);
%GETSIG(XTNEXREG);
%GETSIG(XSERVREG);
%GETSIG(XSERVAFF);
%GETSIG(CACSMPL);
```

**G.12.B   ReportCards\MPR_Adult2013\smoking_BMI.sas - Calculate Healthy Behavior Composite Scores -
Annual.**

```
*****************************************************************************
*
*  Project:    DoD Reporting and Analysis 6077-410
*  Program:    SMOKING_BMI.SAS
*  Purpose:    Calculate Smoking Rate and Smoking Cessation
*              for each region-service affiliation and
*              conus-service affiliation groups.
*
*  Date:       1/31/2005
*  Author:     Regina Gramss
*
*  Modified:  1) 04/2005 By Regina Gramss, Updated for Q1 2005.
*             2) 12/2005 By Regina Gramss, Updated for Q4 2005.
*             3) 01/2006 By Regina Gramss - Updated for 2005 annual data.  Normalize
*                with 2005 data and not 2000.  Standardize using age/sex and MPCSMPL
*                (military personnel category).  Update smoking cessation
*                calculation with new formula to correspond more to HEDIS.  Use new
*                weight (CFWT) and use STRATUM as TMP_CELL.
*             4) 03/24/2006 By Keith Rathbun, Updated for Q2 FY 2006.
*             5) 07/12/2006 By Justin Oh, Updated for Q3 FY 2006.
*             6) 08/24/2006 By Justin Oh, REGNUM changed from 16 to 24.
*                Changed XSERVREG for Overseas
*                Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                        IF XINS_COV IN (3)     THEN GROUP4 = 1
*                Since only XINS_COV IN (1,2,3,6) is kept.
*                Create XOCONUS for 2005 data.
*                Added/Moved LIBRARY Libname to use both Quarter/Annual Formats.
*             7) 10/04/2006 By Justin Oh, Updated %LET DSN and CURRENT.
*             8) 12/22/2006 By Justin Oh, Updated %LET DSN HCS071_1 and CURRENT October, 2006.
*             9) 02/02/2007 By Justin Oh, Added "s" to Healthy Behaviors
*            10) 04/05/2007 By Justin Oh, Updated %LET DSN HCS072_1 and CURRENT January, 2007.
*            11) 04/05/2007 By Justin Oh, Added conditions for RC types
*                        ReportCards OR PurchasedReportCards.
*            12) 05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*                        both Norm and Quarter datasets.
*            13) 05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*                        Groups 1,3, and 4 for new reservists logic.
*            14) 07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*                        Groups All, 4, 5, and 6.
*            15) 09/04/2007 By Justin Oh, Updated %LET DSN HCS074_1 and CURRENT July, 2007.
*            16) 01/10/2008 By Keith Rathbun, Updated %LET DSN HCS081_1 and CURRENT October,
2007.
*                        Also changed H07 variable names to be H08 to match 2008 survey.
*            17) 04/11/2008 By Justin Oh, Updated %LET DSN HCS082_1 and CURRENT January, 2008.
*            18) 06/13/2008 By Keith Rathbun, Updated %LET DSN HCS083_1 and CURRENT April, 2008.
*            19) 03/11/2009 By Keith Rathbun, Updated %LET DSN HCS092_1 and CURRENT January,
2009.
*            20) 04/20/2009 By Mike Rudacille, Switched from 2005 to 2007 benchmark data for
transition to
*                V4 questionnaire.
*            21) 05/05/2009 By Mike Rudacille, Updated for 2008 benchmark data.
*            22) 06/22/2009 By Keith Rathbun, Updated %LET DSN HCS093_1 and CURRENT April, 2009.
*                Changed weight variable from FWRWT_V4 back to FWRWT.
*            23) 09/30/2009 By Mike Rudacille, Updated %LET DSN HCS094_1 and CURRENT July, 2009.
*            24) 09/10/2010 By Mike Rudacille, Updated for 2010 annual report
*            25) 11/02/2010 By Mike Rudacille, Updated input datset from HCS10A_1 to HCS10A_2.
*            26) 10/21/2012 By Mike Rudacille, Updated for 2012 annual report
*            27) 11/11/2012 By Mike Rudacille Updated for handling of Joint Service facilities
*
*   Inputs:   1) HCS11A_2.sas7bdat - Annual 2011 Survey data
*             2) HCS13A_2.sas7bdat - Annual 2013 Survey data
*             3) AC2011DB.sas7bdat - 2011 CAHPS Benchmark Data
*
*   Output:   1) SMOKE.sas7bdat
*
*
*****************************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR;
```

```
/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards              ***/
%LET RCTYPE = ReportCards;

LIBNAME BENCH        "..\..\..\..\2011AdultNCBD";
LIBNAME INDAT        "..\..\..\Data";
LIBNAME INNORM       "..\..\..\..\2011\Data";
LIBNAME OUT          ".";
LIBNAME LIBRARY '..\..\..\Data\fmtlib';
LIBNAME INGP '..\CAHPS_ADULT2013\DATA';

%LET DSN=HCS13A_2;
%LET DSN_NORM=HCS11A_2;                  /*JSO 08/24/2006, Changed Regions, 16 to 15*/ /* MER
11/03/12 15 to 18 */
%LET REGNUM = 18;                        /*RSG 01/2005 Number of Regions (with serv affiliation)*/
%LET CONNUM = 4;                         /*RSG 01/2005 Number of Conus level (with serv
affiliation)*/
%LET SRVNUM = 5;                         /*MER 11/03/2012 Number of service affiliations,
including Joint Service */
%LET CURRENT = 2013;
%LET WGT = CFWT;
%LET NORMWGT = CFWT;
%LET CATCHNUM=9999;                      /*RSG 02/2005 number of catchment areas **/

DATA BENCHA01;
   SET BENCH.AC2011DB (RENAME=(BIRTHYY=YOB));
   if product in (7,9) then model=4;
   if product=3 then model=2;                        /*coded according to AC FORMATS.SAS*/
   if product=1 then model=1;
   if product=4 then model=6;
   if product=8 then model=5;
   if product=2 then model=3;
   product=planid;
/*if ^(model in (2,4)); */ *AMK 4/06/12 removed;
if disp in ('M10','I10')  ;
if ac45_11 in (1,2) & ac46_11>=1 & ac46_11<=4;  /*02/2006 RSG - REMOVED REQUIREMENT FOR
ADDITIONAL VISIT (ACC22 FIELD)*/
cessbnch=0;
if ac46_11>1 then cessbnch=1;


proc summary nway; class product;
var cessbnch;
output out=tbench mean=;
proc print;
proc summary;
var cessbnch;
output out=tbench mean=;
proc print;
data _null_;
set tbench;
call symput('CNSLGOAL',cessbnch);
run;

%LET NSMKGOAL = 0.88;

%LET BMIGOAL  = 0.69;

%INCLUDE "..\..\LoadWeb\LOADCAHQ.INC";

PROC FORMAT;
VALUE AGEF
LOW - 34 = 1
 35 - 49 = 2
 50 - 64 = 3
 65 - HIGH = 4;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */

DATA NORMDATA (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF
               SM_RATE SM_CESS SM_RTDN SM_CSDN  BMI_DN BMI
               TOTCON GROUP XSEXA &WGT. age_n MPCSMPL CACSMPL NXNS_COV);
               /* 05/10/2007 JSO Added NXNS_COV in the keep statement */
```

```
SET INNORM.&DSN_NORM. (DROP=CACSMPL) ;
LENGTH AGE_N AGE_GRP TMP_CELL 8.;


TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);
IF AGE_GRP < 4;

IF SERVAFF = 'A' THEN XSERVAFF = 1;          *Army;
ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
ELSE XSERVAFF = 4;                          *Other/unknown;

IF XCATCH = 37 THEN XCATCH = 67; /* Recode for combining of Walter Reed facilities */

IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

IF XTNEXREG = 1 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 1;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
   ELSE XSERVREG = 5;
END;

IF XTNEXREG = 2 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 6;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
   ELSE XSERVREG = 10;
END;

IF XTNEXREG = 3 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 11;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
   ELSE XSERVREG = 15;
END;

IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
   IF      XREGION = 13 THEN XSERVREG = 16;
   ELSE IF XREGION = 14 THEN XSERVREG = 17;
   ELSE IF XREGION = 15 THEN XSERVREG = 18;
END;

IF HP_SMKH3 IN (1,2) THEN DO;
   SM_RATE = 0;
   IF HP_SMKH3 = 2 THEN SM_RATE=1;
   SM_RTDN=1;
END;

/* MER 3/31/11 Start using HP_CESH3 instead of re-creating work already done in convarq */
IF HP_CESH3 IN (1,2) THEN DO;
   SM_CESS = 0;
   IF HP_CESH3 = 1 THEN SM_CESS=1;
   SM_CSDN=1;
END;

IF xbmicat > 0  THEN DO;
    BMI = 0;
    BMI_DN=1;
   IF xbmicat <=3 THEN BMI=1;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG = 4 THEN TOTCON=2;
```

```
IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */


/* AMK 8/02/12 - New logic for handling out of catchment OCONUS */
IF XCATCH = 9904 THEN DO;
   IF XSERVREG <=5 THEN XCATCH=9901;
   ELSE IF XSERVREG <=10 THEN XCATCH=9902;
   ELSE IF XSERVREG <=15 THEN XCATCH=9903;
   ELSE IF XSERVREG = 16 THEN XCATCH=9905;
   ELSE IF XSERVREG = 17 THEN XCATCH=9906;
   ELSE IF XSERVREG = 18 THEN XCATCH=9907;
END;


RENAME XCATCH=CACSMPL &NORMWGT = &WGT;


IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/


IF XTNEXREG = .    THEN DELETE;


IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11
Added 10,11*/


NXNS_COV = XINS_COV;               /*JSO 04/26/2007 added for reservists logic*/
                                   /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
IF DBENCAT IN('GRD','IGR') AND H11003 = 3 THEN DO;
   NXNS_COV = 3;
   XENR_PCM = .;
END;


* prime enrollees;
IF NXNS_COV IN (1,2,6) AND H11004>=2 THEN DO;
   GROUP=1;
   OUTPUT;
END;


* enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF XENR_PCM IN (1,2,6) AND H11004>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;



* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM = 3 AND H11004>=2 THEN DO;
   GROUP=3;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   ((XENR_PCM = 3 AND H11004>=2) OR NXNS_COV IN (3,9,10)) THEN DO; /*JSO 07/30/2007, Added 9*/
   GROUP=3;
   OUTPUT;
END;



* nonenrollees;
IF NXNS_COV IN (3,9,10) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
   GROUP=4;                      /*JSO 07/30/2007, Added 9*/
   OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
   GROUP=5;         /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR')THEN DO;
   GROUP=6;         /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;
```

```
* retirees;
IF XBNFGRP IN (3,4) THEN DO;
   GROUP=7;
   OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;


DATA SMOKE (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF TOTCON GROUP
               SM_RATE SM_CESS SM_RTDN SM_CSDN XSEXA &WGT BMI_DN BMI
               CACSMPL MPCSMPL NXNS_COV);/* 05/10/2007 JSO Added NXNS_COV in the keep statement
*/
SET INDAT.&DSN. (DROP=CACSMPL);
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

/* MER 4/20/09 - Restrict dataset to just non-zero V4 weights */
*IF &WGT <= 0 THEN DELETE;

TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);

IF AGE_GRP < 4;
IF SERVAFF='A' THEN XSERVAFF=1;             *Army;
   ELSE IF SERVAFF='F' THEN XSERVAFF=2;     *Air Force;
   ELSE IF SERVAFF='N' THEN XSERVAFF=3;     *Navy;
   ELSE XSERVAFF=4;

IF XCATCH = 37 THEN XCATCH = 67; /* Recode for combining of Walter Reed facilities */

IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

IF XTNEXREG = 1 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 1;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
   ELSE XSERVREG = 5;
END;

IF XTNEXREG = 2 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 6;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
   ELSE XSERVREG = 10;
END;

IF XTNEXREG = 3 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 11;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
   ELSE XSERVREG = 15;
END;

IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
   IF      XREGION = 13 THEN XSERVREG = 16;
   ELSE IF XREGION = 14 THEN XSERVREG = 17;
   ELSE IF XREGION = 15 THEN XSERVREG = 18;
END;

IF XSERVREG = . THEN DELETE;  /* MER 11/10/10 - Deletes records with imputed TNEXREG = 'O' */
                             /* and missing XOCONUS.  (Only applies to CACSMPL = 9904)    */

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;
```

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```
ELSE IF XTNEXREG=4 THEN TOTCON=2;

IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

/* AMK 8/02/12 - New logic for handling out of catchment OCONUS */
IF XCATCH = 9904 THEN DO;
   IF XSERVREG <=5 THEN XCATCH=9901;
   ELSE IF XSERVREG <=10 THEN XCATCH=9902;
   ELSE IF XSERVREG <=15 THEN XCATCH=9903;
   ELSE IF XSERVREG = 16 THEN XCATCH=9905;
   ELSE IF XSERVREG = 17 THEN XCATCH=9906;
   ELSE IF XSERVREG = 18 THEN XCATCH=9907;
END;


RENAME XCATCH=CACSMPL;

IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

IF XTNEXREG = . THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

NXNS_COV = XINS_COV;                /*JSO 04/26/2007 added for reservists logic*/
                                    /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
IF DBENCAT IN('GRD','IGR') AND H13003 = 3 THEN DO;
   NXNS_COV = 3;
   XENR_PCM = .;
END;

IF HP_SMKH3 IN (1,2) THEN DO;
   SM_RATE = 0;
   IF HP_SMKH3 = 2 THEN SM_RATE=1;
   SM_RTDN=1;
END;

/* MER 10/07/11 Start using HP_CESH3 instead of re-creating work already done in convarq */
IF HP_CESH3 IN (1,2) THEN DO;
   SM_CESS = 0;
   IF HP_CESH3 = 1 THEN SM_CESS=1;
   SM_CSDN=1;
END;

IF xbmicat > 0  THEN DO;
    BMI = 0;
    BMI_DN=1;
   IF xbmicat <=3 THEN BMI=1;
END;

* prime enrollees;
IF NXNS_COV IN (1,2,6) AND H13004>=2 THEN DO;
   GROUP=1;
   OUTPUT;
END;

* enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF XENR_PCM IN (1,2,6) AND H13004>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;

* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM = 3 AND H13004>=2 THEN DO;
   GROUP=3;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   ((XENR_PCM = 3 AND H13004>=2) OR NXNS_COV IN (3,9,10)) THEN DO; /*JSO 07/30/2007, Added 9*/
   GROUP=3;
   OUTPUT;
```

```
    END;


* nonenrollees;
IF NXNS_COV IN (3,9,10) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
    GROUP=4;                     /*JSO 07/30/2007, Added 9*/
    OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
    GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
    OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
    GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
    OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
    GROUP=7;
    OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;


proc freq;
table xservreg*cacsmpl/list;
run;



PROC SORT DATA=SMOKE;
BY TMP_CELL;
PROC SORT DATA=NORMDATA;
BY TMP_CELL;
RUN;

%MACRO A_SUDAAN(TABLEVAR,SMOKE,SMOKEVAR,DEN);

%IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
    %LET ENDNUM=&REGNUM;
    %LET PREF=R;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
    %LET ENDNUM=&SRVNUM;
    %LET PREF=M;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
    %LET ENDNUM=&CONNUM;
    %LET PREF=S;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=CACSMPL %THEN %DO;    /**RSG 02/2005 add code to calc by CACSMPL**/
    %LET ENDNUM=&CATCHNUM;
    %LET PREF=D;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=TOTCON %THEN %LET PREF=C;

%DO I = 1 %TO 8;

    DATA INDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA CACSMPL MPCSMPL
                    &SMOKEVAR. &DEN. TMP_CELL XTNEXREG);
    SET SMOKE;
    WHERE XSERVREG > 0 AND GROUP=&I. AND &DEN. >= 0;
        %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
            IF XSERVAFF > 5 OR XSERVAFF = . THEN DELETE; /* MER 11/11/12 - Changed 4 to 5 */
        %END;
```

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```
      %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
          IF TOTCON NE 1 THEN DELETE;
      %END;
      %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
          IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
      %END;
   RUN;


      DATA NORMDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA &SMOKEVAR. &DEN.
                         TMP_CELL XTNEXREG MPCSMPL);
         SET NORMDATA;
             WHERE XSERVREG > 0 AND GROUP=&I.;

             %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
                 IF XSERVAFF > 5 OR XSERVAFF = . THEN DELETE; /* MER 11/11/12 - Changed 4 to 5
*/
             %END;
         %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
             IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
         %END;

         RUN;

      %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                 PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                 WEIGHT &WGT;
                 SETENV DECWIDTH=4;
                 NEST TMP_CELL / missunit;
                 VAR &SMOKEVAR;
                 TABLES AGE_GRP*XSEXA*MPCSMPL*&TABLEVAR.;
                 SUBGROUP AGE_GRP XSEXA MPCSMPL &TABLEVAR.;
                 LEVELS 8 2 2 &ENDNUM.;
                 OUTPUT  SEMEAN MEAN wsum nsum
                         / TABLECELL=DEFAULT REPLACE
                           FILENAME=&PREF.GRP&I.&SMOKE.;
                 RUN;
      %END;
      %ELSE %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                 PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                 WEIGHT &WGT;
                 SETENV DECWIDTH=4;
                 NEST TMP_CELL / missunit;
                 VAR &SMOKEVAR;
                 TABLES AGE_GRP*XSEXA*MPCSMPL;
                 SUBGROUP AGE_GRP XSEXA MPCSMPL;
                 LEVELS 3 2 2;
                 OUTPUT  SEMEAN MEAN wsum nsum
                         / TABLECELL=DEFAULT REPLACE
                           FILENAME=&PREF.GRP&I.&SMOKE.;
                 RUN;
      %END;

   %IF %UPCASE(&SMOKE) NE CS %THEN %DO;

         DATA &PREF.SER_&I.&SMOKE.;
         SET &PREF.GRP&I.&SMOKE.;
         GROUP=&I.;
         IF SEMEAN NE .;
         %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
             KEEP &TABLEVAR. GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
         %END;
         %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
             TOTCON=1;
             KEEP TOTCON GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
         %END;
      RUN;

      /* CREATE WEIGHTS FROM 2005 DATA*/
      proc summary data=normdat&i. nway;
             var &WGT;
             where &den>0;
             class age_grp xsexa MPCSMPL;
```

```
            output out=norm_&i. sum=normwt;

            proc sort data=&pref.ser_&i.&smoke.;
            by age_grp xsexa mpcsmpl;

            data &pref.ser_&i.&smoke.;
            merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
            by age_grp xsexa mpcsmpl;
            if gin;
            wsum=wsum/normwt;
            nsum=nsum/normwt;
            sesq=normwt*semean**2;
            run;

            proc summary data=&pref.ser_&i.&smoke. nway;
            var mean semean sesq wsum nsum;
            class &tablevar.;
            weight normwt;
            output out=&pref.sert&i.&smoke. mean(mean sesq)= sum(wsum nsum)= sumwgt(semean)=;
            run;

    data &pref.sert&i.&smoke;
       set &pref.sert&i.&smoke;
       group=&i.;
             semean=sqrt(sesq/semean);
       drop _type_ _freq_;
    run;

    %IF &I. = 1 %THEN %DO;

        DATA &PREF._&SMOKE.;
        SET &PREF.SERT&I.&SMOKE.;
        RUN;
    %END;
    %ELSE %DO;

        DATA &PREF._&SMOKE.;
                SET &PREF._&SMOKE. &PREF.SERT&I.&SMOKE.;
        RUN;

        PROC SORT DATA=&PREF._&SMOKE.;
        BY GROUP;
        RUN;

    %END;

%END;
    %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                WEIGHT &WGT;
                SETENV DECWIDTH=4;
                NEST TMP_CELL / missunit;
                VAR &SMOKEVAR;
                TABLES AGE_GRP*XSEXA*&TABLEVAR.;
                SUBGROUP AGE_GRP XSEXA &TABLEVAR.;
                LEVELS 3 2 &ENDNUM.;
                OUTPUT  SEMEAN MEAN wsum nsum
                        / TABLECELL=DEFAULT REPLACE
                          FILENAME=&PREF.GRP&I.&SMOKE.;
                RUN;
    %END;
    %ELSE %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                WEIGHT &WGT;
                SETENV DECWIDTH=4;
                NEST TMP_CELL / missunit;
                VAR &SMOKEVAR;
                TABLES AGE_GRP*XSEXA;
                SUBGROUP AGE_GRP XSEXA;
                LEVELS 3 2 ;
                OUTPUT  SEMEAN MEAN wsum nsum
                        / TABLECELL=DEFAULT REPLACE
                          FILENAME=&PREF.GRP&I.&SMOKE.;
```

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```
                   RUN;
       %END;

  %IF %UPCASE(&SMOKE) = CS %THEN %DO;

          DATA &PREF.SER_&I.&SMOKE.;
          SET &PREF.GRP&I.&SMOKE.;
          GROUP=&I.;
          IF SEMEAN NE .;
          %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
              KEEP &TABLEVAR. GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
          %END;
          %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
              TOTCON=1;
              KEEP TOTCON GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
          %END;
       RUN;

       /* CREATE WEIGHTS FROM 2005 DATA*/
       proc summary data=normdat&i. nway;
               var &WGT;
               where &den>0;
               class age_grp xsexa;
               output out=norm_&i. sum=normwt;

               proc sort data=&pref.ser_&i.&smoke.;
               by age_grp xsexa;

               data &pref.ser_&i.&smoke.;
               merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
               by age_grp xsexa;
               if gin;
               wsum=wsum/normwt;
               nsum=nsum/normwt;
               sesq=normwt*semean**2;
               run;

               proc summary data=&pref.ser_&i.&smoke. nway;
               var mean semean sesq wsum nsum;
               class &tablevar.;
               weight normwt;
               output out=&pref.sert&i.&smoke. mean(mean sesq)= sum(wsum nsum)= sumwgt(semean)=;
               run;

       data &pref.sert&i.&smoke;
          set &pref.sert&i.&smoke;
          group=&i.;
                  semean=sqrt(sesq/semean);
          drop _type_ _freq_;
       run;




         %IF &I. = 1 %THEN %DO;

          DATA &PREF._CESS;
          SET &PREF.SERT&I.&SMOKE.;
          RUN;
          %END;
          %ELSE %DO;

          DATA &PREF._CESS;
                SET &PREF._CESS &PREF.SERT&I.&SMOKE.;
             RUN;

          PROC SORT DATA=&PREF._CESS;
          BY GROUP;
          RUN;
```

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```
        %END;

     %END;
%END;

%MEND;


%A_SUDAAN(XSERVAFF,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVAFF,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XSERVAFF,BM,BMI,BMI_DN);
%A_SUDAAN(XSERVREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XSERVREG,BM,BMI,BMI_DN);
%A_SUDAAN(XTNEXREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XTNEXREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XTNEXREG,BM,BMI,BMI_DN);
%A_SUDAAN(TOTCON,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(TOTCON,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(TOTCON,BM,BMI,BMI_DN);
%A_SUDAAN(CACSMPL,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(CACSMPL,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(CACSMPL,BM,BMI,BMI_DN);

%MACRO ADDIT(PREF, TYPE);

DATA &PREF._&TYPE;
SET &PREF._&TYPE;
LENGTH BENEFIT $34. BENTYPE $50.;

BENEFIT="Healthy Behaviors";
     %IF &TYPE=RT %THEN %DO;
         BENTYPE="Non-Smoking Rate";
     %END;
     %IF &TYPE=CESS %THEN %DO;
         BENTYPE="Counselled To Quit";
     %END;
     %IF &TYPE = BM %THEN %DO;
         BENTYPE = "Percent Not Obese";
     %END;
RUN;

%MEND;

%ADDIT(C,RT);
%ADDIT(C,CESS);
%ADDIT(C,BM);
%ADDIT(M,RT);
%ADDIT(M,CESS);
%ADDIT(M,BM);
%ADDIT(R,RT);
%ADDIT(R,CESS);
%ADDIT(R,BM);
%ADDIT(S,RT);
%ADDIT(S,CESS);
%ADDIT(S,BM);
%ADDIT(D,RT);
%ADDIT(D,CESS);
%ADDIT(D,BM);

proc freq data=ingp.group8 noprint;
tables cacsmpl*xservind / list out=cacformat(drop=count percent);
run;

%MACRO MAKEDATA(PREF, TABLEVAR);
  DATA &PREF._SMOKE;
   SET &PREF._RT
       &PREF._CESS
       &PREF._BM
;

   LENGTH MAJGRP $30. REGION $30. REGCAT $42.; /* MER 11/11/2012 - Updated REGION for Joint
Service facilities */
```

```
    IF       GROUP=1 THEN MAJGRP="Prime Enrollees            ";
    ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
    ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
    ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
    ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
    ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
    ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
    ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";

    %IF &TABLEVAR = XSERVAFF %THEN %DO;
        IF XSERVAFF = 1 THEN REGION = 'ARMY';
        IF XSERVAFF = 2 THEN REGION = 'AIR FORCE';
        IF XSERVAFF = 3 THEN REGION = 'NAVY';
        IF XSERVAFF = 4 THEN REGION = 'OTHER';
            IF XSERVAFF = 5 THEN REGION = 'JOINT SERVICE'; /* MER 11/11/12 - Added for Joint
Service facilities */
    %END;

    %IF &TABLEVAR = XSERVREG %THEN %DO;
        REGION = PUT(XSERVREG,SERVREGO.); /*JSO 08/24/2006, Create new format for Overseas*/
    %END;

    %IF &TABLEVAR = XTNEXREG %THEN %DO;
        IF XTNEXREG=1 THEN REGION="NORTH";
        ELSE IF XTNEXREG=2 THEN REGION="SOUTH";
        ELSE IF XTNEXREG=3 THEN REGION="WEST";
        ELSE IF XTNEXREG=4 THEN REGION="OVERSEAS";
    %END;

    %IF &TABLEVAR = TOTCON %THEN %DO;
        REGION = "USA MHS";
    %END;

 %IF &TABLEVAR = CACSMPL %THEN %DO;    /*RSG 02/2005 Add CACSMPL**/
        REGCAT = PUT(CACSMPL, CACR.);
        REGION = ' ';
        %END;

    %IF &TABLEVAR NE CACSMPL %THEN %DO;
        REGCAT=REGION;
        DROP GROUP &TABLEVAR;
        %END;

        %IF &TABLEVAR = CACSMPL %THEN %DO;    /*RSG 02/2005 Add CACSMPL**/
        REGCAT = PUT(CACSMPL, CACR.);
        REGION = ' ';
        %END;

    %IF &TABLEVAR NE CACSMPL %THEN %DO;
        REGCAT=REGION;
        DROP GROUP &TABLEVAR;
        %END;


    IF &TABLEVAR NE 0;

  RUN;

 %IF &TABLEVAR = CACSMPL %THEN %DO;

    PROC SORT DATA=&PREF._SMOKE;
    BY CACSMPL;


    DATA &PREF._SMOKE;
    MERGE &PREF._SMOKE (IN=A) CACFORMAT (IN=B);
    BY CACSMPL;
    IF A;
    REGION=PUT(XSERVind,SERVREGO.);
    DROP GROUP &TABLEVAR XSERVREG;
    RUN;
    %END;
```

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```
    %MEND MAKEDATA;

    %MAKEDATA(M,XSERVAFF);
    %MAKEDATA(C,TOTCON);
    %MAKEDATA(R,XSERVREG);
    %MAKEDATA(S,XTNEXREG);
    %MAKEDATA(D,CACSMPL);

    DATA SMOKE;
    SET M_SMOKE R_SMOKE S_SMOKE C_SMOKE D_SMOKE;
    SESQ = SEMEAN**2;
    RENAME MEAN=SCORE wsum=n_wgt nsum=n_obs;
    RUN;

    /* CALCULATE COMPOSITE SCORE - AVERAGE RATE AND CESSATION*/

    PROC SORT DATA=SMOKE;
    BY MAJGRP REGION REGCAT;
    RUN;

    PROC SUMMARY DATA=SMOKE SUM;
    BY MAJGRP REGION REGCAT;
    VAR SCORE SESQ N_WGT N_OBS;
    OUTPUT SUM= OUT=PRECOMP;
    RUN;

    DATA COMP(RENAME=(S_MEAN=SCORE S_SE=SEMEAN));
    SET PRECOMP;
    IF _FREQ_ = 3 THEN DO;
       S_MEAN=SCORE/3;
       S_SE=SQRT(SESQ)/3;
       N_OBS=round(N_OBS/3);
    END;
    ELSE DO;
       S_MEAN=.;
       S_SE=.;
    END;
    BENTYPE="Composite";
    BENEFIT="Healthy Behaviors";
    DROP _TYPE_ _FREQ_ SCORE SESQ;
    RUN;

    PROC SORT DATA=SMOKE;
    BY MAJGRP BENTYPE;
    RUN;

    DATA BENCH;
    SET SMOKE;
    BY MAJGRP BENTYPE;
    IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
       SCORE=&CNSLGOAL;
       SEMEAN=.;
       REGION="Benchmark";
       REGCAT="Benchmark";
       DROP N_WGT N_OBS;
       OUTPUT;
    END;
    ELSE IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
       SCORE=&NSMKGOAL;
       SEMEAN=.;
       REGION="Benchmark";
       REGCAT="Benchmark";
       DROP N_WGT N_OBS;
       OUTPUT;
    END;
    ELSE IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
       SCORE=&BMIGOAL;
       SEMEAN=.;
       REGION="Benchmark";
       REGCAT="Benchmark";
       DROP N_WGT N_OBS;
       OUTPUT;
```

```
        SCORE=(SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3;
        SEMEAN=.;
        REGION="Benchmark";
        REGCAT="Benchmark";
        BENTYPE="Composite";
        DROP N_WGT;
        OUTPUT;
   END;
RUN;

PROC SORT DATA=SMOKE;
BY REGION BENTYPE;
RUN;

DATA TEMP;
SET SMOKE;
IF REGION=REGCAT;
RUN;

PROC SORT DATA=TEMP;
BY REGION BENTYPE;
RUN;

DATA BENCH2;
SET TEMP;
BY REGION BENTYPE;
IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
        SCORE=&CNSLGOAL;
        SEMEAN=.;
        MAJGRP="Benchmark";
        DROP N_WGT N_OBS;
        OUTPUT;
   END;
IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
        SCORE=&NSMKGOAL;
        SEMEAN=.;
        MAJGRP="Benchmark";
        DROP N_WGT;
        OUTPUT;
   END;
IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
        SCORE=&BMIGOAL;
        SEMEAN=.;
        MAJGRP="Benchmark";
        DROP N_WGT;
        OUTPUT;
        SCORE=(SUM(&CNSLGOAL, &NSMKGOAL, &BMIGOAL))/3;
        SEMEAN=.;
        MAJGRP="Benchmark";
        BENTYPE="Composite";
        DROP N_WGT N_OBS;
        OUTPUT;
   END;
RUN;

DATA SIG1;
SET SMOKE COMP;
IF BENTYPE='Non-Smoking Rate' THEN DO;
    IF SEMEAN > 0 THEN TSTAT=(SCORE-&NSMKGOAL)/SEMEAN;
    ELSE TSTAT=.;
    IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
    ELSE PVAL=.;

    IF PVAL GE 0.05 THEN SIG=0;
    ELSE IF PVAL < 0.05 THEN DO;
        IF SCORE > &NSMKGOAL THEN SIG = 1;
        ELSE IF SCORE < &NSMKGOAL THEN SIG = -1;
    END;
END;
IF BENTYPE='Counselled To Quit' THEN DO;
    IF SEMEAN > 0 THEN TSTAT=(SCORE-&CNSLGOAL)/SEMEAN;
    ELSE TSTAT=.;
    IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
```

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```
        ELSE PVAL=.;
        IF PVAL GE 0.05 THEN SIG=0;
        ELSE IF PVAL < 0.05 THEN DO;
            IF SCORE > &CNSLGOAL THEN SIG = 1;
            ELSE IF SCORE < &CNSLGOAL THEN SIG = -1;
        END;
    END;
    IF BENTYPE='Percent Not Obese' THEN DO;
        IF SEMEAN > 0 THEN TSTAT=(SCORE-&BMIGOAL)/SEMEAN;
        ELSE TSTAT=.;
        IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
        ELSE PVAL=.;
        IF PVAL GE 0.05 THEN SIG=0;
        ELSE IF PVAL < 0.05 THEN DO;
            IF SCORE > &BMIGOAL THEN SIG = 1;
            ELSE IF SCORE < &BMIGOAL THEN SIG = -1;
        END;
    END;
    IF BENTYPE='Composite' THEN DO;
        IF SEMEAN > 0 THEN TSTAT=(SCORE-((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3))/SEMEAN;
        ELSE TSTAT=.;
        IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
        ELSE PVAL=.;
        IF PVAL GE 0.05 THEN SIG=0;
        ELSE IF PVAL < 0.05 THEN DO;
            IF SCORE > ((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = 1;
            ELSE IF SCORE <((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = -1;
        END;
    END;

    DROP TSTAT PVAL;
    RUN;


    DATA SMOKE_ALL;
    SET SIG1 BENCH BENCH2;
    TIMEPD="&CURRENT.";
    RUN;


    PROC SORT DATA=SMOKE_ALL OUT=OUT.SMOKE;
    BY MAJGRP REGION REGCAT BENTYPE;
    RUN;
```

G.12.C ReportCards\MPR_Adult2013\LOADMPR.SAS - Convert the MPR Scores Database into the WEB layout - Annual.

```
*****************************************************************;
*  Project:    DoD Reporting and Analysis 6244-410
*  Program:    LOADMPR.SAS
*  Author:     Chris Rankin
*  Date:       4/07/2000
*  Modified:  1) 5/08/2001 -- standard errors retained in output data set.
*             2) 1/8/2003 by Keith Rathbun: Updated to accomodate the
*                2002 survey.
*             3) 1/30/2003 by Chris Rankin:  Updated to for trends from
*                2000, 2002 Annual.
*             4) 02/05/2004 by Mike Scott: Updated for 2003 Annual Report.
*                Uncommented Flu Shot and changed to Cholesterol.
*             5) 02/2005 by Regina Gramss: Updated for 2004 Annual Report.
*                Added codes for new "Region" fields.  Include smoke data
*                from smoking.sas program.
*             6) 02/2006 by Regina Gramss: Updated for 2005.  Dropped chol measure.
*             7) 11/07/2006 by Keith Rathbun: Changed REG loop control from
*                16 to 15 and format servregf to servrego.
*             8) 11/11/2012 By Mike Rudacille, Updated for handling of
*                Joint Service facilities
*
*   Purpose:   Calculate MPR Preventive Care Composites
*
*    Input:    RFINAL.sas7bdat
*              CFINAL.sas7bdat
*              MFINAL.sas7bdat
*              DFINAL.sas7bdat
*              SFINAL.sas7bdat
*              SMOKE.sas7bdat
*    Output:   loadmpr.sas7bdat
*****************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2;

LIBNAME   INLIB    ".";
LIBNAME   OUT      ".";
LIBNAME   LIBRARY  "..\..\..\data\fmtlib";   /*MJS 02/05/04*/

%LET COMPNUM=7; /*** number of questions in both composites ***/
%LET CMPNUM1=4; /*** number of questions in first composite ***/   /*MJS 02/05/04*/

%LET YR=13;
%LET YEAR=2013;
%LET EYR=11;

%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";

*****************************************************************;
*** Note -- take out access to care questions and composite ***;
*****************************************************************;

DATA BENCHMKS(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SIG);
  FORMAT MAJGRP $30.  REGION $30. REGCAT $42. /* MER 11/11/2012 - Updated REGION for Joint
Service facilities */
         BENEFIT $34. BENTYPE $50. TIMEPD $35.;

  SET inlib.CFINAL;

  /***** Benchmarks       *****/

  ARRAY BENCHMK{*} GOALVAR1-GOALVAR&CMPNUM1 CP&yr.BMK1;
  DO I = 1 TO 5;   /*MJS 02/05/04*/
     SCORE  = BENCHMK{I}*100;
     SIG    = .;
     REGION = "Benchmark";
     REGCAT = "Benchmark";
     BENEFIT = "Preventive Care";
     IF      I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
```

```
      ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
      ELSE IF I = 4 THEN BENTYPE = "Hypertension";
      /*ELSE IF I = 5 THEN BENTYPE = "Cholesterol Testing";*/   /*RSG 01/27/06*/
      ELSE IF I = 5 THEN BENTYPE = "Composite";
      TIMEPD = "&YEAR";  /*RSG 02/2005*/
      OUTPUT;
   END;
   DROP I;
RUN;

DATA BENCHMKS;
  SET BENCHMKS;
  OUTPUT;
  IF MAJGRP = "All Beneficiaries" THEN DO;
     DO REG = 1 TO 18; DROP REG; /* MER 11/11/2012 Changed 15 to 18 for Joint Service facilities
*/
           MAJGRP = "Benchmark";
           REGION = PUT(REG,SERVREGO.);
           REGCAT = PUT(REG,SERVREGO.);
           OUTPUT;
     END;
     DO SERV = 1 TO 5; DROP SERV; /* MER 11/11/2012 Changed 4 to 5 for Joint Service facilities
*/
         MAJGRP = "Benchmark";
         REGION = PUT(SERV,XSERVAFF.);
         REGCAT = PUT(SERV,XSERVAFF.);
         OUTPUT;
     END;
     MAJGRP = "Benchmark";
     REGION = 'CONUS MHS';
     REGCAT = 'CONUS MHS';
     OUTPUT;
     MAJGRP = "Benchmark";
     REGION = 'NORTH';
     REGCAT = 'NORTH';
     OUTPUT;
     MAJGRP = "Benchmark";
     REGION = 'SOUTH';
     REGCAT = 'SOUTH';
     OUTPUT;
     MAJGRP = "Benchmark";
     REGION = 'WEST';
     REGCAT = 'WEST';
     OUTPUT;
     MAJGRP = "Benchmark";
     REGION = 'OVERSEAS';
     REGCAT = 'OVERSEAS';
     OUTPUT;
  END;
RUN;

PROC FREQ DATA=BENCHMKS;
   TABLES MAJGRP/MISSING LIST;
RUN;

*************************;
*****  Scores         **;
*************************;

DATA DFINAL;
  SET INLIB.DFINAL;
  WHERE UPCASE(TRIM(MAJGRP)) IN ("PRIME ENROLLEES", "ENROLLEES WITH MILITARY PCM",
                                 "ACTIVE DUTY", "ALL BENEFICIARIES");
RUN;

DATA SCORES(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG N_OBS N_WGT);
  FORMAT MAJGRP $30.  REGION $30. REGCAT $42. /* MER 11/11/2012 - Updated REGION for Joint
Service facilities */
          BENEFIT $34. BENTYPE $50. TIMEPD $35.;
  SET INLIB.MFINAL
      INLIB.RFINAL
      DFINAL
      INLIB.SFINAL
```

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```
      INLIB.CFINAL;
IF REGCAT='Out of Catchment Region 01' then REGCAT='Out of Catchment North Region';
IF REGCAT='Out of Catchment Region 02' then REGCAT='Out of Catchment South Region';
IF REGCAT='Out of Catchment Region 03' then REGCAT='Out of Catchment West Region';
IF REGCAT='Out of Catchment Region 04' then REGCAT='Out of Catchment OCONUS Region';

  ARRAY SEMEANS{*} SERR&YR.V1-SERR&YR.V&CMPNUM1.  CP&YR.1SE ;
  ARRAY  SCORES{*} SCOR&YR.V1-SCOR&YR.V&CMPNUM1.  Comp&YR.1;
  ARRAY  SIGNIF{*} SIG&YR.V1-SIG&YR.V&CMPNUM1.    CP&YR.SIG1;
  ARRAY   NOBS {*} NOBS&YR.V1-NOBS&YR.V&CMPNUM1.  CP&YR.OBS1;
  ARRAY   NWGT {*} DEN&YR.V1-DEN&YR.V&CMPNUM1     CP&YR.DEN1;
  cp&YR.den1=0;
  DO I = 1 TO 5;   /*MJS 02/05/04*/
     SCORE  = SCORES{I};
     SEMEAN = SEMEANS{I};
     SIG    = SIGNIF{I};
     N_OBS  = NOBS{I};
     N_WGT  = NWGT{I};
     if i<5 then cp&YR.den1+nwgt[i];
     BENEFIT = "Preventive Care";
     IF     I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
     ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
     ELSE IF I = 4 THEN BENTYPE = "Hypertension";
     /*ELSE IF I = 5 THEN BENTYPE = "Cholesterol Testing";*/   /*RSG 01/27/06*/
     ELSE IF I = 5 THEN DO;
          BENTYPE = "Composite";  /*RSG 02/2005*/
          score=score*100;
     END;;
     TIMEPD = "&YEAR";
     OUTPUT;
  END;
RUN;

PROC FREQ DATA=SCORES;
   WHERE UPCASE(TRIM(MAJGRP)) IN ("PRIME ENROLLEES", "ENROLLEES WITH MILITARY PCM",
                              "ACTIVE DUTY", "ALL BENEFICIARIES");
   TABLES MAJGRP*REGCAT;
RUN;

DATA DTREND;
  SET INLIB.DTREND; by majgrp;
  WHERE UPCASE(TRIM(MAJGRP)) IN ("PRIME ENROLLEES", "ENROLLEES WITH MILITARY PCM",
                              "ACTIVE DUTY", "ALL BENEFICIARIES");
RUN;

/*
proc sort data=inlib.mtrend out=mtrend; by descending majgrp;
data mtrend;
set mtrend;
retain adj1 adj2 0;
if upcase(majgrp)="ALL BENEFICIARIES" then do;
adj1=cp&YR.bmk1; adj2=cp&EYR.bmk1; end;
proc print;
proc sort data=mtrend; by majgrp;
data mtrend(drop=adj1 adj2);
set mtrend;
retain tadj1 tadj2 0;
if _n_=1 then do;
tadj1=adj1;
tadj2=adj2;
end;
*/

DATA TREND1 (KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE semean TIMEPD SCORE SIG N_OBS N_WGT);
   FORMAT MAJGRP $30.  REGION $30. REGCAT $42. /* MER 11/11/2012 - Updated REGION for Joint
Service facilities */
         BENEFIT $34. BENTYPE $50. TIMEPD $35.;

   SET inlib.CTREND
       DTREND
       INLIB.RTREND
       INLIB.STREND
```

```
         INLIB.MTREND;by majgrp;
/*
   if _n_=1 then do;
      adj1=tadj1;
      adj2=tadj2;
   end;
   retain adj1 adj2;
   score=100*((comp031*adj1/cp03bmk1)-(comp011*adj2/cp01bmk1));*/

/*RSG 02/2005 following code no longer needed - need trend for all
  benefit level, not just composite*/
/*   score=cmptrnd1;
   SIG= SIGCPTR1;
   N_OBS=DF_COMP1;
   N_WGT=NWGTC1;
   BENTYPE="Trend";
   BENEFIT="Preventive Care";
   OUTPUT;
*/
IF REGCAT='Out of Catchment Region 01' then REGCAT='Out of Catchment North Region';
IF REGCAT='Out of Catchment Region 02' then REGCAT='Out of Catchment South Region';
IF REGCAT='Out of Catchment Region 03' then REGCAT='Out of Catchment West Region';
IF REGCAT='Out of Catchment Region 04' then REGCAT='Out of Catchment OCONUS Region';

  ARRAY  SCORES{*} TRENDV1-TRENDV&CMPNUM1. CMPTRND1;
  ARRAY  SIGNIF{*} SIGTRND1-SIGTRND&CMPNUM1.   SIGCPTR1;
  ARRAY   NOBS {*} DFSCOR1-DFSCOR&CMPNUM1.  DF_COMP1;
  ARRAY   NWGT {*} NWGT1-NWGT&CMPNUM1.  NWGTC1;
  DO I = 1 TO 5;   /*MJS 02/05/04*/
     SCORE  = SCORES{I};
     SEMEAN=.;
     SIG    = SIGNIF{I};
     N_OBS  = NOBS{I};
     N_WGT  = NWGT{I};
     BENEFIT = "Preventive Care";
     IF     I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
     ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
     ELSE IF I = 4 THEN BENTYPE = "Hypertension";
     /*ELSE IF I = 5 THEN BENTYPE = "Cholesterol Testing";*/   /*RSG 01/27/06*/
     ELSE IF I = 5 THEN DO;
         BENTYPE = "Composite";  /*RSG 02/2005*/
*        score=score*100;
     END;;
     TIMEPD = "Trend";
     OUTPUT;
  END;
RUN;

DATA TREND2(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE SCORE SIG TIMEPD);
  FORMAT MAJGRP $30.  REGION $30. REGCAT $42. /* MER 11/11/2012 - Updated REGION for Joint
Service facilities */
         BENEFIT $34. BENTYPE $50. TIMEPD $35.;

  SET INLIB.CTREND;

/*RSG 02/2005 hard code in benchmark trends for each measure -
     comment out code for just composite trend benchmark*/
/*   SCORE= TRNDBMK1;
  SIG=.;
  SEMEAN=.;
  REGION="Benchmark";
  REGCAT="Benchmark";
  BENTYPE="Trend";
  BENEFIT="Preventive Care";
  OUTPUT;
*/

  DO I = 1 TO 5;   /*MJS 02/05/04*/
     SCORE  = 0;
     SIG    = .;
     REGION = "Benchmark";
     REGCAT = "Benchmark";
```

```
      BENEFIT = "Preventive Care";
      IF      I = 1 THEN BENTYPE = "Prenatal Care";
      ELSE IF I = 2 THEN BENTYPE = "Mammography";
      ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
      ELSE IF I = 4 THEN BENTYPE = "Hypertension";
      /*ELSE IF I = 5 THEN BENTYPE = "Cholesterol Testing";*/   /*RSG 01/27/06*/
      ELSE IF I = 5 THEN BENTYPE = "Composite";
      TIMEPD = "Trend";  /*RSG 02/2005*/
      OUTPUT;
  END;
  DROP I;
RUN;

DATA OUT.LOADMPR(KEEP=MAJGRP REGION REGCAT BENEFIT semean BENTYPE SCORE SIG
                      N_OBS N_WGT TIMEPD);
  SET BENCHMKS TREND1 TREND2 SCORES INLIB.SMOKE;
RUN;


PROC FREQ DATA=OUT.LOADMPR;
   WHERE TIMEPD='Trend';
   TABLES BENTYPE*REGION/MISSING LIST;
RUN;
```

G.13   ReportCards\MPR_Adult2013\TRENDMPR.SAS - Calculate Trend and Perform Significance tests on MPR Scores - Annual.

```
********************************************************************
*
*  Project:    DoD Reporting and Analysis 6244-410
*  Program:    TRENDMPR.SAS
*  Author:     Chris Rankin
*  Date:       6/19/2000
*
*  Modified:   1) 02/21/2001
*                 trend calculation changed
*              2) 01/29/2003 By Keith Rathbun, Chris Rankin: Updated to
*                 calculate trends based on 2000 to 2002.
*              3) 02/10/2004 By Mike Scott: Updated for 2003 Annual Report.
*              4) 02/2005 By Regina Gramss: Updated for 2004 Annual Report.
*                 added codes to use XSERVREG for region.
*              5) 02/2006 By Regina Gramss: Updated for 2005.  Remove
*                 cholesterol as a measure.
*
*  Purpose:    Calculate trends from 2011 to 2013.
*
*  Outputs:    RTREND.sas7bdat
*              MTREND.sas7bdat
*              CTREND.sas7bdat
*              STREND.sas7bdat
*              DTREND.sas7bdat
*
*  Inputs:     RFINAL.sas7bdat
*              CFINAL.sas7bdat
*              MFINAL.sas7bdat
*              SFINAL.sas7bdat
*              DFINAL.sas7bdat
*
*  Notes:      1) Next program is loadmpr.sas.
*
********************************************************************;
OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2;

%LET YR = 13;
%LET EYR = 11;

LIBNAME IN&YR   ".";
LIBNAME IN&EYR. "..\..\20&EYR.\ReportCards\MPR_Adult20&EYR.";
LIBNAME OUT     ".";
LIBNAME LIBRARY "..\..\..\data\fmtlib";

%LET COMPNUM=7;   /** number of variables - 02/2006 RSG - changed from 8 to 7 because
cholesterol dropped   **/

**** Note:  groups changed 6/16/2000 to correspond with ;
**** definition of CAHPS groups                         ;

************************************************************;
* Beneficiary group note
*    Eight groups              Definitions
* _____;
* 1. Prime enrollees           XINSCOV IN (1,2,6) AND H08007>=2
* 2. Enrollees w/mil PCM        XENR_PCM IN (2,6)  AND H08007>=2
* 3. Enrollees w/civ PCM        XENR_PCM=3         AND H08007>=2
* 4. Nonenrollees               XINSCOV IN (3)
* 5. Active duty                BFGROUPP=1
* 6. Active duty dependents     BFGROUPP=2
* 7. Retirees                   BFGROUPP IN (3,4)
* 8. All beneficiaries          ALL
************************************************************;

/*** macro to merge final datasets together and calculate trends ***/

%MACRO TRENDS(INDATA, OUTDATA);

  PROC SORT DATA=IN&EYR..&INDATA;
```

```
      BY MAJGRP REGION REGCAT;
   RUN;

   PROC SORT DATA=IN&YR..&INDATA;
      BY MAJGRP REGION REGCAT;
   RUN;

   DATA OUT.&OUTDATA;
      MERGE IN&YR..&INDATA(IN=IN_&YR.) IN&EYR..&INDATA(IN=IN_&EYR.);
      BY MAJGRP REGION REGCAT;
      IF IN_&YR. & IN_&EYR.;

      /*** calculate trends in the composite benchmarks ***/
      ARRAY   BMK&YR.{*} CP&YR.BMK1 CP&YR.BMK2;
      ARRAY   BMK&EYR.{*} CP&EYR.BMK1 CP&EYR.BMK2;
      ARRAY BMKTRND{*} TRNDBMK1 TRNDBMK2;

      DO J=1 TO 2;
         IF BMK&EYR.{J} > 0 THEN BMKTRND{J}=100*(BMK&YR.{J}-BMK&EYR.{J});
         ELSE BMKTRND{J}=.;
      END;
      DROP J;

      /*** note-- don't use adjusted scores ***/
      ARRAY SCORE&YR.{*} PROP&YR.V1-PROP&YR.V&COMPNUM COMP&YR.1 COMP&YR.2;
      ARRAY SCORE&EYR.{*} PROP&EYR.V1-PROP&EYR.V&COMPNUM COMP&EYR.1 COMP&EYR.2;
      ARRAY  SERR&YR.{*} SERR&YR.V1-SERR&YR.V&COMPNUM CP&YR.1SE  CP&YR.2SE;
      ARRAY  SERR&EYR.{*} SERR&EYR.V1-SERR&EYR.V&COMPNUM CP&EYR.1SE  CP&EYR.2SE;
      ARRAY    TREND{*} TRENDV1-TRENDV&COMPNUM   CMPTRND1 CMPTRND2;
      ARRAY    TSTAT{*} T_TRNDV1-T_TRNDV&COMPNUM T_CTRND1 T_CTRND2;
      ARRAY   PVALUE{*} P_TRNDV1-P_TRNDV&COMPNUM P_CTRND1 P_CTRND2;
      ARRAY      SIG{*} SIGTRND1-SIGTRND&COMPNUM SIGCPTR1 SIGCPTR2;
      ARRAY DEGFR&YR.{*} DF&YR.SCR1-DF&YR.SCR&COMPNUM DF&YR._CP1 DF&YR._CP2;
      ARRAY DEGFR&EYR.{*} DF&EYR.SCR1-DF&EYR.SCR&COMPNUM DF&EYR._CP1 DF&EYR._CP2;
      ARRAY     DEGF{*} DFSCOR1-DFSCOR&COMPNUM DF_COMP1 DF_COMP2;
      ARRAY    DENOM{*} DENOMT1-DENOMT&COMPNUM DENOMTC1 DENOMTC2;
      ARRAY    DEN&EYR.{*} DEN&EYR.V1-DEN&EYR.V&COMPNUM CP&EYR.DEN1 CP&EYR.DEN2;
      ARRAY    DEN&YR.{*} DEN&YR.V1-DEN&YR.V&COMPNUM CP&YR.DEN1 CP&YR.DEN2;
      ARRAY     NWGT{*} NWGT1-NWGT&COMPNUM NWGTC1 NWGTC2;

      /*** setup t statistics, degreees of freedom    ***/
      DO I=1 TO 9;
         IF SCORE&EYR.{I} GE 0 AND SCORE&YR.{I} GE 0 THEN DO;
            IF SCORE&YR.{I} > 0 THEN TREND{I}=100*(SCORE&YR.{I}-SCORE&EYR.{I});
            ELSE TREND{I}=.;
            DENOM{I}= SERR&EYR.{I}**2+SERR&YR.{I}**2;
            IF DENOM{I} > 0 THEN
               TSTAT{I}=(SCORE&YR.{I}-SCORE&EYR.{I})/SQRT(DENOM{I});
            ELSE TSTAT{I}=.;
            DEGF{I}=MIN(DEGFR&YR.{I},DEGFR&EYR.{I});
            NWGT{I}=MIN(DEN&YR.{I},DEN&EYR.{I});
            IF DEGF{I}=0 THEN DEGF{I}=1;
            IF DEGF{I}IN (0, .) THEN
            PUT "MAJGRP=" MAJGRP "REGCAT=" REGCAT "REGION=" REGION
            "DEGFR&EYR.=" DEGFR&EYR.{I} "DEGFR&YR.=" DEGFR&YR.{I};
            PVALUE{I}=(1-PROBT(ABS(TSTAT{I}),DEGF{I}))*2;
            IF TREND{I}=. THEN SIG{I}=.;
            ELSE IF TREND{I} NE . THEN DO;
               IF PVALUE{I} GE .05 THEN SIG{I}=0;
               IF PVALUE{I} < .05  THEN DO;
                  IF TSTAT{I} > 0 THEN SIG{I}=1;
                  IF TSTAT{I} < 0 & TSTAT{I} ne . THEN SIG{I}=-1;
               END;
            END;
         END;
      END;
      DROP I;
   RUN;

%MEND TRENDS;

%TRENDS(MFINAL, MTREND);
%TRENDS(RFINAL, RTREND);
```

```
%TRENDS(CFINAL, CTREND);
%TRENDS(SFINAL, STREND);
%TRENDS(DFINAL, DTREND);
```

G.14.A LOADWEB\FAKE.SAS - Generate the WEB layout/template file - Annual.

```
/************************************************************************/
/* PROJECT:  6244-410 - 2006 Annual Beneficiary Reports         */
/* PROGRAM:  FAKE.SAS                                           */
/* PURPOSE:  Generate Fake Data for Report Cards                */
/* AUTHOR:   Mark A. Brinkley                                   */
/*                                                              */
/* MODIFIED: 1) July 2000 By Eric Schone to utilize CACRPT and CATREP */
/*              include files.                                  */
/*           2) January 2002 By Keith Rathbun: Updated to support the */
/*              2000 Annual HCSDB format.                       */
/*           3) January 2003 By Keith Rathbun: Updated to support the */
/*              2002 Annual HCSDB format.  Delete flu shot, increment */
/*              previous years by 1, added 2002.               */
/*           4) February 2004 By Mike Scott: Updated for 2003 Annual  */
/*              Report. Uncommented Flu Shot and changed it to   */
/*              Cholesterol.                                    */
/*           5) February 2005 By Regina Gramss: Updated for 2004     */
/*              annual report.  Include smoking scores and use  */
/*              XSERVREG for region fields.                     */
/*           6) November 7, 2006 by Keith Rathbun: Updated for 2006.  */
/*              Added in the quarterly overseas updates.        */
/*           7) November 13, 2007 by Keith Rathbun: Updated parameters*/
/*              for 2007.                                       */
/*           8) November 5, 2008 by Mike Rudacille: Update parameters */
/*              for 2008.                                       */
/*           9) September 10, 2010 by Mike Rudacille: Update    */
/*              parameters for 2010.                            */
/*          10) August 1, 2012 by Amanda Kudis: Update for 2012.     */
/*          11) Novermber 12, 2012 By Mike Rudacille - Updated for    */
/*              handling of Joint Service facilities            */
/*                                                              */
/************************************************************************/

LIBNAME OUT '.';
LIBNAME IN  '..\ReportCards\CAHPS_Adult2013\Data';  /*** Changed to group8 location for revised
cacsmpl KRR 02-05-2004 ***/
LIBNAME LIBRARY  '..\..\DATA\FMTLIB';

OPTIONS COMPRESS=YES NOFMTERR;

%include "loadcahq.inc";

/*RSG 02/2005 added to make fake.sd2 with macros*/
%LET NUMQTR = 4;  /*RSG 02/2005 - Numbering based off quarterly program*/
%LET PERIOD1 = 2011;
%LET PERIOD2 = 2012;
%LET PERIOD3 = 2013;
%LET PERIOD4 = Trend;

DATA TEMP;
   SET IN.GROUP8(KEEP=XSERVind XSERVAFF XTNEXREG USA CACSMPL);   /*KRR 02/05/04*/
RUN;

****************************************************************************
* CACSMPL FORMAT DEFINITIONS FOR REPORT CARD USE FACILITY NAME
* RSG - 02/2005 - USE CACR FORMAT FROM LIBRARY
****************************************************************************;

proc freq data=temp;
   table xservind*cacsmpl/ noprint out=temp2;
run;

data temp3;
   length cafmt $42;
   set temp2 end=last; by xservind;
   caf=0;
   where cacsmpl ne 9999;
   if first.xservind then do;
      cafmt=put(xservind,servrego.);
      output;
```

```
end;
cafmt=put(cacsmpl,cacr.);
caf=1;
if count>1 & cafmt ne 'INV' then output;
if last then do;
    xservind=0;
    caf=0;
    cafmt='Benchmark';
    output;

    caf=1;


    xservind=19;
    cafmt = 'ARMY';
    output;

    xservind=20;
    cafmt = 'AIR FORCE';
    output;

    xservind=21;
    cafmt = 'NAVY';
    output;

    xservind=22;
    cafmt = 'OTHER';
    output;

    xservind=23;
    cafmt = 'JOINT SERVICE';
    output;

    xservind=24;
    cafmt = 'NORTH';
    output;

    xservind=25;
    cafmt = 'SOUTH';
    output;

    xservind=26;
    cafmt = 'WEST';
    output;

    xservind=27;
    cafmt = 'OVERSEAS';
    output;

    xservind=28;
    cafmt = 'Europe Army';
    output;

    xservind=29;
    cafmt = 'Europe Air Force';
    output;

    xservind=30;
    cafmt = 'Europe Navy';
    output;

    xservind=31;
    cafmt = 'Europe Other';
    output;

    xservind=32;
    cafmt = 'Europe Joint Service';
    output;

    xservind=33;
    cafmt = 'Pacific Army';
    output;
```

```
        xservind=34;
        cafmt = 'Pacific Air Force';
        output;

        xservind=35;
        cafmt = 'Pacific Navy';
        output;

        xservind=36;
        cafmt = 'Pacific Other';
        output;

        xservind=37;
        cafmt = 'Pacific Joint Service';
        output;

        xservind=38;
        cafmt = 'Latin America Army';
        output;

        xservind=39;
        cafmt = 'Latin America Air Force';
        output;

        xservind=40;
        cafmt = 'Latin America Navy';
        output;

        xservind=41;
        cafmt = 'Latin America Other';
        output;

        xservind=42;
        cafmt = 'Latin America Joint Service';
        output;

        xservind=43;
        cafmt = 'USA MHS';
        output;
    end;
run;

proc sort; by xservind caf cafmt; run;

data temp4;
   set temp3 end=last;
   start=_n_; label=cafmt; type='N'; fmtname='ROWMAT';
   if last then call symput('x',_n_);
run;

proc format cntlin=temp4;
proc print data=temp4;


RUN;

%MACRO FAKE;
DATA FAKE;

  KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD I K;   ***MJS 06/18/03 Added TIMEPD;

  LENGTH MAJGRP  $ 30
         REGION  $ 30    /*RSG 01/2005 lengthen format to fit service affiliation*/
         REGCAT  $ 42    /*MER 11/08/2012 length format for REGION for Joint Service facilities
*/
         BENTYPE $ 50
         TIMEPD  $ 5;   ***MJS 06/18/03 Added TIMEPD;



  DO I=1 TO 8;            ** 8 Major groups **;

     MAJGRP=PUT(I,MAJGRPF.);
```

```
      DO J=1 TO &x;            ** Region/catchment **;

      REGCAT=PUT(J,ROWMAT.);
      RETAIN REGION;

      **RSG 01/2005 Change code to fit XSERVREG values**;
      IF REGCAT IN ('ARMY','NAVY','AIR FORCE','OTHER','JOINT SERVICE',
                    'NORTH','SOUTH','WEST','OVERSEAS','USA MHS',
                    'Overseas Europe','Overseas Pacific','Overseas Latin America',
                    'North Army','North Navy','North Air Force','North Other','North Joint
Service',
                    'South Army','South Navy','South Air Force','South Other','South Joint
Service',
                    'West Army','West Navy','West Air Force','West Other','West Joint Service',
                    'Europe Army', 'Europe Navy', 'Europe Air Force', 'Europe Other','Europe Joint
Service',
                    'Pacific Army', 'Pacific Navy', 'Pacific Air Force', 'Pacific Other','Pacific
Joint Service',
                    'Latin America Army', 'Latin America Navy', 'Latin America Air Force',
                    'Latin America Other', 'Latin America Joint Service')
        THEN REGION=REGCAT;


        DO K=1 TO 11;       ** 11 Benefits **;  /*** 12-13 MAB ***/

           BENEFIT=PUT(K,BEN.);

           IF K=1 THEN DO;
                DO L=1 TO 3;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,GETNCARE.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                         TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
           END;
           ELSE IF K=2 THEN DO;
                DO L=1 TO 3;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,GETCAREQ.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                         TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
           END;
           ELSE IF K=3 THEN DO;
                DO L=1 TO 5;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,HOWWELL.);    ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                         TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
           END;
           ELSE IF K=4 THEN DO;
                DO L=1 TO 3;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,CUSTSERV.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                         TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
           END;
           ELSE IF K=5 THEN DO;
                DO L=1 TO 3;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,CLMSPROC.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                         TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
           END;
```

```
              ELSE IF K=6 THEN DO;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual - only
go back 2 years;
                        BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                    %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
              END;
              ELSE IF K=7 THEN DO;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual - only
go back 2 years;
                        BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                    %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
              END;
              ELSE IF K=8 THEN DO;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual - only
go back 2 years;
                        BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                    %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
              END;
              ELSE IF K=9 THEN DO;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual - only
go back 2 years;
                        BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                    %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
              END;
              ELSE IF K=10 THEN DO;
                    DO L=1 TO 5;                  ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                        BENTYPE=PUT(L,PREVCARE.);   ***that replaced BENTYPE hard assignment;
                        %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                            TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                        %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                    END;
              END;
              ELSE IF K=11 THEN DO;            ***RSG 02/2005 Added for smoking scores.;
                    DO M=1 TO 4;
                        BENTYPE=PUT(M,SMOKEF.);
                        %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                            TIMEPD = "&&PERIOD&Q"; OUTPUT;
                        %END;
                    END;
              END;
          END;
        END;
      END;
    END;
  END;
RUN;
%MEND FAKE;
%FAKE;

/*** 12-13 MAB ***/
/*** Need to create single benchmarks for ALL major groups ***/
DATA EXTRA;
  SET FAKE;
  IF MAJGRP="Prime Enrollees" AND REGION=REGCAT AND REGION^="Benchmark";
  MAJGRP="Benchmark";
RUN;
/*** Combine extra data with fake ***/
DATA FAKE;
  SET EXTRA FAKE;
  IF REGCAT="Benchmark" THEN REGION=REGCAT;
RUN;
```

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```
/*** Need to clean up data ***/
DATA FAKE2;
  SET FAKE;

  /*** Need to set oddball records to missing ***/
  if region=''|compress(regcat)='.' then delete;

  /*** Don't populate catchment areas for 4 major groups ***/
  IF I IN(3,4,6,7) AND REGION^=REGCAT THEN DELETE;
  SIG = .;
  SCORE = .;

  DROP I K;
RUN;

/*RSG 02/2005 ORDER FILE*/

DATA ORDER1;
  SET FAKE2;
  IF MAJGRP = "Benchmark" THEN DELETE;

  IF MAJGRP = "Prime Enrollees" THEN LINEUP=1;
  IF MAJGRP = "Enrollees with Military PCM" THEN LINEUP=2;
  IF MAJGRP = "Enrollees with Civilian PCM" THEN LINEUP=3;
  IF MAJGRP = "Standard/Extra Users" THEN LINEUP=4;
  IF MAJGRP = "Active Duty" THEN LINEUP=5;
  IF MAJGRP = "Active Duty Dependents" THEN LINEUP=6;
  IF MAJGRP = "Retirees and Dependents" THEN LINEUP=7;
  IF MAJGRP = "All Users" THEN LINEUP=8;

  IF REGION = "Benchmark" THEN LINEUP1=1;
  ELSE IF UPCASE(REGION) = 'USA MHS' THEN LINEUP1=2;

  ELSE IF UPCASE(REGION) = 'ARMY' THEN LINEUP1=3;
  ELSE IF UPCASE(REGION) = 'NAVY' THEN LINEUP1=4;
  ELSE IF UPCASE(REGION) = 'AIR FORCE' THEN LINEUP1=5;
  ELSE IF UPCASE(REGION) = 'OTHER' THEN LINEUP1=6;
  ELSE IF UPCASE(REGION) = 'JOINT SERVICE' THEN LINEUP1=7;

  ELSE IF UPCASE(REGION) = 'NORTH' THEN LINEUP1=8;
  ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP1=9;
  ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP1=10;
  ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP1=11;
  ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP1=12;
  ELSE IF UPCASE(REGION) = 'NORTH JOINT SERVICE' THEN LINEUP1=13;

  ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP1=14;
  ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP1=15;
  ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP1=16;
  ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP1=17;
  ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP1=18;
  ELSE IF UPCASE(REGION) = 'SOUTH JOINT SERVICE' THEN LINEUP1=19;

  ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP1=20;
  ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP1=21;
  ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP1=22;
  ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP1=23;
  ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP1=24;
  ELSE IF UPCASE(REGION) = 'WEST JOINT SERVICE' THEN LINEUP1=25;

  ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP1=26;

  ELSE IF UPCASE(REGION) = 'OVERSEAS EUROPE' THEN LINEUP1=27;
  ELSE IF UPCASE(REGION) = 'EUROPE ARMY' THEN LINEUP1=28;
  ELSE IF UPCASE(REGION) = 'EUROPE NAVY' THEN LINEUP1=29;
  ELSE IF UPCASE(REGION) = 'EUROPE AIR FORCE' THEN LINEUP1=30;
  ELSE IF UPCASE(REGION) = 'EUROPE OTHER' THEN LINEUP1=31;
  ELSE IF UPCASE(REGION) = 'EUROPE JOINT SERVICE' THEN LINEUP1=32;

  ELSE IF UPCASE(REGION) = 'OVERSEAS PACIFIC' THEN LINEUP1=33;
  ELSE IF UPCASE(REGION) = 'PACIFIC ARMY' THEN LINEUP1=34;
  ELSE IF UPCASE(REGION) = 'PACIFIC NAVY' THEN LINEUP1=35;
```

```
    ELSE IF UPCASE(REGION) = 'PACIFIC AIR FORCE' THEN LINEUP1=36;
    ELSE IF UPCASE(REGION) = 'PACIFIC OTHER' THEN LINEUP1=37;
    ELSE IF UPCASE(REGION) = 'PACIFIC JOINT SERVICE' THEN LINEUP1=38;

    ELSE IF UPCASE(REGION) = 'OVERSEAS LATIN AMERICA' THEN LINEUP1=39;
    ELSE IF UPCASE(REGION) = 'LATIN AMERICA ARMY' THEN LINEUP1=40;
    ELSE IF UPCASE(REGION) = 'LATIN AMERICA NAVY' THEN LINEUP1=41;
    ELSE IF UPCASE(REGION) = 'LATIN AMERICA AIR FORCE' THEN LINEUP1=42;
    ELSE IF UPCASE(REGION) = 'LATIN AMERICA OTHER' THEN LINEUP1=43;
    ELSE IF UPCASE(REGION) = 'LATIN AMERICA JOINT SERVICE' THEN LINEUP1=44;

    ELSE LINEUP1=45;

    IF REGION=REGCAT THEN LINEUP2=1;
    ELSE LINEUP2=2;

RUN;    ***MJS 07/03/03 Changed BENTYPE to TIMEPD;

PROC SORT DATA=ORDER1 OUT=OUT.FAKE (DROP=LINEUP LINEUP1 LINEUP2);
BY LINEUP LINEUP1 LINEUP2 REGCAT;
RUN;

PROC FREQ;
  TABLES MAJGRP REGION REGCAT BENTYPE BENEFIT;
RUN;
```

G.14.B LOADWEB\MERGFINL.SAS - Merge the final CAHPS and MPR Scores Databases into the WEB layout - Annual.

```
***************************************************************************
*
* PROGRAM:  MERGFINL.SAS
* TASK:     2007 DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Merge the final CAHPS and MPR Scores Databases
*           into the WEB layout preserving the order of the FAKE.SD2.
*
* WRITTEN:  06/07/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 01/09/2002 BY KEITH RATHBUN: Updated to support the 2000
*              annual HCSDB.
*           2) 01/07/2002 BY KEITH RATHBUN: Updated to support the 2002
*              annual HCSDB.
*           3) 02/08/2004 BY CHRIS RANKIN:  Updated to support the 2003
*              annual HCSDB.
*           4) 11/07/2006 BY KEITH RATHBUN: Updated to support the 2006
*              annual HCSDB.
*           4) 11/13/2007 BY KEITH RATHBUN: Updated to support the 2007
*              annual HCSDB.
*           5) 11/5/2008 BY MIKE RUDACILLE: Updated to support the 2008
*              annual HCSDB.
*           6) 09/10/2010 BY MIKE RUDACILLE: Updated to support the 2010
*              annual HCSDB.
*           7) 10/07/2011 BY MIKE RUDACILLE: Updated to support the 2011
*              annual HCSDB.
*           8) 08/01/2012 BY AMANDA KUDIS: Updated to support the 2012
*              annual HCSDB.
*           8) 08/01/2013 BY AMANDA KUDIS: Updated to support the 2013
*              annual HCSDB.
*
* INPUTS:   1) MPR and CAHPS Individual and Composite data sets with adjusted
*              scores, and benchmark data for DoD HCS.
*              - LOADMPR.sas7bdat  - MPR Scores Databases
*              - LOADCAHP.sas7bdat - CAHPS Scores Databases
*              - BENCHA04.sas7bdat - CAHPS Benchmark Databases
*              - FAKE.sas7bdat     - WEB Layout in Column order
*
* OUTPUT:   1) MERGFINL.sas7bdat - Combined Scores Database in WEB layout
*
* NOTES:
*
* 1) The following steps need to be run prior to this
*    program (2005,2006,2007):
*  - STEP1.SAS        - Recode questions and generate CAHPS group files
*  - STEP2.SAS        - Calculate CAHPS individual adjusted scores for groups 1-8
*  - COMPOSIT.SAS     - Calculate composite adjusted scores for group 1-8
*  - PRVCOMP.SAS      - Calculate MPR individual and composite scores
*  - SMOKING_BMI.SAS  - Calculate MPR smoking and BMI scores
*  - BENCHA01-04.SAS  - Convert Benchmark Scores into WEB layout
*  - LOADCAHP.SAS     - Convert CAHPS Scores Database into WEB layout
*
* 2) The output file (MERGFINL.SD2) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
***************************************************************************
* Assign data libraries and options
***************************************************************************;
LIBNAME IN01  ".";
LIBNAME IN02  ".";
LIBNAME IN03  "..\2011\LoadWeb";
LIBNAME IN04  "..\2012\LoadWeb";
LIBNAME IN05  "..\ReportCards\MPR_Adult2013";
LIBNAME IN06  "..\2011\ReportCards\MPR_Adult2011";
LIBNAME IN07  "..\2012\ReportCards\MPR_Adult2012";
LIBNAME IN08  "..\Benchmark\data";
LIBNAME IN09  "..\2011\Benchmark\data";
LIBNAME IN10  "..\2012\Benchmark\data";
LIBNAME OUT   ".";
```

```
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

%LET PERIOD11 = 2011;
%LET PERIOD12 = 2012;
%LET PERIOD13 = 2013;

*****************************************************************************
* Construct ORDERing variable from WEB layout
*****************************************************************************;
DATA ORDER;
   SET IN01.FAKE;
   ORDER = _N_;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
   KEEP KEY ORDER;
RUN;

PROC SORT DATA=ORDER; BY KEY; RUN;

*****************************************************************************
* Merge the Scores Databases
*****************************************************************************;
DATA MERGFINL;
   SET IN02.LOADCAHP (IN=INCAHP13)
       IN03.LOADCAHP (IN=INCAHP11)
       IN04.LOADCAHP (IN=INCAHP12)
       IN05.LOADMPR  (IN=INMPR13)
       IN06.LOADMPR  (IN=INMPR11)
       IN07.LOADMPR  (IN=INMPR12)
       IN08.BENCHA04 (IN=INBEN13)
       IN09.BENCHA04 (IN=INBEN11)
       IN10.BENCHA04 (IN=INBEN12);
   SVCAHP13 = INCAHP13;
   SVCAHP11 = INCAHP11;
   SVCAHP12 = INCAHP12;
   SVMPR13  = INMPR13 ;
   SVMPR11  = INMPR11 ;
   SVMPR12  = INMPR12 ;
   SVBEN13  = INBEN13 ;
   SVBEN11  = INBEN11 ;
   SVBEN12  = INBEN12 ;

   LENGTH KEY $200;

   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
   IF SCORE = . THEN DELETE;
   IF TRIM(REGCAT) = "INV" THEN DELETE;
RUN;

PROC SORT DATA=MERGFINL; BY KEY; RUN;

*****************************************************************************
* Append ORDERing variable to the merged Scores database file
*****************************************************************************;
DATA MERGFINL2 out.MISSING;
   MERGE MERGFINL(IN=IN1) ORDER(IN=IN2);
   BY KEY;

   LENGTH FLAG $30;
   IF IN1 AND IN2 THEN FLAG = "IN SCORES DB AND LAYOUT";
   ELSE IF    IN1 THEN FLAG = "IN SCORES DB ONLY";
   ELSE IF    IN2 THEN FLAG = "IN LAYOUT ONLY";

   LENGTH SOURCE $30;
   IF SVCAHP13 = 1 THEN SOURCE = "CAHPS &PERIOD13.";
   IF SVCAHP12 = 1 THEN SOURCE = "CAHPS &PERIOD12.";
   IF SVCAHP11 = 1 THEN SOURCE = "CAHPS &PERIOD11.";
   IF SVMPR13  = 1 THEN SOURCE = "MPR &PERIOD13.  ";
   IF SVMPR12  = 1 THEN SOURCE = "MPR &PERIOD12.  ";
```

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```
    IF SVMPR11  = 1 THEN SOURCE = "MPR &PERIOD11.  ";
    IF SVBEN13  = 1 THEN SOURCE = "BENCHMARK &PERIOD13.";
    IF SVBEN12  = 1 THEN SOURCE = "BENCHMARK &PERIOD12.";
    IF SVBEN11  = 1 THEN SOURCE = "BENCHMARK &PERIOD11.";

    IF IN1 AND NOT IN2 THEN OUTPUT out.MISSING; *Missing from layout;
    IF IN1 AND ORDER NE . THEN OUTPUT MERGFINL2;
RUN;

****************************************************************************
* Reorder file according to WEB layout
****************************************************************************;
PROC SORT DATA=MERGFINL2 OUT=OUT.MERGFINL; BY ORDER; RUN;

DATA FAKE;
SET IN01.FAKE;
    ORDER = _N_;
RUN;

DATA LAYONLY;
    MERGE FAKE(IN=IN1) OUT.MERGFINL(IN=IN2 KEEP=ORDER);
    BY ORDER;
    IF IN1 AND NOT IN2;
RUN;

TITLE1 "2013 DOD Health Survey Scores/Report Cards (6663-410)";
TITLE2 "Program Name: MERGFINL.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MPR and CAHPS Combined Scores data sets and WEB Layout";
TITLE4 "Program Outputs: MERGFINL.sas7bdat - Merged Final Scores Database for input to
MAKEHTML.SAS";

TITLE5 "MERGFINL.sas7bdat Data source counts";
PROC FREQ DATA=OUT.MERGFINL;
  TABLES SOURCE FLAG

  SVCAHP13 SVCAHP12 SVCAHP11
  SVMPR13  SVMPR12  SVMPR11
  SVBEN13  SVBEN12  SVBEN11

  SVCAHP13 * SVCAHP12 * SVCAHP11 *
  SVMPR13  * SVMPR12  * SVMPR11  *
  SVBEN13  * SVBEN12  * SVBEN11

 /MISSING LIST;
RUN;

TITLE5 "MERGFINL.sas7bdat Data attribute counts";
PROC FREQ DATA=OUT.MERGFINL;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;

TITLE5 "LAYONLY.sas7bdat Data attribute counts";
PROC FREQ DATA=LAYONLY;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;

TITLE5 "No matching record found in LAYOUT file (FAKE.sas7bdat)";
PROC PRINT DATA=OUT.MISSING;
VAR MAJGRP REGION REGCAT BENTYPE BENEFIT;
RUN;
```

G.15   LOADWEB\TREND_A.SAS - Calculate Trends for CAHPS scores - Annual.

```
******************************************************************************
*
* PROGRAM:  TREND_A.SAS
* TASK:     2007 DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Add TREND records to Scores database.
*
* WRITTEN:  07/28/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 02/21/2001 BY KEITH RATHBUN -- updated calculation for
*              trend score (DSCORE).
*           2) 01/07/2002 BY KEITH RATHBUN -- updated for 2000 survey.
*              Use 1998/2000 pairs to caclulate trends.
*           3) 01/27/2003 BY KEITH RATHBUN -- updated for 2002 survey.
*              Use 2000/2002 pairs to caclulate trends.
*           4) 02/08/2004 BY CHRIS RANKIN -- updated for 2003 survey.
*              Use 2001/2003 pairs to caclulate trends.
*           5) 02/2005 BY REGINA GRAMSS -- updated for 2004 survey,
*              include smoking cessation trend calculation,
*              put patch in for to order properly.
*           6) 02/2006 BY REGINA GRAMSS -- update for 2005.  Use
*              second set of scores using "old" weights to calculate
*              trend.
*           7) 11/14/2007 BY KEITH RATHBUN -- updated for 2007 survey.
*           8) 10/07/2011 BY MIKE RUDACILLE -- updated for 2011 survey.
*           9) 08/01/2012 BY AMANDA KUDIS -- updated for 2012 survey.
*          10) 08/01/2013 BY AMANDA KUDIS -- updated for 2013 survey.
*
* INPUTS:   1) CONUS_Q.sas7bdat - MPR and CAHPS Scores Database in WEB layout
*           2) FAKE.sas7bdat - Scores Database WEB Layout
*
* OUTPUT:   1) TREND_A.sas7bdat - Combined Scores Database in WEB layout
*
* NOTES:
*
* 1) All of the scores DB programs must be run and MERGFINL.SAS prior to
*    running this program.  All report card records must be merged prior
*    to the trend calculations (MERGFINL.SAS,CONUS_Q.SAS,TOTAL_A.SAS).
*
* 2) The output file (TREND_A.sas7bdat) will be run through the
*    MAKEHTML.SAS program to generate the HTML consumer reports.
*
******************************************************************************
* Assign data libraries and options
*****************************************************************************;

LIBNAME IN   ".";
LIBNAME OUT  ".";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER ERRORS=10000;
/*RSG 02/2005 code copied from 2003 TOTAL_Ar.SAS - eliminate all records
  with semean>.05 or missing and delete all records for that region/regcat
  this will reduce the number of missing data*/

/* MER 11/17/08 semean threshold was changed to .07 */

data fakecut(keep=region regcat);
set in.conus_q;
where majgrp='Prime Enrollees' & region ne regcat
 & benefit='Health Plan' & timepd='2013'; *AMK 08/01/2012 changed timepd to 2012;
if semean>.07|semean=.;

proc sort; by region regcat;
data fake;
set in.fake;
oorder=_n_;
proc sort data=fake; by region regcat;
data newfake;
merge fakecut(in=fin) fake; by region regcat;
if fin then delete;
proc sort data=newfake out=out.newfake; by oorder;
```

```
run;


********************************************************************************
* Extract records to calculate TRENDs.  Keep only 2001/2003 pairs for CAHPS
* records.  Trends have already been calculated for MPR scores.
*******************************************************************************;

DATA TRENDS;
   SET IN.CONUS_Q (drop=key);        * AMK 08/01/2013, changed 2010, 2012 ;
   WHERE TIMEPD IN ('2011','2013'); * to 2011,2013;
   ************************************************************************
   * Trends already calculated for MPR scores, so remove from file
   * (RSG 02/2005) EXCEPT Healthy Behavior scores whose trend need to be calculated
   ***********************************************************************;

   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP)) || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION)) || UPCASE(TRIM(TIMEPD));

   *AMK 08/01/2013, changed to svmpr11/12/13;
   IF (SVMPR11 = 1 or SVMPR12 = 1 or SVMPR13 = 1)
      AND BENEFIT NE 'Healthy Behaviors' THEN DELETE;

RUN;

DATA TEMP11;
   SET TRENDS;
   KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE ;
   IF TIMEPD = "2011";
RUN;
PROC SORT DATA=TEMP11; BY MAJGRP REGION REGCAT BENEFIT BENTYPE; RUN;

DATA TEMP13;
   SET TRENDS;
   KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE;
   IF TIMEPD = "2013";
RUN;
PROC SORT DATA=TEMP13; BY MAJGRP REGION REGCAT BENEFIT BENTYPE; RUN;

DATA PAIR1113(keep=majgrp region regcat benefit bentype);
   MERGE TEMP11(IN=IN11) TEMP13(IN=IN13);
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE;
   IF IN11 AND IN13;
RUN;

PROC SORT DATA=TRENDS;
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE;
RUN;

DATA TRENDS2;
   MERGE TRENDS(IN=INTREND) PAIR1113(IN=INPAIR);
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE;
   IF INTREND AND INPAIR;
RUN;

PROC SORT DATA=TRENDS;
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD;
RUN;
 proc print data=trends(obs=100);
********************************************************************************
* Calculate TRENDs keeping only the TREND records
*******************************************************************************;

DATA TRENDS bench;
   SET TRENDS(drop=bscore bsemean);
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD;
   IF TIMEPD = '2011' THEN DO;
      SCORE11 = SCORE/100;
      SE11    = SEMEAN;
      N11     = N_OBS;
      W11     = N_WGT;
   END;
   RETAIN SCORE11 SE11 N11 W11;
```

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```
      IF TIMEPD = '2013' THEN DO;
         SCORE13 = SCORE/100;
         SE13    = SEMEAN;
         N13     = N_OBS;
         W13     = N_WGT;
      END;
      RETAIN SCORE13 SE13 N13 W13;
      LENGTH KEY $200.;
      IF TIMEPD = '2013' THEN DO;
         TIMEPD = "Trend";
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         SOURCE = "TREND";
         SEMEAN = SQRT(SE11**2+SE13**2);
         N_OBS  = MIN(N11,N13);
         N_WGT  = MIN(W11,W13);
         SCORE  = SCORE13-SCORE11;
         DSCORE = 100*(SCORE13-SCORE11);
         if region='Benchmark' then OUTPUT bench;
         else output trends;
      END;
      DROP ORDER SCORE11 SCORE13 SE11 SE13 N11 N13;
   RUN;


   PROC SORT DATA=trends;
      BY MAJGRP BENEFIT BENTYPE TIMEPD;
   RUN;
   proc sort data=bench out=benchs(keep=majgrp benefit bentype timepd score semean);
   by majgrp benefit bentype timepd;
   run;

   *****************************************************************************
   * Perform significance tests for CAHPS scores
   *****************************************************************************;
   DATA trends;
      MERGE trends(IN=SIN) BENCHs(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
      BY MAJGRP BENEFIT BENTYPE;
      if bsemean=. then bsemean=0;
      TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
      TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1));
      SIG = 0;
      IF N_OBS >= 30 AND TEST < 0.05 THEN SIG = 1;
      IF SCORE < BSCORE THEN SIG = -SIG;
      IF SIN;
   RUN;

   data trends;
   set trends bench;
   score=dscore;
   PROC SORT DATA=TRENDS; BY KEY; RUN;

   *****************************************************************************
   * Construct ORDERing variable from WEB layout
   * (RSG 02/2005 add fix to order it properly
   *****************************************************************************;
   DATA ORDER;
    SET IN.newFAKE;
      ORDER = _N_;
      LENGTH KEY $200;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
      KEEP KEY ORDER;
   RUN;

   PROC SORT DATA=ORDER; BY KEY; RUN;

   DATA MERGTRND;
      MERGE TRENDS(IN=IN1) ORDER(IN=IN2);
      BY KEY;
      IF IN1 and in2;
```

```
RUN;

PROC SORT DATA=IN.CONUS_Q OUT=CONUS_Q;
by key;run;
data conus_q;
     merge conus_q order(in=gin); by key;
     if gin;
proc sort data=CONUS_Q; by order;
PROC SORT DATA=MERGTRND; BY ORDER; RUN;

DATA OUT.TREND_A;
   update MERGTRND CONUS_Q;
   BY ORDER;

   IF BENEFIT = "Primary Care Manager" THEN BENEFIT = "Personal Doctor";   /*MJS 02/13/2003*/

   IF REGCAT = "5th Med Grp-Minot" THEN REGION = "West Air Force";
   IF substr(region,1,5) in ('Latin','Europ','Pacif') then delete;
   IF REGION IN ("South Joint Service","West Joint Service","Europe Joint Service",
                 "Pacific Joint Service","Latin America Joint Service") THEN DELETE;

RUN;

TITLE1 "2013 DOD Health Survey Scores/Report Cards (6663-410)";
TITLE2 "Program Name: TREND_A.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MPR and CAHPS data records in WEB Layout";
TITLE4 "Program Outputs: TREND_A.sas7bdat - Merged Final Scores Database with TRENDs for input to
SIGNIF_A.SAS";

TITLE5 "FREQs of TREND_A.sas7bdat";
PROC FREQ;
   TABLES SOURCE FLAG MAJGRP REGION BENEFIT BENTYPE
  /MISSING LIST;
RUN;

TITLE5 "FREQs of newFAKE.sas7bdat";
PROC FREQ DATA=IN.newFAKE;
   TABLES MAJGRP REGION BENEFIT BENTYPE
  /MISSING LIST;
RUN;
```

G.16   LOADWEB\MAKEHTMA.SAS - Generate HTML and XLS files for TRICARE Beneficiary Reports - Annual.

```
*======================================================================;
*   Programmer:  Mark A. Brinkley                                      ;
*        Title:  MAKEHTMA.SAS                                          ;
*       Client:  6077-410                                              ;
*         Date:  02-28-2005                                            ;
*                                                                      ;
*      Purpose:  This program is designed to create                   ;
*                ANNUAL report cards                                   ;
*                                                                      ;
*                                                                      ;
*  Input files:  ?????.SD2                                             ;
* Output files:  HTML\                                                 ;
*                  3384*3 F*.HTM Files (Frame version)                 ;
*                  3384   P*.HTM Files (Printer friendly - no frames)  ;
*                  3384   P*.XLS Files (Excel files)                   ;
*                  -------------------                                 ;
*                  16920   TOTAL files                                 ;
*                                                                      ;
*                                                                      ;
*                                                                      ;
*   ÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!       ;
*                                                                      ;
*     IF YOU MODIFY THIS PROGRAM THEN PLEASE INITIAL AND DOCUMENT      ;
*     YOUR CHANGES.  THOSE FAILING TO DO THIS WILL BE SEVERELY         ;
*     BEATEN.                                                          ;
*                                                                      ;
*   ÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!       ;
*                                                                      ;
*                                                                      ;
*                                                                      ;
* Modifications:                                                       ;
* 11-01-2000 - JSykes added pieces to create Excel Spreadsheets        ;
* 07-01-2001 - MAB modified for qtr 2                                  ;
* 10-25-2001 - C.Rankin moved link to printer friendly version        ;
*              from frame, created macro variable to include           ;
*              third row of subbenefit heading                         ;
* 11-01-2001 - D.Beahm changed splitpercent to splitpixel and adjusted;
*              the pixel size of the top frame to prevent scrolling    ;
*              she also added a <BR> before the printer icon to make   ;
*              sure it appears on it's own line                        ;
* 12-21-2001 - D.Beahm changed column widths for frame page a so that  ;
*              the column headers would line up with the data in frame ;
*              page b. Also revised Excel code so benchmarks for the   ;
*              majorgrp are shaded dark red instead of blue            ;
* 04-18-2002 - Quarterly report cards will now show a rolling 4        ;
*              quarters of data for the trend. DKB updated the period  ;
*              BENTYPE references to account for this, this will need  ;
*              to be done each quarter. Also revised footnote          ;
*              to indicate that this is the 2002 Survey of Health Care ;
*              Beneficiaries. This reflects a change from previous     ;
*              years, the survey year now refers to the processing     ;
*              year instead of the year for which data was collected.  ;
*              Also changed image reference from QTR to COL, these     ;
*              new names for the qtr images reflects the column they   ;
*              are in instead of the quarter they represent            ;
* 06-19-2002 - Mark Brinkley                                           ;
*                Updated for Q2_2002                                   ;
*                Changed macro var PERIOD to CURRENTPERIOD             ;
*                Added macro vars PERIOD1-PERIOD3                      ;
* 07-29-2002 - Daniele Beahm                                           ;
*                Added links to trend pages. Clicking on the fielding  ;
*                Period now takes you to the component page for that   ;
*                period and clicking on the Trend column header now    ;
*                takes you to the Trend section of the help file       ;
* 02-04-2003 - Mike Scott                                              ;
*                Changed "Primary Care Manager" to "Personal Doctor"   ;
* 02-10-2003 - Mike Scott                                              ;
*                Inserted LENGTH HREF $ 250 statements before          ;
*                href = "string" statements so that href wouldn't be   ;
```

```
*               set by default                          ;
* 02-14-2003 - Mike Scott                               ;
*               Added code to avoid scores > 100        ;
* 04-30-2003 - Mike Scott                               ;
*               Changed Preventive Care columns from 5 to 6 to   ;
*               accommodate Cholesterol Testing.        ;
* 05-01-2003 - Mike Scott                               ;
*               Updated periods for Q1 2003, and changed "2001 and  ;
*               2002" to "2002 and 2003" and "2002 Health Care   ;
*               Survey" to "2003 Health Care Survey".   ;
* 05-04-2003 - Mike Scott                               ;
*               Removed Civilian PCM (var1=3 or majgrp=3), and   ;
*               changed 4-8 references to 3-7.          ;
* 05-06-2003 - Mike Scott                               ;
*               Changed 7-0-0 to 8-0-0.                 ;
* 05-13-2003 - Mike Scott                               ;
*               Changed two widths.                     ;
* 05-14-2003 - Mike Scott                               ;
*               Changed columns from 2-12 to 1-11 which is   ;
*               controlled by var3 - decreased var3's by 1 and   ;
*               decreased K loops by 1.                 ;
* 07-03-2003 - Mike Scott                               ;
*               Incorporated TIMEPD variable into program to run   ;
*               with Q1 2003 TOTAL_Q rerun to include TIMEPD   ;
*               variable.                               ;
* 07-30-2003 - Mike Scott                               ;
*               Added else do section to correct header.   ;
* 07-31-2003 - Mike Scott                               ;
*               Updated periods for Q2 2003.            ;
* 08-01-2003 - Mike Scott                               ;
*               Added code so periods would print on var3=7,8,9,10. ;
* 08-07-2003 - Regina Gramss                            ;
*               Changed program to create additional trend pages   ;
*               for each sub-benefit: pages are now named with 4   ;
*               numbers (var4 has been added to all file name   ;
*               references) to compensate for additional layer   ;
*               of pages. All file references have been changed   ;
*               to include var4.                        ;
* 01-28-2004 - Mike Scott                               ;
*               Changed back to html being generated in HTML   ;
*               directory below directory where MAKEHTMQ is being   ;
*               run.                                    ;
* 01-29-2004 - Mike Scott                               ;
*               Commented out LENGTH HREF $ 250 statements, since   ;
*               HREF was already declared.              ;
* 02-11-2004 - Mike Scott                               ;
*               Changed all lengths to 100 that were less than 100. ;
* 03-24-2004 - Mike Scott                               ;
*               Updated for Q1 2004.  Changed hard-coded years in   ;
*               footnotes stating source to macro variables.   ;
* 05-07-2004 - Mike Scott - Changed "Wait More than 15 Minutes Past   ;
*               Appointment" to "Wait in Doctor's Office" and   ;
*               "Problems Getting Referral to Specialist" to "Problems ;
*               Getting to See Specialist".  NAed out trends for the   ;
*               composites Getting Needed Care, Getting Care Quickly,   ;
*               and Customer Service and for the questions Problems   ;
*               Getting Personal Doctor/Nurse (GNC), Wait in Doctor's   ;
*               Office (GCQ), and Problem with Paperwork (CS).   ;
* 02-16-2004 - Mike Scott - Moved initial data read-in outside macro   ;
*               loop to speed up program.               ;
* 06-22-2004 - Regina Gramss - Updated for Q2 2004 run.   ;
* 08-02-2004 - Regina Gramss - removed lines that replaced trend   ;
*               with NA                                 ;
* 10-07-2004 - Regina Gramss - Adjusted for XTNEXREG    ;
* 02-14-2005 - Mark Brinkley - added 12th benefit SMOKING   ;
* 03-28-2005 - Mark Brinkley - made changed to fix excel pages   ;
* 11-19-2007 - Keith Rathbun - Added 's' to Behavior. Updated   ;
*               parameters for 2007 survey.             ;
* 11-05-2008 - Mike Rudacille - Updated parameters for 2008 survey.   ;
* 08-01-2012 - Amanda Kudis - Updated parameters for 2012 survey.   ;
* 11-12-2012 - Mike Rudacille - added handling of 2 new servreg   ;
*               categories (JOINT SERVICE, North Joint Service)   ;
*                                                       ;
```

```
* NOTE: Update only SRCYR1, SRCYR2, PERIOD1/2/3, and CURRENTPERIOD.    ;
*===================================================================;


OPTIONS COMPRESS=YES;

%LET SRCYR1 = 2011;   *** Previous year; /* MER - 11/21/08 Changed from previous year
                                          to 2 years previous for accuracy of footnote*/
%LET SRCYR2 = 2013;   *** Current year;

%LET CURRENTPERIOD = 2013;
%LET QTRS=3;                                            /** Qtr of these reports    **/


OPTIONS NOXWAIT;


%LET HTMLSP=%NRSTR( );
%LET QUOTE=%STR("");
%LET OUTDIR=HTML;                /** Directory to put HTML files **/  /*MJS 01/28/04 Set to
HTML*/
%LET IMGDIR=images;             /** Directory with images **/
%LET TARGET=target='_parent';   /** HTML code for frames targeting **/
%LET OUTXLS=1;                  /** 1=Make XLS file/0=Don't   Added 1-24 MAB **/
%LET fontface=%STR(Arial,Helvetica,Swiss,Geneva);
%LET hdcolr=%STR('white');
%LET BLUE=%STR('#663300');       /** This is really dark red **/
%LET GREEN=%STR('#009933');
%LET RED=%STR('#cc0000');
%LET GRAY=%STR('white');
%LET LOGO=%STR('images\tricare_side_35_new.gif');
%LET HELP_BUT=%STR('images\help75.gif');
%LET HOME_BUT=%STR('images\home75.gif');
%LET BACK_BUT=%STR('images\back75.gif');
%LET NUMBER_HTML_FILES=0;        /** Keep count of HTML files created **/

%LET SUB_HEAD=0;                 /** Macro variable for sub-benfit heading **/
                                 /** 1=headings, 0=no headings          **/

/*******************************************************/
/***** Macro for putting notes at bottom of table   *****/
/*******************************************************/
%MACRO BOTTOM_NOTES();
     PUT "<tr>";
   %if &var3.=6 or &var3.=7 or &var3.=8 or &var3.=9 or &seppage.=2 %then %do;
     PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 through &SRCYR2.</font>"; /* MER
11/21/08
   %end;
   %else %do;
     PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
&SRCYR2 Health Care Survey of DOD Beneficiaries</font>";
   %end;
     PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2' color='#009933'><br>";
     PUT "    <b>Indicates score significantly exceeds benchmark</b></font><b>&htmlsp.<br>";
     PUT "    </b><font face='Arial,Helvetica,Swiss,Geneva' size='2' color='#cc0000'><i>Indicates
score significantly falls short of benchmark</i></font><br>";
     PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'>NA Indicates not
applicable</font><br>";
     PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'>*** Indicates suppressed due to
small sample size</font><br>";
   %if &var3.=6 or &var3.=7 or &var3.=8 or &var3.=9 or &seppage.=2 %then %do;
      %if &var2.=0 %then %do;
        PUT "   <font face='Arial,Helvetica,Swiss,Geneva' size='2'>* For 2011, Walter Reed and
Ft. Belvoir are included in North Joint Service despite not being classified as such until
2012</font><b
      %end;
      %else %if &var2.=12 %then %do;
        PUT "   <font face='Arial,Helvetica,Swiss,Geneva' size='2'>* For 2011, Walter Reed and
Ft. Belvoir are included in North Joint Service despite not being classified as such until
2012</font><b
```

```
        PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'># For 2011, Walter Reed Natl
Mil Med Cntr scores include NNMC Bethesda and Walter Reed AMC which were consolidated in
2012</font><br
      %end;
    %end;
      PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";
      PUT "</td></tr>";
%MEND BOTTOM_NOTES;




/*******************************************************/
/***** Macro for adding in link row to trends data  *****/
/*******************************************************/

/*** Macro variable with Javascript to go back ***/
%LET GOBACK=%STR(<script>document.write(&quote.<a href='javascript:history.go(-1)'
target='_parent'>&quote.);
document.write(&quote.<img src='images\\back75.gif' border='0' alt='Go to previous
page'>&quote.);document.write(&quote.</a>&quote.);</script>);


LIBNAME SRC1 '.'  ACCESS=READONLY;
*LIBNAME SRC1 V612 'L:\2005\PROGRAMS\LOADWEB';

OPTIONS LS=210;


/*************************************************************************/
/****    Macro to create html pages                           ****/
/****          var1=major group                               ****/
/****          var2=region                                    ****/
/****          var3=benefit                                   ****/
/****          var4=trend                                     ****/
/****       seppage=0/no separate pages for qtrly trends      ****/
/****            1/1st separate page with LINK to trends       ****/
/****            2/2nd separate page with trends               ****/
/*************************************************************************/
/** RSG 08/07/03 - added var4 to add extra dimension of page numbers for
    sub benefit trend pages**/


DATA PRE_SUBSET (RENAME=(TIME=TIMEPD));
  SET SRC1.TREND_Apc(DROP=FLAG SOURCE KEY);    /*** MAB testing 3/16/2005 ***/

  /* 02/2006 RSG - need to reset timepd to longer length to include
     values with asterix*/

  LENGTH TIME $6.;
  TIME=TIMEPD;
  IF BENEFIT="Total" THEN DELETE;  /*** MAB testing 2/11/2005 ***/

  /* MER 11/05/09 Temporary fix for 2009 and 2010 */
  /*IF (BENEFIT="Customer Service" AND TIMEPD="Trend") THEN SCORE=.;*/

  /* MER 4/30/11 - Set scores for Counselled To Quit = N/A for 2009 and 2010 for trends pages */
  /*              Also set Trend to N/A
  IF BENEFIT = "Healthy Behaviors" AND BENTYPE = "Counselled To Quit" AND
     TIMEPD IN ("2011", "Trend") THEN SCORE = .A;*/

  IF MAJGRP = "All Beneficiaries" THEN MAJGRP = "All Users";
  IF MAJGRP = "Non-enrolled Beneficiaries" THEN MAJGRP = "Standard/Extra Users";

  IF SCORE>100 then SCORE=100;
  IF (TIMEPD="Trend" and -.5<SCORE<0) THEN SCORE=ABS(SCORE);

  IF BENTYPE="Wait More than 15 Minutes Past Appointment" THEN     /*MJS 5/7/04 Changed label*/
    BENTYPE="Wait in Doctor`s Office";
  IF BENTYPE="Problems Getting Referral to Specialist" THEN        /*MJS 5/7/04 Changed label*/
    BENTYPE="Problems Getting to See Specialist";
```

```
  DROP TIMEPD;

     IF MAJGRP = "Benchmark" THEN LINEUP=1;
     ELSE IF MAJGRP = "Prime Enrollees" THEN LINEUP=2;
     ELSE IF MAJGRP = "Enrollees with Military PCM" THEN LINEUP=3;
         ELSE IF MAJGRP = "Enrollees with Civilian PCM" THEN LINEUP=4;
     ELSE IF MAJGRP = "Standard/Extra Users" THEN LINEUP=5;
         ELSE IF MAJGRP = "Purchased Care Users" THEN LINEUP=6;
     ELSE IF MAJGRP = "Active Duty" THEN LINEUP=7;
     ELSE IF MAJGRP = "Active Duty Dependents" THEN LINEUP=8;
     ELSE IF MAJGRP = "Retirees and Dependents" THEN LINEUP=9;
     ELSE IF MAJGRP = "All Users" THEN LINEUP=10;

     IF REGION = "Benchmark" THEN LINEUP2=1;
     ELSE IF UPCASE(REGION) = 'USA MHS' THEN DO;
         LINEUP2=2;
         REGION='US MHS';
         REGCAT='US MHS';
     END;
     ELSE IF UPCASE(REGION) = 'ARMY' THEN LINEUP2=3;
     ELSE IF UPCASE(REGION) = 'NAVY' THEN LINEUP2=4;
     ELSE IF UPCASE(REGION) = 'AIR FORCE' THEN LINEUP2=5;
     ELSE IF UPCASE(REGION) = 'OTHER' THEN LINEUP2=6;
     ELSE IF UPCASE(REGION) = 'JOINT SERVICE' THEN LINEUP2=7;
     ELSE IF UPCASE(REGION) = 'NORTH' THEN LINEUP2=8;
     ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP2=9;
     ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP2=10;
     ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP2=11;
     ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP2=12;
     ELSE IF UPCASE(REGION) = 'NORTH JOINT SERVICE' THEN LINEUP2=13;
     ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP2=14;
     ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP2=15;
     ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP2=16;
     ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP2=17;
     ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP2=18;
     ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP2=19;
     ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP2=20;
     ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP2=21;
     ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP2=22;
     ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP2=23;
     ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP2=24;
     ELSE IF UPCASE(REGION) = 'OVERSEAS EUROPE' THEN LINEUP2=25;
     ELSE IF UPCASE(REGION) = 'OVERSEAS PACIFIC' THEN LINEUP2=26;
     ELSE IF UPCASE(REGION) = 'OVERSEAS LATIN AMERICA' THEN LINEUP2=27;


RUN;    ***MJS 07/03/03 Changed BENTYPE to TIMEPD;

PROC SORT;
BY LINEUP LINEUP2;
RUN;


%MACRO MKHTML(var1,var2,var3,seppage,var4);


/*** Determine some macro variables ***/
%if &prefix=f %then %do;
  %let width1=640;
  %let width2=640;
  %let border=0;
%end;
%else %do;
  %let width1=90%;
  %let width2=85%;
  %let border=1;
%end;

%let number_html_files=%EVAL(1+&number_html_files.);


/** Load in data **/
```

```
DATA SUBSET;
  SET PRE_SUBSET;
  LENGTH FILEOUT1 $ 100;   /*MJS 02/11/04*/
  LENGTH FILEOUT2 $ 100;
  LENGTH FILEOUT3 $ 100;


  /*** VAR1 indicated major group ***/
  %if &var1.=0 %then %let major=%STR();
  %if &var1.=1 %then %let major=%STR(Prime Enrollees);
  %if &var1.=2 %then %let major=%STR(Enrollees with Military PCM);
  %if &var1.=3 %then %let major=%STR(Enrollees with Civilian PCM);
  %if &var1.=4 %then %let major=%STR(Standard/Extra Users);
  %if &var1.=5 %then %let major=%STR(Purchased Care Users);
  %if &var1.=6 %then %let major=%STR(Active Duty);
  %if &var1.=7 %then %let major=%STR(Active Duty Dependents);
  %if &var1.=8 %then %let major=%STR(Retirees and Dependents);
  %if &var1.=9 %then %let major=%STR(All Users);


  %if &var4. = 0 %then %do;
      %LET BEN_TYPE=%STR('Composite');
  %end;
  %else %do;
      %if &var3. = 1 %then %do;
          %if &var4. = 1 %then %do;
              %LET BEN_TYPE = %STR('Getting to See a Specialist');
          %end;
          %else %if &var4. = 2 %then %do;
              %LET BEN_TYPE = %STR('Getting Treatment');
          %end;
      %end;
      %else %if &var3. = 2 %then %do;
          %if &var4. = 1 %then %do;
              %LET BEN_TYPE = %STR('Wait for Routine Visit');
          %end;
          %else %if &var4. = 2 %then %do;
              %LET BEN_TYPE = %STR('Wait for Urgent Care');
          %end;
      %end;
      %else %if &var3. = 3 %then %do;
          %if &var4. = 1 %then %do;
              %LET BEN_TYPE = %STR('Listens Carefully');
          %end;
          %else %if &var4. = 2 %then %do;
              %LET BEN_TYPE = %STR('Explains so You Can Understand');
          %end;
      %else %if &var4. = 3 %then %do;
              %LET BEN_TYPE = %STR('Shows Respect');
          %end;
          %else %if &var4. = 4 %then %do;
              %LET BEN_TYPE = %STR('Spends Time with You');
          %end;
      %end;
      %else %if &var3. = 4 %then %do;
          %if &var4. = 1 %then %do;
              %LET BEN_TYPE = %STR('Getting Information');
          %end;
          %else %if &var4. = 2 %then %do;
              %LET BEN_TYPE = %STR('Courteous Customer Service');
          %end;
      %end;
      %else %if &var3. = 5 %then %do;
          %if &var4. = 1 %then %do;
              %LET BEN_TYPE = %STR('Claims Handled in a Reasonable Time');
          %end;
          %else %if &var4. = 2 %then %do;
              %LET BEN_TYPE = %STR('Claims Handled Correctly');
          %end;
      %end;
      %else %if &var3. = 10 %then %do;
          %if &var4. = 1 %then %do;
              %LET BEN_TYPE = %STR('Mammography');
```

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```
                %end;
                %else %if &var4. = 2 %then %do;
                    %LET BEN_TYPE = %STR('Pap Smear');
                %end;
                %else %if &var4. = 3 %then %do;
                    %LET BEN_TYPE = %STR('Hypertension');
                %end;
                %else %if &var4. = 4 %then %do;
                    %LET BEN_TYPE = %STR('Prenatal Care');
                %end;
            %end;
            %else %if &var3. = 11 %then %do;    /*** MAB Added 2/11/2005 ***/
                %if &var4. = 1 %then %do;
                    %LET BEN_TYPE = %STR('Non-Smoking Rate');
                %end;
                %else %if &var4. = 2 %then %do;
                    %LET BEN_TYPE = %STR('Counselled To Quit');
                %end;
                %else %if &var4. = 3 %then %do;
                    %LET BEN_TYPE = %STR('Percent Not Obese');
                %end;
            %end;
        %end;

        IF MAJGRP = "&major.";     /*** MAB MODIFIED 3/16/2005 ***/
        %let comma=%STR(,);
        %let grpmsg=%STR(Click below to view this table by other groups);


     /*** Create macro variables to refer to Component or Trend pages ***/
        %if &seppage.=2 %then %do;
            %let q=q;
            %let unq=;
            %let click_alt=Click for Component data;
            %let click_image=component.gif;
        %end;
        %else %do;
            %let q=;
            %let unq=q;
            %let click_alt=Click for Trend data;
            %let click_image=trend.gif;
        %end;


        FILEOUT1=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q..htm");     /** Main html **/
        FILEOUT2=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q.a.htm");    /** Header html
**/
        FILEOUT3=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q.b.htm");    /** Data html **/
        %if &outxls.=1 %then %do;
            %let fileout1= NUL;
            %let fileout2= NUL;
            %let fileout3= NUL;
        %end;
        %else %do;
            call symput('fileout1',FILEOUT1);
            call symput('fileout2',FILEOUT2);
            call symput('fileout3',FILEOUT3);
        %end;



    /*------------------------*/
    /* 2000/11: begin xls code */
    /*------------------------*/

    FILEOUTX=COMPRESS("&outdir.\p&var1.-&var2.-&var3.-&var4.&q..xls");          /* create run-
specific xls file */
    CALL SYMPUT('fileoutX',FILEOUTX);                                  /* via global macro vars
*/
    %if &seppage. ne 2 %then %do;
        TEMPLATE=COMPRESS("Templates\Template&var3..xls");
    %end;
    %else %do;
```

```
      TEMPLATE=COMPRESS("Templates\Template_trend.xls");
  %end;
  CALL SYMPUT('template',TEMPLATE);                              /* identify which template
xls file */
  /*------------------------*/
  /* 2000/11: end xls code   */
  /*------------------------*/


  /*** VAR3 dictates type of benefit heading ***/
  %if &var3=0 %then %do;
    %let headvar=BENEFIT;
  %end;
  %else %do;
    %if &seppage.=2 or &var3=6 or &var3=7 or &var3=8 or &var3=9 %then %let headvar=TIMEPD;
    %else %let headvar=BENTYPE;
  %end;


  /*** Link to XLS file ***/
  HREFXLS=COMPRESS("p&var1.-&var2.-&var3.-&var4.&q..xls");
  call symput('hrefxls',HREFXLS);
RUN;


/*** Subset data by region ***/
DATA SUBSET2;
  SET SUBSET;

  %if &var2.=0 %then %do;    /** 0 = All regions **/
    IF REGION=REGCAT;        /** Just do All Region table **/
     %let sub_regs=%STR(All Regions);
  %end;

  %else %if &var2.=1 %then %do;
    IF UPCASE(REGION)="US MHS" ;
     %let sub_regs=%STR(US MHS);
  %end;
  %else %if &var2.=2 %then %do;
    IF UPCASE(REGION)="ARMY";
     %let sub_regs=%STR(ARMY);
  %end;
  %else %if &var2.=3 %then %do;
    IF UPCASE(REGION)="NAVY" ;
     %let sub_regs=%STR(NAVY);
  %end;
  %else %if &var2.=4 %then %do;
    IF UPCASE(REGION)="AIR FORCE";
     %let sub_regs=%STR(AIR FORCE);
  %end;
  %else %if &var2.=5 %then %do;
    IF UPCASE(REGION)="OTHER";
     %let sub_regs=%STR(OTHER);
  %end;
  %else %if &var2.=6 %then %do;
    IF UPCASE(REGION)="JOINT SERVICE";
     %let sub_regs=%STR(JOINT SERVICE);
  %end;
  %else %if &var2.=7 %then %do;
    IF UPCASE(REGION)="NORTH";
     %let sub_regs=%STR(NORTH);
  %end;
  %else %if &var2.=8 %then %do;
    IF UPCASE(REGION)="NORTH ARMY" or REGION="Benchmark" or REGION = "US MHS"
       OR REGION="NORTH" OR REGION="ARMY";
     %let sub_regs=%STR(North Army);
  %end;
  %else %if &var2.=9 %then %do;
    IF UPCASE(REGION)="NORTH NAVY" or REGION="Benchmark" or REGION = "US MHS"
       OR REGION="NORTH" OR REGION="NAVY";
     %let sub_regs=%STR(North Navy);
  %end;
  %else %if &var2.=10 %then %do;
```

```
   IF UPCASE(REGION)="NORTH AIR FORCE" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="NORTH" OR REGION="AIR FORCE";
    %let sub_regs=%STR(North Air Force);
 %end;
 %else %if &var2.=11 %then %do;
    IF UPCASE(REGION)="NORTH OTHER" or REGION="Benchmark" or REGION = "US MHS"
     OR REGION="NORTH" OR REGION="OTHER";
     %let sub_regs=%STR(North Other);
 %end;
 %else %if &var2.=12 %then %do;
    IF UPCASE(REGION)="NORTH JOINT SERVICE" or REGION="Benchmark" or REGION = "US MHS"
     OR REGION="NORTH" OR REGION="JOINT SERVICE";
     %let sub_regs=%STR(North Joint Service);
 %end;
 %else %if &var2.=13 %then %do;
    IF UPCASE(REGION)="SOUTH";
     %let sub_regs=%STR(SOUTH);
 %end;
 %else %if &var2.=14 %then %do;
    IF UPCASE(REGION)="SOUTH ARMY" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="SOUTH" OR REGION="ARMY";
     %let sub_regs=%STR(South Army);
 %end;
%else %if &var2.=15 %then %do;
    IF UPCASE(REGION)="SOUTH NAVY" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="SOUTH" OR REGION="NAVY";
     %let sub_regs=%STR(South Navy);
%end;
%else %if &var2.=16 %then %do;
    IF UPCASE(REGION)="SOUTH AIR FORCE" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="SOUTH" OR REGION="AIR FORCE";
     %let sub_regs=%STR(South Air Force);
%end;
%else %if &var2.=17 %then %do;
    IF UPCASE(REGION)="SOUTH OTHER" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="SOUTH" OR REGION="OTHER";
     %let sub_regs=%STR(South Other);
%end;
%else %if &var2.=18 %then %do;
    IF UPCASE(REGION)="WEST";
     %let sub_regs=%STR(OVERSEAS);
%end;
%else %if &var2.=19 %then %do;
    IF UPCASE(REGION) = "WEST ARMY" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="WEST" OR REGION="ARMY";
     %let sub_regs=%STR(West Army);
%end;
%else %if &var2.=20 %then %do;
    IF UPCASE(REGION) = "WEST NAVY" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="WEST" OR REGION="NAVY";
     %let sub_regs=%STR(West Navy);
%end;
%else %if &var2.=21 %then %do;
    IF UPCASE(REGION) = "WEST AIR FORCE" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="WEST" OR REGION="AIR FORCE";
     %let sub_regs=%STR(West Air Force);
%end;
%else %if &var2.=22 %then %do;
    IF UPCASE(REGION) = "WEST OTHER" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="WEST" OR REGION="OTHER";
     %let sub_regs=%STR(West Other);
%end;
%else %if &var2.=23 %then %do;
    IF UPCASE(REGION) = "OVERSEAS" ;
     %let sub_regs=%STR(OVERSEAS);
%end;
%else %if &var2.=24 %then %do;
     IF UPCASE(REGION) = "OVERSEAS EUROPE" or REGION="Benchmark" or REGION = "US MHS"
      OR REGION="OVERSEAS" OR REGION="EUROPE";
      %let sub_regs=%STR(Overseas Europe);
 %end;
 %else %if &var2.=25 %then %do;
     IF UPCASE(REGION) = "OVERSEAS PACIFIC"or REGION="Benchmark" or REGION = "US MHS"
```

```
        OR REGION="OVERSEAS" OR REGION="PACIFIC";
      %let sub_regs=%STR(Overseas Pacific);
  %end;
  %else %if &var2.=26 %then %do;
      IF UPCASE(REGION) = "OVERSEAS LATIN AMERICA"or REGION="Benchmark" or REGION = "US MHS"
        OR REGION="OVERSEAS" OR REGION="LATIN AMERICA";
      %let sub_regs=%STR(Overseas Latin America);
  %end;


RUN;

/* MER 11/22/12 - Temp fix for pages showing 2010/11 scores */
  %if &var3.=6 or &var3.=7 or &var3.=8 or &var3.=9 or &seppage.=2 %then %do;
    %if &var2.=0 %then %do;
        DATA SUBSET2;
          SET SUBSET2;
          IF REGCAT IN ("JOINT SERVICE","North Joint Service") THEN REGCAT = TRIM(REGCAT) ||
"*";
        RUN;
    %end;
    %else %if &var2.=12 %then %do;
        DATA SUBSET2;
          SET SUBSET2;
          IF REGCAT IN ("JOINT SERVICE","North Joint Service") THEN REGCAT = TRIM(REGCAT) ||
"*";
          ELSE IF SUBSTR(REGCAT,1,10) = "Ft Belvoir" THEN REGCAT = TRIM(REGCAT) || "*";
          ELSE IF SUBSTR(REGCAT,1,11) = "Walter Reed" THEN REGCAT = TRIM(REGCAT) || "*#";
        RUN;
    %end;
  %end;


/*** Subset data by Benefit ***/
DATA SUBSET3;
  SET SUBSET2;

  %if &var3.=0 %then %do;   /** 0=All Benefits **/
    IF BENTYPE="Composite" and TIMEPD="&currentperiod.";
  %end;
  %else %if &var3.=1 %then %do;
    IF BENEFIT="Getting Needed Care";

    /*** # of columns for this benefit table ***/
    %let columns=%EVAL(3+&qtrs.);
  %end;
  %else %if &var3.=2 %then %do;
    IF BENEFIT="Getting Care Quickly";
    %let columns=%EVAL(3+&qtrs.);
  %end;
  %else %if &var3.=3 %then %do;
    IF BENEFIT="How Well Doctors Communicate";
    %let columns=%EVAL(5+&qtrs.);
  %end;
  %else %if &var3.=4 %then %do;
    IF BENEFIT="Customer Service";
    %let columns=%EVAL(3+&qtrs.);
  %end;
  %else %if &var3.=5 %then %do;
    IF BENEFIT="Claims Processing";
    %let columns=%EVAL(3+&qtrs.);
  %end;
  %else %if &var3.=6 %then %do;
    IF BENEFIT="Health Plan";
    %let columns=%EVAL(2+&qtrs.);
  %end;
  %else %if &var3.=7 %then %do;
    IF BENEFIT="Health Care";
    %let columns=%EVAL(2+&qtrs.);
  %end;
  %else %if &var3.=8 %then %do;
    IF BENEFIT="Personal Doctor";
    %let columns=%EVAL(2+&qtrs.);
  %end;
```

```
    %else %if &var3.=9 %then %do;
        IF BENEFIT="Specialty Care";
        %let columns=%EVAL(2+&qtrs.);
    %end;
    %else %if &var3.=10 %then %do;
        IF BENEFIT="Preventive Care";
        %let columns=%EVAL(5+&qtrs.);
    %end;
    %else %if &var3.=11 %then %do;
        IF BENEFIT="Healthy Behaviors";
        %let columns=%EVAL(4+&qtrs.);
    %end;

    /*** Set macro variable ***/
    %if &var3.=0 %then %do;
        %let sub_ben=%STR(&currentperiod. Composite Scores);
        %let columns=12;
    %end;
    %else %do;
      call symput('sub_ben',BENEFIT);
    %end;


    /*** Determine number of columns for sub-benefits  ***/
    /*** Equals cols - (x for qtrs  - 1 for stub column) ***/
    %let subcols=%EVAL(&columns.-&qtrs.-2);

    /*** Determine number of columns less 1st (stub) column ***/
    %let columns_less1=%EVAL(&columns.-1);

RUN;


DATA SUBSET4;
  SET SUBSET3;

  WIDTH_COL1=120; /** Set width of column 1 **/

  IF BENTYPE="Composite" THEN WIDTH3=90;
  ELSE WIDTH3=90;

  /** Deal with some special cases **/
  IF BENEFIT="Preventive Care" THEN DO;
      IF BENTYPE="Composite" THEN WIDTH3=.;
      ELSE WIDTH3=80;
  END;

  %if &prefix.=p %then %do;
      WIDTH3=.;
  %end;
  %else %if &var3.=0 %then %do;
/*      WIDTH_COL1=.;
      WIDTH3=40;*/
/* MER 05/02/09 new values for V4 frames */
      WIDTH_COL1=80;
      /* MER 05/02/09 */
      %if &var2.=0 %then %do;
         WIDTH3=44;
      %end;
      %else %do;
         WIDTH3=43;
      %end;
  %end;

RUN;



OPTIONS LS=152;
PROC PRINT;
 VAR BENEFIT BENTYPE TIMEPD REGION REGCAT MAJGRP;
RUN CANCEL;
PROC PRINT;
```

```
 VAR BENEFIT BENTYPE REGION REGCAT MAJGRP;
RUN CANCEL;


/****************************************************************/
/****  Put out Header rows of table                       ****/
/****************************************************************/
DATA HTML;
  SET SUBSET4;
  LENGTH HREFBACK $100;

  IF REGION IN("Benchmark");

  /** Determine where back button should link to **/
  %if &var1.=0 %then %do;
     HREFBACK=COMPRESS("&prefix.9-0-0-0.htm");
  %end;
  %else %do;
     HREFBACK=COMPRESS("&prefix.&var1.-0-0-0.htm");
  %end;

  /*** Create macro variable date with today's date ***/
  DATETIME=DATETIME();
  CALL SYMPUT ('DATETIME',left(put(datetime,datetime20.)));
  DROP DATETIME;

RUN;



/*** ÛÛ FRAMES SECTION ÛÛ ***/
%if &prefix=f %then %do;

    /*** Make frameset page split frames smaller on all ratings pages ***/

   %if &var3.=0 %then %do;
        %let splitpixel=228;
   %end;
   %else %if &var3.=1 OR &var3.=2 %then %do;
        %let splitpixel=211;
   %end;
   %else %if &var3.=5 OR &var3.=11 %then %do;
        %let splitpixel=181;
   %end;
   %else %if &var3.=3 %then %do;
        %let splitpixel=196;
   %end;
   %else %if &var3.=4 %then %do;
        %let splitpixel=221;
   %end;
   %else %if &var3.=6 OR &var3.=7 OR &var3.=8 OR &var3.=9 %then %do;
        %let splitpixel=158;
   %end;
   %else %if &var3.=10 %then %do;
        %let splitpixel=192;
   %end;

   %if &SEPPAGE.=2 %then %do;
        %let splitpixel=157;
   %end;


   /*** Create frameset page HTML page ***/
   DATA _NULL_;
     FILE "&FILEOUT1.";
     PUT "<html>";
     PUT "<frameset rows='&splitpixel.,*'>";
      %if &seppage.=2 %then %do;
        PUT "   <frame src='f&var1.-&var2.-&var3.-&var4.qa.htm'  MARGINHEIGHT='0'
MARGINWIDTH='0'>";
        PUT "   <frame src='f&var1.-&var2.-&var3.-&var4.qb.htm'  MARGINHEIGHT='0'
MARGINWIDTH='0'>";
      %end;
```

```
      %else %do;
         PUT "   <frame src='f&var1.-&var2.-&var3.-&var4.a.htm'  MARGINHEIGHT='0'
MARGINWIDTH='0'>";
         PUT "   <frame src='f&var1.-&var2.-&var3.-&var4.b.htm'  MARGINHEIGHT='0'
MARGINWIDTH='0'>";
      %end;


      PUT "</frameset></html>";
    RUN;


    /*** Since done making frameset page then assign fileout1 = frame 1 ***/
    %let fileout1=&fileout2.;
    %if &seppage.=1 %then %do;
       %let fileout1=&fileout2.;
     %end;
     %else %if &seppage.=2 %then %do;
       %let fileout1=&fileout2.;
     %end;

%end;


/*** Initialize HTML page ***/
DATA _NULL_;
  FILE "&FILEOUT1.";

  PUT "<! Created &datetime.>";
  PUT "<html><head><title>";
  PUT "&major. &comma. &sub_ben., &sub_regs.";
  PUT "</title></head>";
  PUT "<body bgcolor='#999999' text='#000099' link='#660066' alink='#660066' vlink='#996699'>";

  /*** link to printer friendly version moved, 10/25/2001 C.Rankin ***/


RUN;

/*------------------------*/
/* 2000/11: begin xls code */
/*------------------------*/
%if &outxls.=1 %then %do;
  X "COPY &template. &fileoutX.";                          /* copy template xls to run-
specific xls file */
  X "START &fileoutX.";                                    /* open run-specific xls file
*/
  FILENAME XLSTITLE DDE 'excel|Sheet1!R1C1:R2C20' NOTAB;        /* xls rows 1 & 2 (titles)
*/
  FILENAME XLSDATA DDE 'excel|Sheet1!R6C1:R100C20' NOTAB;        /* xls rows 6+ (body of table)
*/
%end;
/*------------------------*/
/* 2000/11: end xls code   */
/*------------------------*/



/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*** If ALL benefits (VAR3=0) then do special column headers ***/
%if &var3.=0 %then %do;
DATA _NULL_;
  SET HTML END=EOF;
  *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/

  IF _N_=1 THEN DO;

       FILE "&FILEOUT1." MOD;       /* 2000/11: moved file stmt inside if stmt */

        /*** put table title ***/
        /**PUT "<h2><center><font face='&fontface.'>&major., &sub_regs. <br> &sub_ben.
</font></center></h2>"**/
```

```
          /** MF Changes ROW 1 **/
          PUT "<center><table border='&border.' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
colspan=12 width='&width1.'>";
          PUT "<tr bgcolor='white'>";
          PUT "    <td colspan='6' valign='top' bgcolor='#999999'><img border='0' height='25'
width='242' src=&logo.></td>";
          PUT "    <td colspan='6' align='right' valign='bottom' bgcolor='#999999'>";
          PUT "          <div align='right'>";
          PUT "          <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";
          PUT "&goback.";

          PUT "          <noscript><a href='"" HREFBACK  +(-1) "" &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
          PUT "          &htmlsp. &htmlsp.";
          PUT "          <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
          PUT "    </td>";
          PUT "</tr>";

          PUT "<tr>";
          PUT "     <td valign='center' align='center' colspan='12' bgcolor='#D8D8D8'>";
          PUT "          <font face='&fontface.' color='#3333cc' size='5'><b>&major. &comma.
&sub_regs.<br>";
          PUT "          &sub_ben.</b></font>";
          PUT "     </td>";
          PUT "</tr>";


          /*** Print out 3rd row ***/
          /*** ÛÛ FRAMES SECTION ÛÛ ***/


          /***here***/

        %if &prefix=f %then %do;
            PUT "<tr bgcolor= &hdcolr.>";
            /**RSG 02/2005 add in a dummy gif to align titles and comment out extra cell**/
            PUT "<td width=40 colspan=1><IMG SRC='&imgdir.\dummy.gif' ALT=' ' BORDER=0></td>";
            PUT "<td width=80 colspan=2><IMG SRC='&imgdir.\eoa.gif'ALT='Ease of Access'
BORDER=0></td>";
            PUT "<td width=185 colspan=3><IMG SRC='&imgdir.\com_cus_ser.gif' ALT='Communication
and Customer Service' BORDER=0></td>";
            PUT "<td width=160 colspan=4><IMG SRC='&imgdir.\ratings0.gif' ALT='Ratings'
BORDER=0></td>";
            PUT "<td width=50 colspan=1><IMG SRC='&imgdir.\prevention.gif' ALT='Prevention'
BORDER=0></td>";
            PUT "<td width=80 colspan=1><IMG SRC='&imgdir.\healthy.gif' ALT='Healthy Behaviors'
BORDER=0></td>";
            PUT "</tr>";
            PUT "<tr bgcolor= &hdcolr.>";
          %end;
          %else %do;
            PUT "<tr bgcolor= &hdcolr.>";
            PUT "<td>&htmlsp.</td>";

            PUT "<td align='center' valign='bottom' colspan=2><font face='&fontface.'
size='2'><b>Ease of Access</b></font></td>";
            PUT "<td align='center' valign='bottom' colspan=3><font face='&fontface.'
size='2'><b>Communication and Customer Service</b></font></td>";
            PUT "<td align='center' valign='bottom' colspan=4><font face='&fontface.'
size='2'><b>Ratings</b></font></td>";
            PUT "<td align='center' valign='bottom' colspan=1><font face='&fontface.'
size='2'><b>Prevention</b></font></td>";
            PUT "<td align='center' valign='bottom' colspan=1><font face='&fontface.'
size='2'><b>Healthy Behaviors</b></font></td>";
            PUT "</tr>";
            PUT "<tr bgcolor= &hdcolr.>";
          %end;


          /*** Print out 1st column of 4th row ***/
```

```
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        %if &prefix=f %then %do;
            PUT "<td width=125>&htmlsp.</td>";
        %end;
        %else %do;
            PUT "<td width='8%'><font face='&fontface.'>&htmlsp.</font></td>";
        %end;

        bennum=1;  /** index to all 11 benefits **/


        /*-----------------------*/
        /* 2000/11: begin xls code */
        /*-----------------------*/
        %if &outxls.=1 %then %do;
          FILE XLSTITLE;
          PUT "&major. &comma. &sub_regs.";
          PUT "%cmpres('&sub_ben.')";
        %end;
        /*-----------------------*/
        /* 2000/11: begin xls code */
        /*-----------------------*/
    END;

   FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */

    /*** Put Benefits across columns (Continuation of 4th row) ***/
    HREF=COMPRESS("..\html\&prefix.&var1.-&var2.-"||bennum||"-&var4..htm");


    /** If TOTAL benefit then don't have HREF **/
    /*** ÛÛ FRAMES SECTION ÛÛ ***/
    %if &prefix=f %then %do;
      IMAGE=COMPRESS("&imgdir.\image0_"||bennum||".gif");
      IF BENNUM=0 THEN PUT "<td align='center' valign='bottom'><IMG SRC='&imgdir.\image0_0.gif
alt='Total' BORDER=0></td>";
      ELSE PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='"
IMAGE "' alt='" BENEFIT "' BORDER=0></a></td>";

    %end;
    %else %do;
      IF BENNUM=0 THEN PUT "<td width='8%' align='center' valign='bottom'><font
face='&fontface.'size='1'>" &HEADVAR. "</font></td>";
      ELSE PUT "<td width='8%' align='center' valign='bottom'><font face='&fontface.'size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
    %end;


  bennum+1;


  IF EOF THEN DO;
    PUT "</tr>";
  END;

RUN;
%end;




/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*** If Sub-benefit (VAR3^=0) then do differently ***/
/*** If not separate page (SEPPAGE=0) for quarterly info then do as before ***/
%else %if &var3.=6 OR &var3.=7 OR &var3.=8 OR &var3.=9 %then %do;



DATA _NULL_;
  SET HTML END=EOF;
  *LENGTH HREF $ 250;

  COLUMNS=&columns.;
```

```
    SPAN2=ROUND(COLUMNS/2,1);
    SPAN1=COLUMNS-SPAN2;


  IF _N_=1 THEN DO;

        FILE "&FILEOUT1." MOD ;


        /** MF Changes ROW 1 **/
        PUT "<center><table border='&border.' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
width='&width2.'>";
        PUT "<tr bgcolor='white'>";
        PUT "    <td colspan=""" SPAN1 +(-1) """ valign='top' bgcolor='#999999'><img border='0'
height='25' width='242' src=&logo.></td>";
        PUT "    <td colspan=""" SPAN2 +(-1) """ align='right' valign='bottom'
bgcolor='#999999'>";
        PUT "        <div align='right'>";
        PUT "        <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";


        PUT "&goback.";

        PUT "        <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
        PUT "        &htmlsp. &htmlsp.";
        PUT "        <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
        PUT "    </td>";
        PUT "</tr>";

        /** MF Changes ROW 2 **/

        PUT "<tr>";
        PUT "      <td valign='center' align='center' colspan=""" COLUMNS +(-1) """
bgcolor='#D8D8D8'>";
        PUT "            <font face='&fontface.' color='#3333cc' size='5'><b>&major. &comma.
&sub_regs. <br>";

        /*** If ratings then don't display reference period ***/
        %if &var3.=6 OR &var3.=7 OR &var3.=8 OR &var3.=9 %then %do;
                    ***MJS 4/23/03 Changed 8/9/10/11 to 7/8/9/10;
            PUT "                &sub_ben.</b></font>";
        %end;
        %else %do;
            PUT "                &sub_ben.<BR>&currentperiod.</b></font>";
        %end;


        PUT "      </td>";
        PUT "</tr>";


        /*** Sub_head macro variable added C.Rankin 10/25/2001  ***/

        %if &sub_head.=1 %then %do;
          /** 3rd Row ***/
          /** ÛÛ FRAMES SECTION ÛÛ ***/
          %if &prefix=f %then %do;
              PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
              /*** If sub-benefits then output sub-benefit columns ***/
              %if &subcols.^=0 %then %do;
                IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
                PUT "<td align='center' valign='bottom' colspan=&subcols.><IMG SRC=" IMAGE "
alt='" BENEFIT "' BORDER=0></td>";
                PUT "<td align='center' valign='bottom' colspan=&qtrs.><IMG
SRC='&imgdir.\composite.gif' ALT='Composite' BORDER=0></td></tr>";
              %end;
              %else %do;
                PUT "<td align='center' valign='bottom' colspan=&qtrs.><IMG
SRC='&imgdir.\border_rating.gif' ALT='Ratings' BORDER=0></td></tr>";
              %end;
```

```
                %end;
                %else %do;
                      PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";    /** Column 1 **/
                      /*** If sub-benefits then output sub-benefit columns ***/
                      %if &subcols.^=0 %then %do;
                        PUT "<td align='center' valign='bottom' colspan=&subcols.><font
face='&fontface.'><b>&sub_ben.<br>components</b></font></td>";
                        PUT "<td align='center' valign='bottom' colspan=&qtrs.><font
face='&fontface.'><b>Composite</b></font></td></tr>";
                      %end;
                      %else %do;
                        PUT "<td align='center' valign='bottom' colspan=&qtrs.><font
face='&fontface.'><b>Ratings</b></font></td></tr>";
                      %end;
                %end;
           %end;


           /*** 4th Row start (column 1) ***/
           /*** ÛÛ FRAMES SECTION ÛÛ ***/
           %if &prefix=f %then %do;
             PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
             PUT "<td align='left' valign='bottom'><img src='&imgdir.\blank_35_50.gif'
border=0></td>";
           %end;
           %else %do;
             PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
             PUT "<td width='10%'>&htmlsp.</td>";
           %end;



           /*------------------------*/
           /* 2000/11: begin xls code */
           /*------------------------*/
           %if &outxls.=1 %then %do;
             FILE XLSTITLE;
             PUT "&major. &comma. &sub_regs.";
             PUT "%cmpres('&sub_ben.')";
           %end;
           /*------------------------*/
           /* 2000/11: begin xls code */
           /*------------------------*/
   END;

  FILE "&FILEOUT1." MOD ;                  /* 2000/11: refer back to htm file */
  /*** Print out column headings ***/

      HREF=COMPRESS("..\html\help.htm#q&var3.");
      HREF1=COMPRESS("..\html\help.htm#trend");




  /*** 4th Row (columns 2+) ***/
  /*** If quarter column then HREF link is different ****/
  /*** ÛÛ FRAMES SECTION ÛÛ ***/

  %if &prefix=f %then %do;
      IF _N_>&subcols. THEN IMAGE=COMPRESS("&imgdir.\col"||_N_-&subcols.||".gif");
      ELSE IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");

      /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE */
      IF TIMEPD NE "TREND" AND TIMEPD NE "TREND*" THEN PUT "<td align='center' valign='bottom'><a
href=""" HREF +(-1) """ &target.><IMG SRC='" IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
      ELSE PUT "<td align='center' valign='bottom'><a href=""" HREF1 +(-1) """ &target.><IMG
SRC='" IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
  %end;
  %else %do;
      /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE */
      IF TIMEPD NE "TREND" AND TIMEPD NE "TREND*" THEN PUT "<td width='10%' align='center'
valign='bottom'><font face='&fontface.' size='1'><a href=""" HREF +(-1) """ &target.>" &HEADVAR.
"</a></font><
```

```
     ELSE PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF1 +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
  %end;


  IF EOF THEN DO;
    PUT "</font></tr>";
  END;

RUN;
%end;




/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*** Added MAB 11-20-2000 ***/
/*** If Sub-benefit then do differently ***/
/*** If separate page (SEPPAGE=1) then create 1st of 2 HTML files ***/
/*** 1 for data without qtrly info and 1 for just qtrly info ***/
%else %if &seppage.=1 %then %do;


DATA HTML2;
  SET HTML;
  IF TIMEPD="&currentperiod.";
  IF BENTYPE="Composite" THEN DELETE;
RUN;





/*** Remove qtrs from column counts ***/
%let columns=%EVAL(&columns.-&qtrs.);

/*** Do sub-benefit page without any qtrly info ***/
DATA _NULL_;
  SET HTML2 END=EOF;


  FILE "&FILEOUT1." MOD ;

  COLUMNS=&columns.;
  SPAN2=ROUND(COLUMNS/2,1);
  SPAN1=COLUMNS-SPAN2;


  IF _N_=1 THEN DO;


        FILE "&FILEOUT1." MOD ;


        /** MF Changes ROW 1 **/
        PUT "<center><table border='&border.' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
width='&width2.'>";
        PUT "<tr bgcolor='white'>";
        PUT "    <td colspan=""" SPAN1 +(-1) """ valign='top' bgcolor='#999999'><img border='0'
height='25' width='242' src=&logo.></td>";
        PUT "    <td colspan=""" SPAN2 +(-1) """ align='right' valign='bottom'
bgcolor='#999999'>";
        PUT "        <div align='right'>";
        /** RSG - 09/02/03 Second set of trend pages need to refer to var4=0 pages **/
        PUT "          <a href='..\html\&prefix.&var1.-&var2.-&var3.-0&unq..htm' &target.><img
src='&imgdir.\&click_image.' alt='&click_alt.' border=0></a>&htmlsp.";
        PUT "          <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. ";

        PUT "&goback.";
```

```
        PUT "            <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
        PUT "              &htmlsp. ";
        PUT "              <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
        PUT "     </td>";
        PUT "</tr>";

        /** MF Changes ROW 2 **/
        PUT "<tr>";
        PUT "         <td valign='center' align='center' colspan=""" COLUMNS +(-1) """
bgcolor='#D8D8D8'>";
        PUT "                 <font face='&fontface.' color='#3333cc' size='5'><b>&major. &comma.
&sub_regs. <br>";


        PUT "                    &sub_ben.<BR>&currentperiod.</b></font>";



        PUT "          </td>";
        PUT "</tr>";

        /*** Sub_head macro variable added C.Rankin 10/25/2001  ***/

        %if &sub_head.=1 %then %do;
           /*** 3rd Row ***/
           /*** ÛÛ FRAMES SECTION ÛÛ ***/
           %if &prefix=f %then %do;
              PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";    /** Column 1 **/
              IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
              PUT "<td align='center' valign='bottom' colspan=&subcols.><IMG SRC=" IMAGE "
alt='" BENEFIT "' BORDER=0></td>";
           %end;
           %else %do;
              PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";    /** Column 1 **/
              PUT "<td align='center' valign='bottom' colspan=&subcols.><font
face='&fontface.'><b>&sub_ben.<br>components</b></font></td>";
           %end;
        %end;

        /*** 4th Row start (column 1) ***/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        %if &prefix=f %then %do;
          PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
      if columns ne 3 and columns ne 6 and columns ne 4 then do;
          PUT "<td align='left' valign='bottom'><img src='&imgdir.\blank_50_50.gif'
border=0></td>";
          end;
      else if columns = 3 or columns = 4 then do;
          PUT "<td align='left' valign='bottom'><img src='&imgdir.\blank_120_50.gif'
border=0></td>";
      end;
      else if columns = 6 then do;
          PUT "<td align='left' valign='bottom'><img src='&imgdir.\blank_145_50.gif'
border=0></td>";
      end;

        %end;
        %else %do;
          PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
          PUT "<td width='10%'>&htmlsp.</td>";
        %end;


   qnum=1; /**RSG 08/07/03 Added as counter to use to for link to the trend pages**/

        /*------------------------*/
        /* 2000/11: begin xls code */
        /*------------------------*/
        %if &outxls.=1 %then %do;
          FILE XLSTITLE;
          PUT "&major. &comma. &sub_regs.";
```

```
            PUT "%cmpres('&sub_ben.')";
          %end;
          /*-----------------------*/
          /* 2000/11: begin xls code */
          /*-----------------------*/
  END;

  FILE "&FILEOUT1." MOD ;                 /* 2000/11: refer back to htm file */
  /*** Print out column headings ***/

  /*HREF=COMPRESS("help.htm#q&var3.");    */

  HREF=COMPRESS("..\html\&prefix.&var1.-&var2.-&var3.-"||qnum||"&unq..htm");
    *** RSG 08/07/03 Use qnum counter to refer to subbenefit trend pages;

*****************************************;
  /*** 4th Row (columns 2+) ***/
  /*** If quarter column then HREF link is different ****/
  /*** ÛÛ FRAMES SECTION ÛÛ ***/
  %if &prefix=f %then %do;
     IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");
     PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='"
IMAGE "' alt='" BENTYPE "' BORDER=0></a></td>";
  %end;
  %else %do;
     PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
  %end;

  qnum+1; *** RSG 08/07/03 Added to increase the counter;

  IF EOF THEN DO;
    PUT "</font></tr>";
    /***  2-2 MAB removed scale row ***/
  END;


RUN;
%end;




/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*** If separate page (SEPPAGE=2) then create 2nd of 2 HTML files ***/
/*** 1 for data without qtrly info and 1 for just qtrly info ***/
%else %if &seppage.=2 %then %do;


/*** Keep only qtrs in column counts ***/

%let columns=%EVAL(&qtrs.+2);


/*** Then do sub-benefit page with just qtrly info ***/
DATA JUSTQTR;
  SET HTML;
  /*** Since spliting up table need to delete some records ***/

  *  IF BENTYPE="Composite";   ***DKB ADDED TREND on 4/29/2002 to account for trend col;
  %if &var4. = 0 %then %do;  **RSG ADDED TREND FOR BENTYPES on 8/7/2003 - select
                                  records appropriate for bentype;
       IF BENTYPE="Composite";
  %end;
  %else %if &var4. ne 0 and BENTYPE ne "Composite" %then %do;

       %if &var3. = 1 %then %do;
           %if &var4. = 1 %then %do;
               IF BENTYPE = "Getting to See a Specialist";
           %end;
           %else %if &var4. = 2 %then %do;
               IF BENTYPE = "Getting Treatment";
           %end;
```

```
        %end;
        %else %if &var3. = 2 %then %do;
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Wait for Routine Visit";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Wait for Urgent Care";
            %end;
        %end;
        %else %if &var3. = 3 %then %do;
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Listens Carefully";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Explains so You Can Understand";
            %end;
            %else %if &var4. = 3 %then %do;
                IF BENTYPE = "Shows Respect";
            %end;
            %else %if &var4. = 4 %then %do;
                IF BENTYPE = "Spends Time with You";
            %end;
        %end;
        %else %if &var3. = 4 %then %do;
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Getting Information";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Courteous Customer Service";
            %end;
        %end;
        %else %if &var3. = 5 %then %do;
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Claims Handled in a Reasonable Time";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Claims Handled Correctly";
            %end;
        %end;
        %else %if &var3. = 10 %then %do;
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Mammography";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Pap Smear";
            %end;
            %else %if &var4. = 3 %then %do;
                IF BENTYPE = "Hypertension";
            %end;
            %else %if &var4. = 4 %then %do;
                IF BENTYPE = "Prenatal Care";
            %end;
        %end;
        %else %if &var3. = 11 %then %do;    /*** MAB Added 2/11/2005 ***/
            %if &var4. = 1 %then %do;
                IF BENTYPE = "Non-Smoking Rate";
            %end;
            %else %if &var4. = 2 %then %do;
                IF BENTYPE = "Counselled To Quit";
            %end;
                    %else %if &var4. = 3 %then %do;
                            IF BENTYPE = "Percent Not Obese";
                    %end;
        %end;

        call symput('sub2_ben',BENTYPE); **create macro var to use in sub-benefit
                                    trend pages (below) - RSG 08/07/03;
    %end;


RUN;

DATA _NULL_;
```

```
      SET JUSTQTR END=EOF;


   FILE "&FILEOUT1." MOD ;

   COLUMNS=&columns.;
   SPAN2=ROUND(COLUMNS/2,1);
   SPAN1=COLUMNS-SPAN2;

   IF _N_=1 THEN DO;

        FILE "&FILEOUT1." MOD ;

         /** MF Changes ROW 1 **/
         PUT "<center><table border='&border.' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
width='&width2.'>";
         PUT "<tr bgcolor='white'>";
         PUT "    <td colspan=""" SPAN1 +(-1) """ valign='top' bgcolor='#999999'><img border='0'
height='25' width='242' src=&logo.></td>";
         PUT "    <td colspan=""" SPAN2 +(-1) """ align='right' valign='bottom'
bgcolor='#999999'>";
         PUT "         <div align='right'>";
         PUT "         <a href='..\html\&prefix.&var1.-&var2.-&var3.-0&unq..htm' &target.><img
src='&imgdir.\&click_image.' alt='&click_alt.' border=0></a>&htmlsp.";
         PUT "         <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";


         PUT "&goback.";

         PUT "         <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
         PUT "         &htmlsp.";
         PUT "         <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
         PUT "    </td>";
         PUT "</tr>";

         /** MF Changes ROW 2 **/

         PUT "<tr>";
         PUT "     <td valign='center' align='center' colspan=""" COLUMNS +(-1) """
bgcolor='#D8D8D8'>";
         PUT "              <font face='&fontface.' color='#3333cc' size='5'><b>&major. &comma.
&sub_regs. <br>";

         PUT "              &sub_ben.</b></font><br>";
         /*** For trend data for each benefit type, display benefit type - RSG 08/07/03***/
         %if &var4. ne 0 %then %do;
         PUT "              <font face='&fontface.' color='#3333cc' size='4'><b>";
         PUT "              &sub2_ben.</b></font>";
         %end;
         PUT "     </td>";
         PUT "</tr>";


         /*** 3rd Row ***/
         /*** ÛÛ FRAMES SECTION ÛÛ ***/
         /**PUT "<td></td>"**/



         /*** 4th Row start (column 1) ***/
         /*** ÛÛ FRAMES SECTION ÛÛ ***/
         %if &prefix=f %then %do;
           PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
           PUT "<td align='left' valign='bottom'><img src='&imgdir.\blank_75_50.gif'
border=0></td>";
         %end;
         %else %do;
           PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
           PUT "<td width='10%'>&htmlsp.</td>";
         %end;
```

```
                /*------------------------*/
                /* 2000/11: begin xls code */
                /*------------------------*/
                %if &outxls.=1 %then %do;
                  FILE XLSTITLE;
                  PUT "&major. &comma. &sub_regs.";
                  %if &var4. = 0 %then %do;
                   PUT "%cmpres('&sub_ben.')";
                  %end;
                  %else %do;
                   PUT "%CMPRES('&sub_ben. &comma. &sub2_ben.')";
                  %end;
                %end;
                /*------------------------*/
                /* 2000/11: begin xls code */
                /*------------------------*/
       END;

    FILE "&FILEOUT1." MOD ;                  /* 2000/11: refer back to htm file */
    /*** Print out column headings ***/


        LENGTH HREFf1 $250;
        LENGTH HREFf2 $250;
        LENGTH HREFf3 $250;

        LENGTH HREFp1 $250;
        LENGTH HREFp2 $250;
        LENGTH HREFp3 $250;

        LENGTH HREF5  $250;


        ****7-29-2002 DKB ADDED LINKS TO COMPONENT PAGES OF PREVIOUS QUARTERS FROM TREND PAGE****;
        ***********************THIS WILL NEED TO BE UPDATED EACH QUARTER*********************;
         ***FRAMES***;
         HREFf1=COMPRESS("..\Period1\f&var1.-&var2.-&var3.-0.htm");
         HREFf2=COMPRESS("..\Period2\f&var1.-&var2.-&var3.-0.htm");
         HREFf3=COMPRESS("f&var1.-&var2.-&var3.-0.htm");

         ***NO FRAMES***;
         HREFp1=COMPRESS("..\Period1\p&var1.-&var2.-&var3.-0.htm");
         HREFp2=COMPRESS("..\Period2\p&var1.-&var2.-&var3.-0.htm");
         HREFp3=COMPRESS("p&var1.-&var2.-&var3.-0.htm");

         ****HELP FILE FOR TREND COLUMN***;
         HREF5=COMPRESS("..\html\help.htm#trend");    /*7-29-2002 DKB ADDED LINK FOR TREND SECTION
OF HELP FILE*/

    **************************************************;


   /*** 4th Row (columns 2+) ***/
   /*** If quarter column then HREF link is different ****/
   /*** ÛÛ FRAMES SECTION ÛÛ ***/


   %if &prefix=f %then %do;
     IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");  *DKB CHANGED IMAGE NAME FROM QTR TO COL;

     IF _N_=1 THEN HREF=HREFf1;
     ELSE IF _N_=2 THEN HREF=HREFf2;
     ELSE IF _N_=3 THEN HREF=HREFf3;
     ELSE IF _N_=4 THEN HREF=HREF5;

     PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='" IMAGE
"' alt='" TIMEPD "' BORDER=0></a></td>";

   %end;
   %else %do;
```

```
      IF _N_=1 THEN HREF=HREFp1;
      ELSE IF _N_=2 THEN HREF=HREFp2;
      ELSE IF _N_=3 THEN HREF=HREFp3;
      ELSE IF _N_=4 THEN HREF=HREF5;
      /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE*/

      PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
   %end;


   IF EOF THEN DO;
     PUT "</font></tr>";
   END;

RUN;

%end;

/*** ÛÛ FRAMES SECTION ÛÛ ***/
%if &prefix=f %then %do;
  /*** Close out header HTML page ***/
  DATA _NULL_;
    FILE "&FILEOUT1." MOD;

    PUT "</center></table>";
    PUT "</body></html>";
  RUN;


  /*** Since done making frame 1 page then assign fileout1 = frame 2 ***/
  %let fileout1=&fileout3.;

  /*** Initialize out data HTML page ***/
  DATA _NULL_;
    FILE "&FILEOUT3.";

    PUT "<! Created &datetime.>";
    PUT "<html>";
    PUT "<body bgcolor='#999999' text='#000099' link='#660066' alink='#660066' vlink='#996699'>";
    PUT "<center><table border='1' cellpadding='2' cellspacing='0' bgcolor='#D8D8D8'
cols=&columns. width=640>";
  RUN;



%end;




/**********************************/
/****  Put out rest of table     ****/
/****  Colored scores and Stub   ****/
/**********************************/
%if &seppage.=0 OR &var3.=6 OR &var3.=7 OR &var3.=8 OR &var3.=9 %then %do;
DATA HTML3;
  SET SUBSET4;
RUN;
%end;
%else %if &seppage.=1 %then %do;
DATA HTML3;
  SET SUBSET4;

  IF TIMEPD="&currentperiod.";

  /*** Since spliting up table need to delete some records ***/

  %IF &VAR3. NE 0 %THEN %DO;
     IF BENTYPE="Composite" THEN DELETE;
  %END;
RUN;
```

```
%end;
%else %if &seppage.=2 %then %do;

DATA HTML3;
  SET SUBSET4;
  /*** Since spliting up table need to delete some records ***/
  /*** Modified 2-2 MAB to deal with new period values **/


  IF BENTYPE=&BEN_TYPE;


RUN;
%end;

/*ÛÛÛÛ ALL MAJGRPS ÛÛÛÛ*/
%if &var1.=0 %then %do;

DATA HTML4;
  SET HTML3 END=EOF;


  IF MAJGRP="Prime Enrollees" THEN MAJNUM=1;
  IF MAJGRP="Enrollees with Military PCM"  THEN MAJNUM=2;
  IF MAJGRP="Enrollees with Civilian PCM" THEN MAJNUM=3;
  IF MAJGRP="Standard/Extra Users" THEN MAJNUM=4;
  IF MAJGRP="Purchased Care Users" THEN MAJNUM=5;
  IF MAJGRP="Active Duty" THEN MAJNUM=6;
  IF MAJGRP="Active Duty Dependents" THEN MAJNUM=7;
  IF MAJGRP="Retirees and Dependents" THEN MAJNUM=8;
  IF MAJGRP="All Users" THEN MAJNUM=9;


  /*** HREF link to another page ***/
/*  HREF=COMPRESS("..\html\&prefix."||MAJNUM||"-0-&var3.-&var4.&q..htm");
    RSG 02/2005 - changed for period1-3, link goes to that period component page*/
    HREF=COMPRESS("&prefix."||MAJNUM||"-0-&var3.-&var4.&q..htm");

  LENGTH HREFQ LMAJGRP $ 100;
  RETAIN LMAJGRP;

  IF _N_=1 THEN DO;
     LMAJGRP=" ";
     ROW=0;


    /*** Add links to trend data 7.6.2001 MAB ***/
    %let columns_less1=%EVAL(&columns.-1);
    %if &seppage.=0 %then %do;
         FILE "&FILEOUT1." MOD ;
         PUT "<tr bgcolor= &gray.><td width='" WIDTH_COL1 "'><font face='&fontface.'
size='2'><b>Trends</b></font></td>";

         %do i=1 %to 11;
             %if &i.^=6 AND &i.^=7 AND &i.^=8 AND &i.^=9 %then %do;   ***MJS 04/14/03 Changed
8,9,10,11 to 7,8,9,10;
                 HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0q.htm");
             %end;
             %else %do;
                 HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0.htm");
             %end;
             %if &prefix.=f %then %do;
               PUT "<td width='" WIDTH3 "'><a href='" HREFQ "' &target.><CENTER><img
src='&imgdir.\trend_row.gif' border=0></CENTER></a></td>";
             %end;
             %else %do;
               PUT "<td><a href='" HREFQ "' &target.><CENTER><img src='&imgdir.\trend_row.gif'
border=0></CENTER></a></td>";
             %end;
         %end;
         PUT "</tr>";
    %end;
```

```
    END;



   IF LMAJGRP^=MAJGRP THEN DO;               /*** Start new row ***/
        FILE "&FILEOUT1." MOD ;
        ROW+1;
        IF LMAJGRP^=" " THEN PUT "</tr>";


        /*** Column 1 / Row 1 ***/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        %if &prefix=f %then %do;
            IF MAJGRP IN("Benchmark") THEN PUT "<tr><td width='" WIDTH_COL1 "'><b><font
face='&fontface.' size='2'>" MAJGRP "</font></b></td>";    /*** no HREF links ***/
        %end;
        %else %do;
            IF MAJGRP IN("Benchmark") THEN PUT "<tr><td><b><font face='&fontface.' size='2'>"
MAJGRP "</font></b></td>";                            /*** no HREF links ***/
        %end;

        /*** Column 1 / Row 2+ ***/

        ELSE IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'><a href=""" HREF +(-1) """ &target.> " MAJGRP " </a></font></td>";   /** Shade row **/
        ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href=""" HREF +(-1) """ &target.> "
MAJGRP " </a></font></td>";


        /*------------------------*/
        /* 2000/11: begin xls code */
        /*------------------------*/
         %if &outxls.=1 %then %do;
           FILE XLSDATA;
           IF LMAJGRP^=" " THEN           PUT " ";
           IF REGION IN("Benchmark") THEN PUT REGION '09'x @@;   /* '09'x ensures text string is
put into one cell */
           ELSE IF MOD(ROW,2)=0 THEN     PUT MAJGRP '09'x @@;    /* rather than spanning across
cells         */
           ELSE                          PUT MAJGRP '09'x @@;
         %end;
        /*------------------------*/
        /* 2000/11: end xls code   */
        /*------------------------*/

        LMAJGRP=MAJGRP;
   END;


  /*** Column 2+ ***/
  /*****************************************/
  /**** Need to output different formats    ****/
  /*****************************************/
  FILE "&FILEOUT1." MOD ;                  /* 2000/11: refer back to htm file */


  IF MAJGRP IN("Benchmark") THEN DO;
      IF SCORE=. THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
      ELSE IF SCORE=.A THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
      ELSE PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
  END;
  ELSE DO;
    IF SCORE=. THEN DO;
      PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
    END;
    ELSE IF SCORE=.A THEN DO;
      PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
```

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```
      END;
      ELSE DO;
          IF SIG=1 THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'
color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
          ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
          ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
          ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
          ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE 3.0
"<!CODE= " +(-1) ORDER Z5.  "></font></td>";
      END;
   END;


   /*------------------------*/
   /* 2000/11: begin xls code */
   /*------------------------*/
   %if &outxls.=1 %then %do;
     FILE XLSDATA;
     IF MAJGRP IN("Benchmark") THEN DO;
          IF SCORE=. THEN          PUT "***" '09'x @@;
          ELSE IF SCORE=.A THEN   PUT "NA"  '09'x @@;
          ELSE                    PUT SCORE '09'x @@;
     END;
     ELSE DO;
       IF SCORE=. THEN DO;
          PUT "***" '09'x @@;
       END;
       ELSE IF SCORE=.A THEN DO;
          PUT "NA" '09'x @@;
       END;
       ELSE DO;
          IF SIG=1 THEN        PUT SCORE '09'x @@;
          ELSE IF SIG=. THEN   PUT "***" '09'x @@;
          ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
          ELSE IF SIG=-1 THEN PUT SCORE '09'x @@;
          ELSE                 PUT SCORE '09'x @@;
       END;
     END;
   %end;
   /*------------------------*/
   /* 2000/11: end xls code   */
   /*------------------------*/

   IF EOF THEN DO;
      FILE "&FILEOUT1." MOD ;                           /* 2000/11: to refer back to htm file */
      PUT "</tr>";  /*** terminate last row ***/

      %BOTTOM_NOTES;  /** Macro with bottom notes **/


      /*------------------------*/
      /* 2000/11: begin xls code */
      /*------------------------*/
      %if &outxls.=1 %then %do;
          FILE XLSDATA;
          PUT; PUT;
          %if (&var3.=6 or &var3.=7 or &var3.=8 or &var3.=9 or &seppage.=2) %then %do;
            PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 through
&SRCYR2";   ***MJS 03/24/04 Changed hard-coded year to macro variable;
                                                                    /* MER 11/21/08
Changed "and" to "through" */
          %end;
          %else %do;
            PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries";   ***MJS 03/24/04
Changed hard-coded year to macro variable;
          %end;
            PUT "Indicates score significantly exceeds benchmark";
            PUT "Indicates score significantly falls short of benchmark";
            PUT "NA Indicates not applicable";
```

```
        PUT "*** Indicates suppressed due to small sample size";
      %if &var3.=6 or &var3.=7 or &var3.=8 or &var3.=9 or &seppage.=2 %then %do;
        %if &var2.=0 %then %do;
          PUT "* For 2011, Walter Reed and Ft. Belvoir are included in North Joint Service
despite not being classified as such until 2012"; /*MER 11/22/12 Temp note for 2010/11*/
        %end;
        %else %if &var2.=12 %then %do;
          PUT "* For 2011, Walter Reed and Ft. Belvoir are included in North Joint Service
despite not being classified as such until 2012"; /*MER 11/22/12 Temp note for 2010/11*/
          PUT "# For 2011, Walter Reed Natl Mil Med Cntr scores include NNMC Bethesda and
Walter Reed AMC which were consolidated in 2012"; /*MER 11/22/12 Temp note for 2010/11*/
        %end;
      %end;
    %end;


    /*------------------------*/
    /* 2000/11: end xls code   */
    /*------------------------*/

  END;
RUN;
%end;




/*ÛÛÛÛ All Regions ÛÛÛÛ*/
%if &var2.=0 %then %do;
DATA HTML4;
  SET HTML3 END=EOF;

  LENGTH LREGION HREFQ $ 100;
  RETAIN LREGION;

  IF _N_=1 THEN DO;
     LREGION=" ";
     REGNUM=1;
     ROW=0;



    %let columns_less1=%EVAL(&columns.-1);
    %if &seppage.=0 %then %do;
         FILE "&FILEOUT1." MOD ;
         PUT "<tr bgcolor= &gray.><td width='" WIDTH_COL1 "'><font face='&fontface.'
size='2'><b>Trends</b></font></td>";

          %do i=1 %to 11;    ***RSG 02/2005 changed 11 to 12 since we now have 12 benefits;
            %if &i.^=6 AND &i.^=7 AND &i.^=8 AND &i.^=9 %then %do;    ***MJS 04/14/03 Changed
from 8,9,10,11 to 7,8,9,10;
                   HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0q.htm");  /*** href to 2nd
html file ***/
            %end;
            %else %do;
                   HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0.htm");  /*** href to 2nd
html file ***/
            %end;
            %if &prefix.=f %then %do;
              PUT "<td width='" WIDTH3 "'><a href='" HREFQ "' &target.><CENTER><img
src='&imgdir.\trend_row.gif' border=0></CENTER></a></td>";
        %end;
        %else %do;
              PUT "<td><a href='" HREFQ "' &target.><CENTER><img src='&imgdir.\trend_row.gif'
border=0></CENTER></a></td>";
        %end;
         %end;
         PUT "</tr>";
    %end;


END;
```

```
   IF LREGION^=REGION THEN DO;                /*** Start new row ***/
        FILE "&FILEOUT1." MOD ;
        ROW+1;
        IF LREGION^=" " THEN PUT "</tr>";  /*** terminate previous row ***/


        /*-----------------------*/
        /* 2000/11: begin xls code */
        /*-----------------------*/
        %if &outxls.=1 %then %do;
          FILE XLSDATA;
          IF LREGION^=" " THEN PUT " ";          /*** terminate previous row ***/
          FILE "&FILEOUT1." MOD ;                /* 2000/11: to refer back to htm file */
        %end;
        /*-----------------------*/
        /* 2000/11: end xls code   */
        /*-----------------------*/


        /*** Column 1 / Row 1 ***/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        %if &prefix=f %then %do;
           IF REGION IN("Benchmark") THEN PUT "<tr><td width='" WIDTH_COL1 "'><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";  /*** no HREF links ***/
        %end;
        %else %do;
           IF REGION IN("Benchmark") THEN PUT "<tr><td><b><font face='&fontface.' size='2'>"
REGCAT "</font></b></td>";  /*** no HREF links ***/
        %end;
        ELSE DO;   /*** HREF links for each region ***/


           /*HREF=COMPRESS("..\html\&prefix.&var1.-"||REGNUM||"-&var3.-&var4.&q..htm");*/ /** MAB
3-16-2005 Added VAR1 **/
           /*RSG 02/2005 - Changed link so period1-3 will link to appropriate component page*/
           HREF=COMPRESS("&prefix.&var1.-"||REGNUM||"-&var3.-&var4.&q..htm");

           /*** Column 1 / Row 2+ ***/
           %if &prefix=f %then %do;
           %if &var1.=3 or &var1.=4 or &var1.=5 or &var1.=7 or &var1.=8 %then %do;
                 IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'> " REGCAT " </font></td>";
                    ELSE PUT "<tr><td><font face='&fontface.' size='2'> " REGCAT " </font></td>";
           %end;
           %else %do;
                   if regcat = "NORTH" or regcat = "SOUTH" or regcat="WEST" or
                      regcat = "OVERSEAS" or regcat="US MHS" then do;
                 IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><b><font face='&fontface.'
size='2'> " REGCAT " </b></font></td>";
                      ELSE PUT "<tr><td><b><font face='&fontface.' size='2'> " REGCAT "
</b></font></td>";
                   end;
                   else if regcat = "ARMY" or regcat = "NAVY" or regcat = "AIR FORCE" or
                      regcat = "OTHER" or regcat = "JOINT SERVICE" or regcat = "JOINT SERVICE*"
then do;
                 IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'> " REGCAT " </font></td>";
                      ELSE PUT "<tr><td><font face='&fontface.' size='2'> " REGCAT "
</font></td>";
                   end;
                   else do;
                      IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'><a href=""" HREF +(-1) """ &target.> " REGCAT " </a></font></td>"; /** Shade row **/
                      ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href=""" HREF +(-1)
""" &target.> " REGCAT " </a></font></td>";
                   end;
               %end;
        %end;
           %else %do;
           %if &var1.=3 or &var1.=4 or &var1.=5 or &var1.=7 or &var1.=8 %then %do;
```

```
                    IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font  face='&fontface.'
size='2'> " REGCAT " </font></td>";
                        ELSE PUT "<tr><td><font face='&fontface.' size='2'> " REGCAT " </font></td>";
                %end;
                %else %do;
                    if regcat = "NORTH" or regcat = "SOUTH" or regcat="WEST" or
                       regcat = "OVERSEAS" or regcat="US MHS" then do;
                    IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><b><font  face='&fontface.'
size='2'> " REGCAT " </b></font></td>";
                        ELSE PUT "<tr><td><b><font face='&fontface.' size='2'> " REGCAT "
</b></font></td>";
                    end;
                    else if regcat = "ARMY" or regcat = "NAVY" or regcat = "AIR FORCE" or
                       regcat = "OTHER" or regcat = "JOINT SERVICE" or regcat = "JOINT SERVICE*"
then do;
                        IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font  face='&fontface.'
size='2'> " REGCAT " </font></td>";
                        ELSE PUT "<tr><td><font face='&fontface.' size='2'> " REGCAT "
</font></td>";
                    end;
                    else do;
                        IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font  face='&fontface.'
size='2'><a href=""" HREF +(-1) """ &target.> " REGCAT " </a></font></td>"; /** Shade row **/
                        ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href=""" HREF +(-1)
""" &target.> " REGCAT " </a></font></td>";
                    end;
                %end;
            %end;

            REGNUM+1;


        END;

        /*------------------------*/
        /* 2000/11: begin xls code */
        /*------------------------*/
        %if &outxls.=1 %then %do;
          FILE XLSDATA;
          IF REGION IN("Benchmark") THEN  PUT REGCAT '09'x @@;   /* no logic difference */
          ELSE DO;
            IF MOD(ROW,2)=0 THEN          PUT REGCAT '09'x @@;   /* just presentation difference
in htm */
            ELSE                          PUT REGCAT '09'x @@;   /* keeping as is to preserve htm
code structure */
          END;
        %end;
        /*------------------------*/
        /* 2000/11: end xls code   */
        /*------------------------*/

        LREGION=REGION;
   END;


  /*** Column 2+ ***/
  /*******************************************/
  /**** Need to output different formats    ****/
  /*******************************************/
  FILE "&FILEOUT1." MOD ;                    /* 2000/11: refer back to htm file */
  IF REGION IN("Benchmark") THEN DO;
     %if &prefix.=f %then %do;
       IF SCORE=. THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
       ELSE IF SCORE=.A THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
       ELSE PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
     %end;
     %else %do;
       IF SCORE=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
```

```
       ELSE IF SCORE=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
       ELSE PUT "<td align='center' valign='bottom'><b><font face='&fontface.' color=&blue.
size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
     %end;
   END;
   ELSE DO;
     IF SCORE=. THEN DO;
        PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
     END;
     ELSE IF SCORE=.A THEN DO;
        PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
     END;
     ELSE DO;
        IF SIG=1 THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'
color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
        ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE 3.0
"<!CODE= " +(-1) ORDER Z5.  "></font></td>";
     END;
   END;


  /*------------------------*/
  /* 2000/11: begin xls code */
  /*------------------------*/
  %if &outxls.=1 %then %do;
    FILE XLSDATA;
    IF REGION IN("Benchmark") THEN DO;
        IF SCORE=. THEN       PUT "***" '09'x @@;
        ELSE IF SCORE=.A THEN PUT "NA"  '09'x @@;
        ELSE                  PUT SCORE '09'x @@;
    END;
    ELSE DO;
      IF SCORE=. THEN DO;
         PUT "***" '09'x @@;
      END;
      ELSE IF SCORE=.A THEN DO;
         PUT "NA" '09'x @@;
      END;
      ELSE DO;
         IF SIG=1 THEN        PUT SCORE '09'x @@;
         ELSE IF SIG=. THEN   PUT "***" '09'x @@;
         ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
         ELSE IF SIG=-1 THEN PUT SCORE '09'x @@;
         ELSE                 PUT SCORE '09'x @@;
      END;
    END;
  %end;
  /*------------------------*/
  /* 2000/11: end xls code   */
  /*------------------------*/



  IF EOF THEN DO;
     FILE "&FILEOUT1." MOD ;                  /* 2000/11: refer back to htm file */
     PUT "</tr>";  /*** terminate last row ***/


     %BOTTOM_NOTES;  /** Macro with bottom notes **/


     /*------------------------*/
     /* 2000/11: begin xls code */
     /*------------------------*/
```

```
    %if &outxls.=1 %then %do;
        FILE XLSDATA;
        PUT; PUT;
        %if (&var3.=6 or &var3.=7 or &var3.=8 or &var3.=9 or &seppage.=2) %then %do;
          PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 through
&SRCYR2";   ***MJS 03/24/04 Changed hard-coded year to macro variable;
                                                                /* MER 11/21/08
Changed "and" to "through" */
        %end;
        %else %do;
          PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries";   ***MJS 03/24/04
Changed hard-coded year to macro variable;
        %end;
          PUT "Indicates score significantly exceeds benchmark";
          PUT "Indicates score significantly falls short of benchmark";
          PUT "NA Indicates not applicable";
          PUT "*** Indicates suppressed due to small sample size";
        %if &var3.=6 or &var3.=7 or &var3.=8 or &var3.=9 or &seppage.=2 %then %do;
           %if &var2.=0 %then %do;
             PUT "* For 2011, Walter Reed and Ft. Belvoir are included in North Joint Service
despite not being classified as such until 2012"; /*MER 11/22/12 Temp note for 2010/11*/
           %end;
           %else %if &var2.=12 %then %do;
             PUT "* For 2011, Walter Reed and Ft. Belvoir are included in North Joint Service
despite not being classified as such until 2012"; /*MER 11/22/12 Temp note for 2010/11*/
             PUT "# For 2011, Walter Reed Natl Mil Med Cntr scores include NNMC Bethesda and
Walter Reed AMC which were consolidated in 2012"; /*MER 11/22/12 Temp note for 2010/11*/
           %end;
        %end;
    %end;
    /*------------------------*/
    /* 2000/11: end xls code   */
    /*------------------------*/

  END;

RUN;

%end;




/*ÛÛÛÛ Single Regions ÛÛÛÛ*/
/* This code is not applicable for the 2000 report cards */
/*  since not enough data to display sub-region info. */
/*  Will leave in code in case this changes */
%if &var2.^=0 AND &var1.^=0 %then %do;
DATA HTML4;
  SET HTML3 END=EOF;

  LENGTH LREGCAT $ 100;
  RETAIN LREGCAT;

  IF _N_=1 THEN DO;
     LREGCAT=" ";
     ROW=0;
  END;

  IF LREGCAT^=REGCAT THEN DO;              /*** Start new row ***/
        FILE "&FILEOUT1." MOD ;
        ROW+1;
        IF LREGCAT^=" " THEN PUT "</tr>";  /*** terminate previous row ***/
        IF REGCAT IN("Benchmark") THEN PUT "<tr><td width='" WIDTH_COL1 "'><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";
        ELSE IF SUBSTR(REGCAT,1,2) = "US" THEN PUT "<tr bgcolor= &gray.><td><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";
        ELSE IF REGCAT NE "ARMY" AND REGCAT NE "NAVY" AND REGCAT NE "AIR FORCE" AND REGCAT NE
"OTHER" AND REGCAT NE "JOINT SERVICE" AND REGCAT NE "JOINT SERVICE*" AND
             UPCASE(SUBSTR(REGCAT,1,5)) NE "NORTH" AND UPCASE(SUBSTR(REGCAT,1,5)) NE "SOUTH" AND
```

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```
             UPCASE(SUBSTR(REGCAT,1,4)) NE "WEST" AND UPCASE(SUBSTR(REGCAT,1,8)) NE "OVERSEAS"
THEN DO;
             IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'><a href=""..\HTML\help.htm#MTFs"">" REGCAT " </a></font></td>"; /** Shade row **/
             ELSE PUT "<tr><td><font face='&fontface.' size='2'><a
href=""..\HTML\help.htm#MTFs"">" REGCAT " </a></font></td>";
         END;
         ELSE DO;
             IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.' size='2'>"
REGCAT "</font></td>";   /** Shade row **/
             ELSE PUT "<tr><td><font face='&fontface.' size='2'>" REGCAT "</font></td>";
         END;

         /*------------------------*/
         /* 2000/11: begin xls code */
         /*------------------------*/
         %if &outxls.=1 %then %do;
           FILE XLSDATA;
           IF LREGCAT^=" " THEN PUT " ";
           IF REGCAT IN("Benchmark") THEN     PUT REGCAT '09'x @@;          /* no logic difference
*/
           ELSE IF SUBSTR(REGCAT,1,5) = "CONUS" THEN PUT REGCAT '09'x @@;   /*** MAB 3/27/2005
Fixed error ***/
           ELSE IF MOD(ROW,2)=0 THEN            PUT REGCAT '09'x @@;        /* just presentation
difference in htm */
           ELSE                                 PUT REGCAT '09'x @@;        /* keeping as is to
preserve htm code structure */
         %end;
         /*------------------------*/
         /* 2000/11: end xls code   */
         /*------------------------*/


         LREGCAT=REGCAT;

   END;


   /*********************************************/
   /**** Need to output different formats    ****/
   /*********************************************/
   FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
   IF REGION IN("Benchmark") THEN DO;
       IF SCORE=. THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
       ELSE IF SCORE=.A THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
       ELSE PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
   END;
   ELSE DO;
     IF SCORE=. THEN DO;
        PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
     END;
     ELSE IF SCORE=.A THEN DO;
        PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
     END;
     ELSE DO;
        IF SIG=1 THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'
color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
        ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
        ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE 3.0
"<!CODE= " +(-1) ORDER Z5.  "></font></td>";
     END;
   END;
```

```
   /*-----------------------*/
   /* 2000/11: begin xls code */
   /*-----------------------*/
   %if &outxls.=1 %then %do;
     FILE XLSDATA;
     IF REGION IN("Benchmark") THEN DO;
          IF SCORE=. THEN          PUT "***" '09'x @@;
          ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
          ELSE                     PUT SCORE '09'x @@;
     END;
     ELSE DO;
       IF SCORE=. THEN DO;
          PUT "***" '09'x @@;
       END;
       ELSE IF SCORE=.A THEN DO;
          PUT "NA" '09'x @@;
       END;
       ELSE DO;
          IF SIG=1 THEN          PUT SCORE '09'x @@;
          ELSE IF SIG=. THEN    PUT "***" '09'x @@;
          ELSE IF SIG=.A THEN   PUT "NA"  '09'x @@;
          ELSE IF SIG=-1 THEN   PUT SCORE '09'x @@;
          ELSE                   PUT SCORE '09'x @@;
       END;
     END;
   %end;
   /*-----------------------*/
   /* 2000/11: end xls code   */
   /*-----------------------*/


   IF EOF THEN DO;
     FILE "&FILEOUT1." MOD ;                  /* 2000/11: refer back to htm file */
     PUT "</tr>";  /*** terminate last row ***/

     %BOTTOM_NOTES;  /** Macro with bottom notes **/


     /*-----------------------*/
     /* 2000/11: begin xls code */
     /*-----------------------*/
     %if &outxls.=1 %then %do;
        FILE XLSDATA;
        PUT; PUT;
        %if (&var3.=6 or &var3.=7 or &var3.=8 or &var3.=9 or &seppage.=2) %then %do;
          PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 through
&SRCYR2";   ***MJS 03/24/04 Changed hard-coded year to macro variable;
                                                              /* MER 11/21/08
Changed "and" to "through" */
        %end;
        %else %do;
          PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries";   ***MJS 03/24/04
Changed hard-coded year to macro variable;
        %end;
          PUT "Indicates score significantly exceeds benchmark";
          PUT "Indicates score significantly falls short of benchmark";
          PUT "NA Indicates not applicable";
          PUT "*** Indicates suppressed due to small sample size";
        %if &var3.=6 or &var3.=7 or &var3.=8 or &var3.=9 or &seppage.=2 %then %do;
          %if &var2.=0 %then %do;
            PUT "* For 2011, Walter Reed and Ft. Belvoir are included in North Joint Service
despite not being classified as such until 2012"; /*MER 11/22/12 Temp note for 2010/11*/
          %end;
          %else %if &var2.=12 %then %do;
            PUT "* For 2011, Walter Reed and Ft. Belvoir are included in North Joint Service
despite not being classified as such until 2012"; /*MER 11/22/12 Temp note for 2010/11*/
            PUT "# For 2011, Walter Reed Natl Mil Med Cntr scores include NNMC Bethesda and
Walter Reed AMC which were consolidated in 2012"; /*MER 11/22/12 Temp note for 2010/11*/
          %end;
        %end;
     %end;
     /*-----------------------*/
```

```
      /* 2000/11: end xls code   */
      /*------------------------*/

   END;

RUN;

%end;



/************************************/
/****  Print out footer info     ****/
/************************************/
DATA _NULL_;
    FILE "&FILEOUT1." MOD ;
    LENGTH HREF $250;


    /** Determine where back button should link to **/
    %if &var1.=0 %then %do;
       HREFBACK=COMPRESS("&prefix.9-0-0-0.htm");
    %end;
    %else %do;
       HREFBACK=COMPRESS("&prefix.&var1.-0-0-0.htm");
    %end;


    /** MF Changes **/
    PUT "<tr>";
    PUT "    <td colspan='&columns.'>";
    PUT "        <center>";
    PUT "            <a href='..\html\index.htm' &target.><img src=&home_but. border='0' alt='Return
to Main Page'></a>&htmlsp.&htmlsp.";
              /*** 7-17 MAB added JS code to go back ***/
    PUT "&goback.";
    PUT "             <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";

    PUT "            <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a><br>";
    PUT "            <font face='Arial,Helvetica,Swiss,Geneva' size='2'><b>&grpmsg.<br>";
    PUT "            </b></font>";



    majgrp1=COMPRESS("&prefix.1-&var2.-&var3.-&var4.&q..htm");
    majgrp2=COMPRESS("&prefix.2-&var2.-&var3.-&var4.&q..htm");
    majgrp3=COMPRESS("&prefix.3-&var2.-&var3.-&var4.&q..htm");   ***MJS 05/04/03 Removed Civilian
PCM;
    majgrp4=COMPRESS("&prefix.4-&var2.-&var3.-&var4.&q..htm");   ***(majgrp3), and changed 4-8 to
3-7;
    majgrp5=COMPRESS("&prefix.5-&var2.-&var3.-&var4.&q..htm");   /* added purchased care MER
11/11/09 */
    majgrp6=COMPRESS("&prefix.6-&var2.-&var3.-&var4.&q..htm");
    majgrp7=COMPRESS("&prefix.7-&var2.-&var3.-&var4.&q..htm");
    majgrp8=COMPRESS("&prefix.8-&var2.-&var3.-&var4.&q..htm");   /**RSG - ADD IN MAJGRP 8**/
    majgrp9=COMPRESS("&prefix.9-&var2.-&var3.-&var4.&q..htm");


     /*** Certain major groups are not large enough to show ***/
     /*** catchment level detail. So if we are in html file ***/
     /*** which has this detail then don't link to a html   ***/
     /*** file which doesn't exist                          ***/

    %if &var1.^=0 %then %do;
      %if &var1.^=3 and &var1.^=4 and &var1.^=5 and &var1.^=7 and &var1.^=8 and &var2.^=0 %then
%do;

         PUT "<a href=""" MAJGRP1 +(-1) """ &target.><font face='&fontface.' size='2'>Prime
Enrollees</font></a>&htmlsp.&htmlsp.";
         PUT "<a href=""" MAJGRP2 +(-1) """ &target.><font face='&fontface.' size='2'>Enrollees
with Military PCM</font></a>&htmlsp.&htmlsp.";
```

```
        PUT "<a href=""" MAJGRP6 +(-1) """ &target.><font face='&fontface.' size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP9 +(-1) """ &target.><font face='&fontface.' size='2'>All
Users</font></a>";

      %end;
      %else %do;

        PUT "<a href=""" MAJGRP1 +(-1) """ &target.><font face='&fontface.' size='2'>Prime
Enrollees</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP2 +(-1) """ &target.><font face='&fontface.' size='2'>Enrollees
with Military PCM</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP3 +(-1) """ &target.><font face='&fontface.' size='2'>Enrollees
with Civilian PCM</font></a>&htmlsp.&htmlsp.";  /*RSG 02/2005 added Civilian PCM*/
        PUT "<a href=""" MAJGRP4 +(-1) """ &target.><font face='&fontface.'
size='2'>Standard/Extra Users</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP5 +(-1) """ &target.><font face='&fontface.' size='2'>Purchased
Care Users</font></a>&htmlsp.&htmlsp.";
        PUT "<br>";
        PUT "<a href=""" MAJGRP6 +(-1) """ &target.><font face='&fontface.' size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP7 +(-1) """ &target.><font face='&fontface.' size='2'>Active Duty
Dependents</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP8 +(-1) """ &target.><font face='&fontface.' size='2'>Retirees and
Dependents</font></a>&htmlsp.&htmlsp.";
        PUT "<a href=""" MAJGRP9 +(-1) """ &target.><font face='&fontface.' size='2'>All
Users</font></a>";

      %end;
    %end;

  /*** link to printer friendly version moved C.Rankin 10/25/2001 ***/

  /*** If creating frames need link to printer friendly version of file ***/
  %if &prefix=f %then %do;
     HREFP=COMPRESS("p&var1.-&var2.-&var3.-&var4.&q..htm");
     PUT "    <BR><font face='Arial,Helvetica,Swiss,Geneva' size='1'><a href='" HREFP "'
&target.><img src='&imgdir.\printer.gif' alt='Printer Friendly Page' border=0>Printer Friendly
Page</a></font>
  %end;



RUN;


/*** Close HTML page ***/
DATA _NULL_;
  FILE "&FILEOUT1." MOD ;

  PUT "</center></td></tr></table>";
  PUT "</body></html>";

RUN;



/*------------------------------*/
/* 2000/12: begin xls color code */
/*------------------------------*/
%if &outxls.=1 %then %do;
  FILENAME CMDS DDE 'excel|system';

  /* Align 2 titles */
  DATA _NULL_;
     FILE CMDS;
     %if &var3 = 3 or &var3 = 6 %then %do;
        CELL=COMPRESS("[SELECT(""R1C1:R1C""||4||"")]"); PUT CELL;
        PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
        CELL=COMPRESS("[SELECT(""R2C1:R2C""||4||"")]"); PUT CELL;
        PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
     %end;
     %else %do;
```

```
        CELL=COMPRESS("[SELECT(""R1C1:R1C"||&columns.||""")]"); PUT CELL;
        PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
        CELL=COMPRESS("[SELECT(""R2C1:R2C"||&columns.||""")]"); PUT CELL;
        PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
    %end;

  RUN;

  DATA _NULL_;
    FILE CMDS;
    SET HTML4(DROP=ROW) END=EOF;

    RETAIN ROW COLUMN;


    /*** Need to initialize row and column pointers ***/
    IF _N_=1 THEN DO;
      ROW=6;
      COLUMN=1;
    END;


   COLUMN=COLUMN+1;
    IF COLUMN>&columns. THEN DO;
       ROW=ROW+1;
       COLUMN=2;
    END;


    CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
    PUT CELL;

    /** Before color cell center data **/
    PUT '[ALIGNMENT(3, False, 3,0, False)]';


    IF REGION IN("Benchmark") OR MAJGRP IN("Benchmark") THEN PUT
'[FORMAT.FONT("Arial",10,True,False,False,False,9)]';  /*** BOLD & DARK RED ***/
    ELSE IF SCORE NOT IN(.,.A) THEN DO;
      IF SIG=1 THEN PUT '[FORMAT.FONT("Arial",10,True,False,False,False,10)]';          /*** BOLD
& GREEN ***/
      ELSE IF SIG=-1 THEN PUT '[FORMAT.FONT("Arial",10,False,True,False,False,3)]';     /*** RED
***/
      ELSE PUT '[FORMAT.FONT("Arial",10,False,False,False,False,5)]';    /*** BLUE ***/
    END;


    /*** If last record then output footer ***/
    IF EOF THEN DO;
      ROW=ROW+3; COLUMN=1;
      CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
      PUT CELL;
      PUT '[FORMAT.FONT("Arial",10,True,False,False,False,10)]';          /*** BOLD & GREEN ***/
      ROW=ROW+1;
      CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
      PUT CELL;
      PUT '[FORMAT.FONT("Arial",10,False,True,False,False,3)]';     /*** RED ***/
    END;
  RUN;
  FILENAME CMDS DDE 'excel|system';
  DATA _NULL_;
    FILE CMDS;
    PUT '[SAVE()]';
    PUT '[CLOSE()]';
  RUN;
%end;
/*------------------------------*/
/* 2000/12: end xls color code   */
/*------------------------------*/
```

```
%MEND MKHTML;
/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
/*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/


/*
%LET PREFIX=p;
%LET OUTXLS=0;
%MKHTML(3,0,1,2,1);
%MKHTML(1,0,12,2,1);
%MKHTML(1,0,12,1,0);
%MKHTML(1,0,12,2,2);
%MKHTML(1,0,12,2,3);
%MKHTML(1,0,12,2,0);
*/


*********************************************;
**** Create macros to all MKHTML macro  ****;
*********************************************;


/*** Create 9 HTML pages (9 Majgrps / All Regions / All Benefits)***/
%MACRO DOALL1();
            %MKHTML(1,0,0,0,0);
            %MKHTML(2,0,0,0,0);
            %MKHTML(3,0,0,0,0);
            %MKHTML(4,0,0,0,0);
            %MKHTML(5,0,0,0,0);
            %MKHTML(6,0,0,0,0);
            %MKHTML(7,0,0,0,0);
            %MKHTML(8,0,0,0,0);
            %MKHTML(9,0,0,0,0);
%MEND DOALL1;




/*** Create 368 HTML pages (8 Majgrps / All Regions / 12 Benefits)***/
%MACRO DOALL2();
    %DO J=1 %TO 9;
        %DO K=1 %TO 11;
            %MKHTML(&J.,0,&K.,1,0);
            %if &k.^=6 AND &k.^=7 AND &k.^=8 AND &k.^=9 %then %do;
                %IF &K. = 3 OR &K. = 10 %THEN %DO L= 0 %TO 4;
                    %MKHTML(&J.,0,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 5 %THEN %DO L = 0 %TO 2;  ***RSG
02/2005 - ADDED 12TH BENEFIT;
                    %MKHTML(&J.,0,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 3;
                    %MKHTML(&J.,0,&K.,2,&L.);
                %END;
            %END;
        %END;
    %END;
%MEND DOALL2;

/*** Need to populate new table for all majgrps ***/
/*** Create 736 HTML pages (All Majgrps / 16 Regions / 12 Benefits) ***/
%MACRO DOALL4(i=);
        %DO K = 1 %TO 11;
            /*** Call macro for 2nd page (except for ratings benefits) ***/
            %DO J = 8 %TO 12;
                %MKHTML(&I.,&J.,&K.,1,0);
                %if &k.^=6 AND &k.^=7 AND &k.^=8 AND &k.^=9 %then %do;
                    %IF &K. = 3 OR &K. = 10 %THEN %DO L = 0 %TO 4;
                        %MKHTML(&I.,&J.,&K.,2,&L.);
                    %END;
                    %ELSE %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 5 %THEN %DO L = 0 %TO 2;
/*** MAB Added 2/11/2005 ***/
                        %MKHTML(&I.,&J.,&K.,2,&L.);
                    %END;
                    %ELSE %IF &K.=11 %THEN %DO L = 0 %TO 3;
                        %MKHTML(&I.,&J.,&K.,2,&L.);
                    %END;
```

```
                    %end;
                %END;
                %DO J = 14 %TO 17;
                    %MKHTML(&I.,&J.,&K.,1,0);
                    %if &k.^=6 AND &k.^=7 AND &k.^=8 AND &k.^=9 %then %do;
                        %IF &K. = 3 OR &K. = 10 %THEN %DO L = 0 %TO 4;
                            %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 5 %THEN %DO L = 0 %TO 2;
/*** MAB Added 2/11/2005 ***/
                            %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K.=11 %THEN %DO L = 0 %TO 3;
                            %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                    %end;
                %END;
                %DO J = 19 %TO 22;
                    %MKHTML(&I.,&J.,&K.,1,0);
                    %if &k.^=6 AND &k.^=7 AND &k.^=8 AND &k.^=9 %then %do;
                        %IF &K. = 3 OR &K. = 10 %THEN %DO L = 0 %TO 4;
                            %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 5 %THEN %DO L = 0 %TO 2;
/*** MAB Added 2/11/2005 ***/
                            %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K.=11 %THEN %DO L = 0 %TO 3;
                            %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                    %end;
                %END;
                %DO J = 24 %TO 26;
                    %MKHTML(&I.,&J.,&K.,1,0);
                    %if &k.^=6 AND &k.^=7 AND &k.^=8 AND &k.^=9 %then %do;
                        %IF &K. = 3 OR &K. = 10 %THEN %DO L = 0 %TO 4;
                            %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 5 %THEN %DO L = 0 %TO 2;
/*** MAB Added 2/11/2005 ***/
                            %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K.=11 %THEN %DO L = 0 %TO 3;
                            %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                    %end;
                %END;

    %END;
%MEND DOALL4;



 /*** Create 16 HTML pages (8 Majgrps / 16 Regions / All Benefits) ***/
%MACRO DOALL5(I=);
    %DO J=8 %TO 12;
        %MKHTML(&i.,&j.,0,0,0);
    %END;
    %DO J=14 %TO 17;
        %MKHTML(&i.,&j.,0,0,0);
    %END;
    %DO J=19 %TO 22;
        %MKHTML(&i.,&j.,0,0,0);
    %END;
    %DO J=24 %TO 26;
        %MKHTML(&i.,&j.,0,0,0);
    %END;

%MEND DOALL5;
```

```
/*** Run macro to create Frame HTML files ***/


%LET PREFIX=f;
%LET OUTXLS=0;
%DOALL1;
%DOALL2;
%DOALL4(I=1);
%DOALL4(I=2);
%DOALL4(I=6);
%DOALL4(I=9);
%DOALL5(I=1);
%DOALL5(I=2);
%DOALL5(I=6);
%DOALL5(I=9);


/*** Run macro to create Printer Friendly HTML files (non-frames) ***/

%LET PREFIX=p;
%LET OUTXLS=0;
%DOALL1;
%DOALL2;
%DOALL4(I=1);
%DOALL4(I=2);
%DOALL4(I=6);
%DOALL4(I=9);
%DOALL5(I=1);
%DOALL5(I=2);
%DOALL5(I=6);
%DOALL5(I=9);

/*** Run macro to create Excel files ONLY ***/

%LET PREFIX=p;
%LET OUTXLS=1;
%DOALL1;
%DOALL2;
%DOALL4(I=1);
%DOALL4(I=2);
%DOALL4(I=6);
%DOALL4(I=9);
%DOALL5(I=1);
%DOALL5(I=2);
%DOALL5(I=6);
%DOALL5(I=9);


%PUT "&number_html_files. HTML files created.";
```

APPENDIX H

SAS CODE FOR 2013 TRICARE CONSUMER WATCH
QUARTERS I-III AND COMBINED ANNUAL

H.1.A   ConsumerWatch\CONSUMERWATCH-CMACRO.INC - Produce numbers for annual Consumer Watch reports.

```
********************************************************************************
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-Cmacro.INC
* PURPOSE: To pull from Beneficiary Reports the numbers that go into the data
*          sheet in Excel to produce graphs
*          Catchment level only
* AUTHOR : NATALIE JUSTH
* DATE   : 2/12/02
* UPDATED: 2/5/03
* UPDATED: 11/17/03
* UPDATED  03/15/2005 LUCY LU
*          --REMOVE LIBNAME FORM THE PROGRAM
*          --SUBSTITUTE ACTUAL YEAR VALUES BY MACRO YEAR VARIABLES
*          --ADD SMOKING CESSATION RATE ON PREVENTIVE CARE TABLE
* UPDATED: 01/31/2006 LUCY LU FOR 2005 ANNUAL CATCHMENT
*          --CHANGE 'CHOLESTEROL TESTING' TO 'PERCENT OF NORMAL WEIGHT'
* UPDATED: 04/07/2006 LUCY LU: ADD THE CODE TO COMPARE THE ANNUAL COMSUMER WATCH
*          WITH REPORT CARDS IN SCORESAND SIGNIFICANCE.
* MODIFIED 11/24/09 BY LUCY LU
*          1.START THIS YEAR, THE DATA DOES NOT INCLUDE THE VALUE OF
*            'Courteous and Helpful Office Staff'. THE PROGRAM WILL DELETE
*             RELATED CODE.
*          2.CHANGE IN CLCULATION OF VARIABLE SCORE
* MODIFIED 7/23/2010 BY LUCY LU
*          1. ADD MACRO TO MINIMIZE EXCEL WAITING, REDUCE PROGRAM
*             RUNNING TIME
*          2. ELIMINATE UNNECESSARY MACRO VARIABLE &VAL
*
*
* INPUT  : ..\..\..\&YEAR.\PROGRAMS\LOADWEB\TREND_A.SAS7BDAT
* OUTPUT : INTO EXCEL SPREADSHEET
********************************************************************************;

OPTIONS NOXWAIT NOFMTERR /*MPRINT*/;

TITLE "Consumer Watch &YEAR. - Catchment";

%MACRO RUNCW (AREA=,     /*AREA=Catchment area                                 */
              NAME=,     /*NAME=Name of Excel file being created for catchment area */
              FOLDER=    /*FOLDER=Regional folder                              */
             );

/* Change parameter for each catchment area */

FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;

   LENGTH FID RC START STOP TIME 8;
   FID = FOPEN('CMDS' , 'S');
   IF (FID LE 0) THEN DO;
      RC = SYSTEM('START EXCEL');
      START = DATETIME();
      STOP = START + 10;
      DO WHILE (FID LE 0);
         FID = FOPEN('CMDS' , 'S');
         TIME = DATETIME();
         IF (TIME GE STOP) THEN FID = 1;
      END;
   END;
   RC = FCLOSE(FID);
RUN;


*LLU 7/21/2010--DETECTING AVAILABILITY OF EXCEL, MINIMIZE WAITING TIME;

%MACRO SETUP;

%GLOBAL OPENXLS SAVEXLS;
```

```
DATA _NULL_;

    SINGLE="'";
    DOUBLE='"';

LENGTH OPENXLS SAVEXLS $120;
    OPENXLS=SINGLE||"[OPEN("||DOUBLE||"&PATH.\templateAnnual.XLSB"||DOUBLE||")]"||SINGLE;
    SAVEXLS=SINGLE||"[SAVE.AS("||DOUBLE||"&PATH.\&FOLDER.\&NAME..XLSB"||DOUBLE||")]"||SINGLE;

    CALL SYMPUT ("OPENXLS",TRIM(OPENXLS));
    CALL SYMPUT ("SAVEXLS",TRIM(SAVEXLS));

RUN;

%MEND SETUP;

%SETUP;

DATA _NULL_;

    FILE CMDS;
    PUT &OPENXLS;
    X=SLEEP(2);
    PUT '[ERROR(FALSE)]';
    PUT &SAVEXLS;
    PUT '[app.minimize()]';

RUN;

********************************************************************************
* FIGURE 1: Health Care Rating
********************************************************************************;
TITLE2 'Figure 1: Health Care Rating';
PROC FREQ DATA=TREND_A;
    WHERE MAJGRP = 'Prime Enrollees'
      AND REGCAT in ("&AREA","Benchmark")
      AND BENEFIT = 'Health Care'
      AND TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
    TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/NOPRINT OUT=FIG1_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ DATA=TREND_A;
    WHERE MAJGRP = 'Prime Enrollees'
      AND REGCAT = 'Benchmark'
      AND BENEFIT = 'Health Care'
      AND TIMEPD = "&YEAR.";
    TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/NOPRINT OUT=FIG1_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG1_SC FIG1_A(KEEP=SCORE TIMEPD);
    SET FIG1_SC;
    IF REGCAT='Benchmark' THEN OUTPUT FIG1_A;
      ELSE OUTPUT FIG1_SC;
RUN;
PROC SORT DATA=FIG1_SC;
    BY TIMEPD;
RUN;
PROC SORT DATA=FIG1_A;
    BY TIMEPD;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG1;
    SET FIG1_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;

/*
DATA FIG1_SC(DROP=ASCORE);
    MERGE FIG1_SC
          FIG1_A(RENAME=(SCORE=ASCORE));
    BY TIMEPD;
    SCORE=SCORE-ASCORE;
RUN;
```

```
*/
DATA FIG1;
   SET FIG1_BE FIG1_SC;
   RETAIN BSCORE;
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
 *    SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
  *    SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW =4 ;
  *   SCORE=BSCORE+SCORE;
   END;

   COL2 = SCORE / 100;
   COL3 = SIG;
RUN;

PROC SORT;
   BY ROW;
RUN;
*TITLE2 'FIGURE 1';
*PROC PRINT;
RUN;

********************************************************************************
* DDE LINK (EXCEL file has to be open )
********************************************************************************;
FILENAME CMDS DDE "EXCEL|SYSTEM";

FILENAME TBL DDE "EXCEL|RATINGS!R18C2:R21C3";

DATA _NULL_;
   SET FIG1;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;

********************************************************************************
* FIGURE 2: Health Plan Rating
********************************************************************************;
TITLE2 'Figure 2: Health Plan Rating';
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&AREA","Benchmark")
     AND BENEFIT = 'Health Plan'
     AND TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG2_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT = 'Health Plan'
     AND TIMEPD = "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG2_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG2_SC FIG2_A(KEEP=SCORE TIMEPD);
   SET FIG2_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG2_A;
      ELSE OUTPUT FIG2_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG2;
   SET FIG2_SC;
```

```
      KEEP MAJGRP REGCAT  BENEFIT TIMEPD SCORE SIG;
      RUN;

      PROC SORT DATA=FIG2_SC;
         BY TIMEPD;
      RUN;
      PROC SORT DATA=FIG2_A;
         BY TIMEPD;
      RUN;
      /*
      DATA FIG2_SC(DROP=ASCORE);
         MERGE FIG2_SC
               FIG2_A(RENAME=(SCORE=ASCORE));
         BY TIMEPD;
         SCORE=SCORE-ASCORE;
      RUN;
      */
      DATA FIG2;
         SET FIG2_BE FIG2_SC;
         RETAIN BSCORE;
         IF REGCAT = 'Benchmark' THEN DO;
            ROW = 1;
            BSCORE=SCORE;
         END;
         ELSE IF TIMEPD = "&YEARP2." THEN DO;
            ROW = 2;
      *      SCORE=BSCORE+SCORE;
         END;
         ELSE IF TIMEPD = "&YEARP1." THEN DO;
            ROW = 3;
       *     SCORE=BSCORE+SCORE;
         END;
         ELSE IF TIMEPD = "&YEAR." THEN DO;
            ROW = 4;
        *    SCORE=BSCORE+SCORE;
         END;

         COL2 = SCORE / 100;
         COL3 = SIG;
      RUN;

      PROC SORT;
         BY ROW;
      RUN;
      *TITLE2 'FIGURE 2';
      *PROC PRINT;
      RUN;

      ******************************************************************************
      * DDE LINK (EXCEL file has to be open )
      *****************************************************************************;

      FILENAME TBL DDE "EXCEL|RATINGS!R18C6:R21C7";

      DATA _NULL_;
         SET FIG2;
         FILE TBL NOTAB LRECL=200;
         PUT COL2 '09'X COL3;
      RUN;

      ******************************************************************************
      * FIGURE 3: Personal Doctor
      *****************************************************************************;
      TITLE2 'Figure 3: Personal Doctor Rating';
      PROC FREQ NOPRINT DATA=TREND_A;
         WHERE MAJGRP = 'Prime Enrollees'
           AND REGCAT in ("&AREA","Benchmark")
           AND BENEFIT = 'Personal Doctor'
           AND TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
         TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG3_SC(DROP=COUNT PERCENT);
      RUN;
      PROC FREQ NOPRINT DATA=TREND_A;
         WHERE MAJGRP = 'Prime Enrollees'
```

```
      AND REGCAT = 'Benchmark'
      AND BENEFIT = 'Personal Doctor'
      AND TIMEPD = "&YEAR.";
    TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG3_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG3_SC FIG3_A(KEEP=SCORE TIMEPD);
    SET FIG3_SC;
    IF REGCAT='Benchmark' THEN OUTPUT FIG3_A;
      ELSE OUTPUT FIG3_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG3;
    SET FIG3_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;


PROC SORT DATA=FIG3_SC;
    BY TIMEPD;
RUN;
PROC SORT DATA=FIG3_A;
    BY TIMEPD;
RUN;
/*
DATA FIG3_SC(DROP=ASCORE);
    MERGE FIG3_SC
          FIG3_A(RENAME=(SCORE=ASCORE));
    BY TIMEPD;
    SCORE=SCORE-ASCORE;
RUN;
*/

DATA FIG3;
    SET FIG3_BE FIG3_SC;
    RETAIN BSCORE;
    IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
    END;
    ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
*      SCORE=BSCORE+SCORE;
    END;
    ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
 *      SCORE=BSCORE+SCORE;
    END;
    ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW = 4;
  *    SCORE=BSCORE+SCORE;
    END;

    COL2 = SCORE / 100;
    COL3 = SIG;
RUN;

PROC SORT;
    BY ROW;
RUN;
*TITLE2 'FIGURE 3';
*PROC PRINT;
RUN;

*******************************************************************************
* DDE LINK (EXCEL file has to be open )
*******************************************************************************;

FILENAME TBL DDE "EXCEL|RATINGS!R18C10:R21C11";

DATA _NULL_;
    SET FIG3;
```

```
    FILE TBL NOTAB LRECL=200;
    PUT COL2 '09'X COL3;
RUN;


*******************************************************************************
* FIGURE 4: Specialist Rating
*******************************************************************************;
TITLE2 'Figure 4: Specialist Rating';
PROC FREQ NOPRINT DATA=TREND_A;
    WHERE MAJGRP = 'Prime Enrollees'
      AND REGCAT in ("&AREA","Benchmark")
      AND BENEFIT = 'Specialty Care'
      AND TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
    TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG4_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
    WHERE MAJGRP = 'Prime Enrollees'
      AND REGCAT = 'Benchmark'
      AND BENEFIT = 'Specialty Care'
      AND TIMEPD = "&YEAR.";
    TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG4_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG4_SC FIG4_A(KEEP=SCORE TIMEPD);
    SET FIG4_SC;
    IF REGCAT='Benchmark' THEN OUTPUT FIG4_A;
      ELSE OUTPUT FIG4_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG4;
    SET FIG4_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;

PROC SORT DATA=FIG4_SC;
    BY TIMEPD;
RUN;
PROC SORT DATA=FIG4_A;
    BY TIMEPD;
RUN;
/*
DATA FIG4_SC(DROP=ASCORE);
    MERGE FIG4_SC
          FIG4_A(RENAME=(SCORE=ASCORE));
    BY TIMEPD;
    SCORE=SCORE-ASCORE;
RUN;
*/
DATA FIG4;
    SET FIG4_BE FIG4_SC;
    RETAIN BSCORE;
    IF REGCAT = 'Benchmark' THEN DO;
       ROW = 1;
       BSCORE=SCORE;
    END;
    ELSE IF TIMEPD = "&YEARP2." THEN DO;
       ROW = 2;
*       SCORE=BSCORE+SCORE;
    END;
    ELSE IF TIMEPD = "&YEARP1." THEN DO;
       ROW = 3;
 *     SCORE=BSCORE+SCORE;
    END;
    ELSE IF TIMEPD = "&YEAR." THEN DO;
       ROW = 4;
  *    SCORE=BSCORE+SCORE;
    END;

    COL2 = SCORE / 100;
    COL3 = SIG;
RUN;
```

```
PROC SORT;
   BY ROW;
RUN;
*TITLE2 'FIGURE 4';
*PROC PRINT;
RUN;

********************************************************************************
* DDE LINK (EXCEL file has to be open )
*******************************************************************************;

FILENAME TBL DDE "EXCEL|RATINGS!R18C14:R21C15";

DATA _NULL_;
   SET FIG4;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;


********************************************************************************
* FIGURE 5: Access Composites
*******************************************************************************;
TITLE2 'Figure 5: Access Composites';
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&AREA","Benchmark")
     AND BENEFIT IN ('Getting Needed Care','Getting Care Quickly')
     AND BENTYPE='Composite' & TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG5_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT IN ('Getting Needed Care','Getting Care Quickly')
     AND BENTYPE='Composite' & TIMEPD = "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG5_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG5_SC FIG5_A(KEEP=SCORE TIMEPD BENEFIT);
   SET FIG5_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG5_A;
     ELSE OUTPUT FIG5_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG5;
   SET FIG5_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;


PROC SORT DATA=FIG5_SC;
   BY BENEFIT TIMEPD;
RUN;
PROC SORT DATA=FIG5_A;
   BY BENEFIT TIMEPD;
RUN;
/*DATA FIG5_SC(DROP=ASCORE);
   MERGE FIG5_SC
         FIG5_A(RENAME=(SCORE=ASCORE));
   BY BENEFIT TIMEPD;
   SCORE=SCORE-ASCORE;
RUN;*/
PROC SORT DATA=FIG5_BE;
   BY BENEFIT;
RUN;

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE  RENAME=(SCORE1=COL4))
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
```

```
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
   SET FIG5_BE FIG5_SC ; BY BENEFIT;
   RETAIN BSCORE;
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
*      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
 *     SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW = 4;
  *     SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;

   IF (BENEFIT = 'Getting Needed Care' AND REGCAT NE 'Benchmark') THEN OUTPUT COL2 COL6;
   IF (BENEFIT = 'Getting Needed Care' AND REGCAT = 'Benchmark') THEN OUTPUT COL3;
   IF (BENEFIT = 'Getting Care Quickly' AND REGCAT NE 'Benchmark') THEN OUTPUT COL4 COL7;
   IF (BENEFIT = 'Getting Care Quickly' AND REGCAT = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 04/07/2006*/

DATA FIG5A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG5B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG5AB;
   SET FIG5A FIG5B;
  BY ROW;
RUN;



DATA FIG5;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
   BY ROW;
RUN;
*TITLE2 'ACCESS COMPOSITES';
*PROC PRINT;
RUN;

*******************************************************************************
* DDE LINK (EXCEL file has to be open )
******************************************************************************;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C2:R21C2";
```

```
DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C3:R18C3";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL3;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C4:R21C4";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL4;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C5:R18C5";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL5;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R23C2:R26C4";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL6 '09'X '09'X COL7;
RUN;

*********************************************************************************
* FIGURE 6: Office Composites
*********************************************************************************;
TITLE2 'Figure 6: Office Composites';
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&AREA","Benchmark")
     AND BENEFIT IN ('How Well Doctors Communicate')
     AND BENTYPE="Composite" & TIMEPD
    IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG6_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT IN ('How Well Doctors Communicate')
     AND BENTYPE="Composite" & TIMEPD = "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG6_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG6_SC FIG6_A(KEEP=SCORE TIMEPD BENEFIT);
   SET FIG6_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG6_A;
      ELSE OUTPUT FIG6_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG6;
   SET FIG6_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;


PROC SORT DATA=FIG6_SC;
   BY BENEFIT TIMEPD;
```

```
RUN;
PROC SORT DATA=FIG6_A;
   BY BENEFIT TIMEPD;
RUN;
/*DATA FIG6_SC(DROP=ASCORE);
   MERGE FIG6_SC
         FIG6_A(RENAME=(SCORE=ASCORE));
   BY BENEFIT TIMEPD;
   SCORE=SCORE-ASCORE;
RUN;*/
PROC SORT DATA=FIG6_BE;
   BY BENEFIT;
RUN;

DATA COL4(DROP=SCORE RENAME=(SCORE1=COL4))
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
   SET FIG6_BE FIG6_SC ; BY BENEFIT;
   RETAIN BSCORE;
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
*      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
*      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW = 4;
*      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;

   IF (BENEFIT = 'How Well Doctors Communicate' AND REGCAT NE 'Benchmark') THEN OUTPUT COL4 COL7;
   IF (BENEFIT = 'How Well Doctors Communicate' AND REGCAT = 'Benchmark') THEN OUTPUT COL5;

RUN;


PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;

PROC SORT DATA=COL7; BY ROW; RUN;

/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 04/07/2006*/


DATA FIG6B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG6AB;
   SET FIG6B;
  BY ROW;
RUN;


DATA FIG6;
   MERGE  COL4(KEEP=ROW COL4) COL5  COL7;
   BY ROW;
RUN;
*TITLE2 'OFFICE COMPOSITES';
*PROC PRINT;
RUN;
```

```
********************************************************************************
* DDE LINK (EXCEL file has to be open )
********************************************************************************;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C8:R21C8";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL4;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C9:R18C9";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL5;
RUN;



FILENAME TBL DDE "EXCEL|COMPOSITES!R23C8:R26C8";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT  COL7;
RUN;

********************************************************************************
* FIGURE 7: Claims/Service Composites
********************************************************************************;
TITLE2 'Figure 7: Claims/Service Composites';
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&AREA","Benchmark")
     AND BENEFIT IN ('Customer Service','Claims Processing')
     AND BENTYPE ="Composite" & TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG7_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT IN ('Customer Service','Claims Processing')
     AND BENTYPE ="Composite" & TIMEPD= "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG7_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG7_SC FIG7_A(KEEP=SCORE TIMEPD BENEFIT);
   SET FIG7_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG7_A;
     ELSE OUTPUT FIG7_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG7;
   SET FIG7_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;


PROC SORT DATA=FIG7_SC;
   BY BENEFIT TIMEPD;
RUN;
PROC SORT DATA=FIG7_A;
   BY BENEFIT TIMEPD;
RUN;
/*DATA FIG7_SC(DROP=ASCORE);
   MERGE FIG7_SC
         FIG7_A(RENAME=(SCORE=ASCORE));
   BY BENEFIT TIMEPD;
   SCORE=SCORE-ASCORE;
```

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```
RUN;*/
PROC SORT DATA=FIG7_BE;
    BY BENEFIT;
RUN;

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE  RENAME=(SCORE1=COL4))
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
    SET FIG7_BE FIG7_SC ; BY BENEFIT;
    RETAIN BSCORE;
    IF REGCAT = 'Benchmark' THEN DO;
       ROW = 1;
       BSCORE=SCORE;
       SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&YEARP2." THEN DO;
       ROW = 2;
     *  SCORE=BSCORE+SCORE;
       SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&YEARP1." THEN DO;
       ROW = 3;
     *  SCORE=BSCORE+SCORE;
       SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&YEAR." THEN DO;
       ROW = 4;
     *  SCORE=BSCORE+SCORE;
       SCORE1=SCORE;
    END;

    IF (BENEFIT = 'Customer Service' AND REGCAT NE 'Benchmark') THEN OUTPUT COL2 COL6;
    IF (BENEFIT = 'Customer Service' AND REGCAT = 'Benchmark') THEN OUTPUT COL3;
    IF (BENEFIT = 'Claims Processing' AND REGCAT NE 'Benchmark') THEN OUTPUT COL4 COL7;
    IF (BENEFIT = 'Claims Processing' AND REGCAT = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;

/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 04/07/2006*/

DATA FIG7A;
    MERGE COL2 COL6;
   BY ROW;
RUN;

DATA FIG7B;
    MERGE  COL4 COL7;
   BY ROW;
RUN;

DATA FIG7AB;
    SET FIG7A FIG7B;
   BY ROW;
RUN;


DATA FIG7;
    MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
    BY ROW;
RUN;
*TITLE2 'CLAIMS/SERVICE COMPOSITES';
*PROC PRINT;
RUN;
```

```
*******************************************************************************
* DDE LINK (EXCEL file has to be open )
*******************************************************************************;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C14:R21C14";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C15:R18C15";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL3;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C16:R21C16";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL4;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C17:R18C17";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL5;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R23C14:R26C16";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL6 '09'X '09'X COL7;
RUN;

*******************************************************************************
* TABLE 1: Preventive Care
*******************************************************************************;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = "&AREA"
     AND TIMEPD = "&YEAR"
     AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
     AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                     'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit');
   TABLES MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*SCORE*SIG/ OUT=TAB1_03(DROP=COUNT PERCENT);
   TABLES MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*N_OBS/ OUT=TAB2_03(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND TIMEPD = "&YEAR"
     AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
     AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                     'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit');
   TABLES MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*SCORE*SIG/ OUT=TAB3_03(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
    WHERE MAJGRP = 'Prime Enrollees'
      AND REGCAT = "&AREA"
      AND TIMEPD = "&YEARP1"
      AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
      AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
```

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```
                         'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit');
     TABLES MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*SCORE*N_OBS*N_WGT*SIG/ OUT=TAB1_02(DROP=COUNT
PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
    WHERE MAJGRP = 'Prime Enrollees'
      AND REGCAT = "&AREA"
      AND TIMEPD = "&YEARP2"
      AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
      AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                     'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit');
    TABLES MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*SCORE*N_OBS*N_WGT*SIG/ OUT=TAB1_01(DROP=COUNT
PERCENT);
RUN;

DATA TAB303;
    SET TAB3_03;
    IF REGCAT = 'Benchmark' THEN DO;
       ROW=5;
       IF BENTYPE='Mammography' THEN COL2=SCORE;
           ELSE IF BENTYPE='Pap Smear' THEN COL3=SCORE;
           ELSE IF BENTYPE='Hypertension' THEN COL4=SCORE;
           ELSE IF BENTYPE='Prenatal Care' THEN COL5=SCORE;
           ELSE IF BENTYPE='Percent Not Obese' THEN COL6=SCORE;
           ELSE IF BENTYPE = 'Non-Smoking Rate' THEN COL7=SCORE;
           ELSE IF BENTYPE ='Counselled To Quit' THEN COL8=SCORE;
    END;
PROC SORT;
    BY ROW;
RUN;
DATA TAB203;
    SET TAB2_03;
    ROW=4;
    IF MAJGRP='Prime Enrollees';
    IF BENTYPE='Mammography' THEN COL2=N_OBS;
       ELSE IF BENTYPE='Pap Smear' THEN COL3=N_OBS;
       ELSE IF BENTYPE='Hypertension' THEN COL4=N_OBS;
       ELSE IF BENTYPE='Prenatal Care' THEN COL5=N_OBS;
       ELSE IF BENTYPE='Percent Not Obese' THEN COL6=N_OBS;
       ELSE IF BENTYPE = 'Non-Smoking Rate' THEN COL7=N_OBS;
       ELSE IF BENTYPE ='Counselled To Quit' THEN COL8=N_OBS;
PROC SORT;
    BY ROW;
RUN;
DATA TAB103;
    SET TAB1_03;
    ROW=3;
    IF BENTYPE='Mammography' THEN DO;
       COL2=SCORE;
       COL9=SIG;
    END;
    ELSE IF BENTYPE='Pap Smear' THEN DO;
       COL3=SCORE;
       COL10=SIG;
    END;
    ELSE IF BENTYPE='Hypertension' THEN DO;
       COL4=SCORE;
       COL11=SIG;
    END;
    ELSE IF BENTYPE='Prenatal Care' THEN DO;
       COL5=SCORE;
       COL12=SIG;
    END;
    ELSE IF BENTYPE='Percent Not Obese' THEN DO;
       COL6=SCORE;
       COL13=SIG;
    END;
    ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
       COL7=SCORE;
       COL14=SIG;
    END;
    ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
       COL8=SCORE;
```

```
        COL15=SIG;
    END;

    PROC SORT;
    BY ROW;
RUN;

DATA TAB101;
    SET TAB1_01;
    ROW=1;
    IF BENTYPE='Mammography' THEN DO;
        IF (N_WGT<200 OR N_OBS<30) THEN COL2=.;
        ELSE DO;
            COL2=SCORE;
            COL9=SIG;
        END;
    END;
    ELSE IF BENTYPE='Pap Smear' THEN DO;
        IF (N_WGT<200 OR N_OBS<30) THEN COL3=.;
        ELSE DO;
            COL3=SCORE;
            COL10=SIG;
        END;
    END;
    ELSE IF BENTYPE='Hypertension' THEN DO;
        IF (N_WGT<200 OR N_OBS<30) THEN COL4=.;
        ELSE DO;
            COL4=SCORE;
            COL11=SIG;
        END;
    END;
    ELSE IF BENTYPE='Prenatal Care' THEN DO;
        IF (N_WGT<200 OR N_OBS<30) THEN COL5=.;
        ELSE DO;
            COL5=SCORE;
            COL12=SIG;
        END;
    END;
    ELSE IF BENTYPE='Percent Not Obese' THEN DO;
        IF (N_WGT<200 OR N_OBS<30) THEN COL6=.;
        ELSE DO;
            COL6=SCORE;
            COL13=SIG;
        END;
    END;
    ELSE IF BENTYPE='Non-Smoking Rate' THEN DO;
        IF (N_WGT<200 OR N_OBS<30) THEN COL7=.;
        ELSE DO;
            COL7=SCORE;
            COL14=SIG;
        END;
    END;
    ELSE IF BENTYPE='Counselled To Quit' THEN DO;
        IF (N_WGT<200 OR N_OBS<30) THEN COL8=.;
        ELSE DO;
            COL8=SCORE;
            COL15=SIG;
        END;
     END;

PROC SORT;
    BY ROW;
RUN;
DATA TAB102;
    SET TAB1_02;
    ROW=2;
    IF BENTYPE='Mammography' THEN DO;
        IF (N_WGT<200 OR N_OBS<30) THEN COL2=.;
        ELSE DO;
            COL2=SCORE;
            COL9=SIG;
        END;
    END;
```

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```
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         IF (N_WGT<200 OR N_OBS<30) THEN COL3=.;
         ELSE DO;
            COL3=SCORE;
            COL10=SIG;
         END;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         IF (N_WGT<200 OR N_OBS<30) THEN COL4=.;
         ELSE DO;
            COL4=SCORE;
            COL11=SIG;
         END;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         IF (N_WGT<200 OR N_OBS<30) THEN COL5=.;
         ELSE DO;
            COL5=SCORE;
            COL12=SIG;
         END;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         IF (N_WGT<200 OR N_OBS<30) THEN COL6=.;
         ELSE DO;
            COL6=SCORE;
            COL13=SIG;
         END;
      END;
      ELSE IF BENTYPE='Non-Smoking Rate' THEN DO;
         IF (N_WGT<200 OR N_OBS<30) THEN COL7=.;
         ELSE DO;
            COL7=SCORE;
            COL14=SIG;
         END;
      END;
      ELSE IF BENTYPE='Counselled To Quit' THEN DO;
         IF (N_WGT<200 OR N_OBS<30) THEN COL8=.;
         ELSE DO;
            COL8=SCORE;
            COL15=SIG;
         END;
      END;
   END;
PROC SORT;
   BY ROW;
RUN;

DATA TAB1;
   MERGE TAB101 TAB102 TAB103 TAB203 TAB303;
   BY ROW;
RUN;
DATA COL2(DROP=COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL3(DROP=COL2 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL4(DROP=COL2 COL3 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL5(DROP=COL2 COL3 COL4 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL6(DROP=COL2 COL3 COL4 COL5 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL7(DROP=COL2 COL3 COL4 COL5 COL6 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL8(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL9(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL10 COL11 COL12 COL13 COL14 COL15)
     COL10(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL11 COL12 COL13 COL14 COL15)
     COL11(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL12 COL13 COL14 COL15)
     COL12(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL13 COL14 COL15)
     COL13(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL14 COL15)
     COL14(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL15)
     COL15(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14)
;
   SET TAB1;

   IF COL2 NE . THEN OUTPUT COL2;
   IF COL3 NE . THEN OUTPUT COL3;
   IF COL4 NE . THEN OUTPUT COL4;
   IF COL5 NE . THEN OUTPUT COL5;
   IF COL6 NE . THEN OUTPUT COL6;
   IF COL7 NE . THEN OUTPUT COL7;
```

```
     IF COL8 NE . THEN OUTPUT COL8;
     IF COL9 NE . THEN OUTPUT COL9;
     IF COL10 NE . THEN OUTPUT COL10;
     IF COL11 NE . THEN OUTPUT COL11;
     IF COL12 NE . THEN OUTPUT COL12;
     IF COL13 NE . THEN OUTPUT COL13;
     IF COL14 NE . THEN OUTPUT COL14;
     IF COL15 NE . THEN OUTPUT COL15;
RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;
PROC SORT DATA=COL8; BY ROW; RUN;
PROC SORT DATA=COL9; BY ROW; RUN;
PROC SORT DATA=COL10; BY ROW; RUN;
PROC SORT DATA=COL11; BY ROW; RUN;
PROC SORT DATA=COL12; BY ROW; RUN;
PROC SORT DATA=COL13; BY ROW; RUN;
PROC SORT DATA=COL14; BY ROW; RUN;
PROC SORT DATA=COL15; BY ROW; RUN;

DATA ALLROWS;
     LENGTH ROW 8.;
     DO ROW = 1 TO 5;
         OUTPUT;
     END;
RUN;

PROC SORT DATA=ALLROWS; BY ROW; RUN;

DATA TABLE1;
     MERGE COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11
           COL12 COL13 COL14 COL15 ALLROWS;
     BY ROW;
RUN;


*******************************************************************************
* DDE LINK (EXCEL file has to be open )
*******************************************************************************;
FILENAME TBL DDE "EXCEL|TABLES!R4C9:R8C22";

DATA _NULL_;
     SET TABLE1;
     FILE TBL NOTAB LRECL=200;
     IF ROW=5 THEN DO;
     PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X '-' '09'X COL9 '09'X
COL10
         '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
     END;
     ELSE DO;
     PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X COL8 '09'X COL9 '09'X
COL10
         '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;

     END;
RUN;

/*Run Excel macro signif,  May 9 2006, LLU*/

options noxsync;
*-- Specify XL filename ;

*%let excelf = &NAME..XLS ;

*-- Specify XL macro name ;
%let macron = signif ;
```

```
FILENAME CMDS DDE "EXCEL|SYSTEM";


DATA _NULL_;
  FILE CMDS;
  DDECommand = '[Run("' || "&macron" || '",0)]' ;
  put DDEcommand ;

RUN;


*FILENAME CMDS DDE "EXCEL|SYSTEM";
DATA _NULL_;
   FILE CMDS;
   PUT '[SAVE]';
   PUT '[CLOSE]';
RUN;




**********************************************************************************
       COMPARE SCORES AND SIG B/T CONSUMER WATCH AND REPORT CARDS.
       SET 0.015 DIFFERENCE AS THRESHOLD.
       LUCY LU 04/04/2006
*********************************************************************************;


PROC SORT DATA=FIG1(DROP=SCORE);                 *FROM CONSUMER WATCH;
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG2(DROP=SCORE);
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG3(DROP=SCORE);
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG4(DROP=SCORE);
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG5AB OUT=FIG5;
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG6AB OUT=FIG6;
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG7AB OUT=FIG7;
BY BENEFIT TIMEPD REGCAT;
RUN;


%MACRO COMPARE(I=, TITL=);


PROC SORT DATA=CFIG&I;                    *FROM REPROT CARDS;
BY BENEFIT TIMEPD REGCAT;
RUN;

DATA COMBFIG&I;
   MERGE CFIG&I.(IN=F1) FIG&I(IN=F2);
BY BENEFIT TIMEPD REGCAT;


IF F1 AND F2;

FIG = &I;

IF FIG <=4 THEN DO;
   SCORE2=COL2*100;
   SIG2=COL3;
END;

ELSE IF FIG >4 THEN DO;
```

```
   IF COL2 >= 0 THEN SCORE2=COL2;
   ELSE IF COL4 >0 THEN SCORE2=COL4;

   IF COL6 >= .Z THEN SIG2=COL6;
   ELSE IF COL7>=.Z THEN SIG2=COL7;
END;


   SCOREDIF=SCORE2-SCORE;
   SIGDIF=SIG2-SIG;


IF ABS(SCOREDIF)>.015 OR SIGDIF>0 THEN FLAG=1;
ELSE FLAG=0;

KEEP BENEFIT TIMEPD REGCAT SCORE SIG SCORE2 SIG2 SCOREDIF SIGDIF FLAG;

LABEL
FLAG="DIFF IN SCORES >0.015 OR/AND DIFF IN SIG >0"
SCORE="SCORES FROM CONUS"
SCORE2="SCORES FROM CONSUMER WATCH"
SIG="SIG FROM CONUS"
SIG2="SIG FROM CONSUMER WATCH"
;


TITLE   "   ";
TITLE2 "***********************************************************";
TITLE3 "&YEAR. CATCHMENT CONSUMER WATCH, &AREA ";

PROC PRINT L NOOBS;
TITLE4 "Compare &TITL.";
RUN;


%MEND COMPARE;


%COMPARE(I=1, TITL=Health Care Rating);
%COMPARE(I=2, TITL=Health Plan Rating);
%COMPARE(I=3, TITL=Personal Provider Rating);
%COMPARE(I=4, TITL=Specialist Rating);

%COMPARE(I=5, TITL=Access composites);

%COMPARE(I=6, TITL=Office composites);
%COMPARE(I=7, TITL=Claims/Service composites);


%MEND RUNCW;
```

H.1.B ConsumerWatch\CONSUMERWATCH-C.SAS - Run annual MTF TRICARE Consumer Watch reports.

```
********************************************************************************
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-C.SAS
* PURPOSE: Run Catchment Consumer Watch
* AUTHOR : NATALIE JUSTH
* DATE   : 2/12/02
* UPDATED: 2/5/03
* UPDATED: 11/17/03
* UPDATED: 03/17/05 BY LUCY LU.
* UPDATED: 01/02/06 BY LUCY LU.
* UPDATED: 11/22/06 BY LUCY LU.
* UPDATED: 11/16/07 BY LUCY LU.
* MODIFIED: 11/23/2010 BY  LUCY LU. WITH IMPROVED PROGRAMMING, WE
*           COMBINED ALL REGIONAL PROGRAMS INTO A SINGLE RUN.
********************************************************************************;
OPTIONS PS=63 LS=200 COMPRESS=NO ERRORS=2 NOCENTER SOURCE2 NOFMTERR SPOOL;


/*********************/
/* TIME PERIOD MACROS */
/*********************/
%LET YEAR   = 2013;
%LET YEARP1 = 2012;
%LET YEARP2 = 2011;
%LET PATH = L:\2013\Programs\Consumerwatch;

LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT   '..\loadweb';


/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

DATA TREND_A;
   SET INT.TREND_A(RENAME=(REGCAT=XREGCAT));

REGCAT=COMPRESS(XREGCAT,"'");
DROP XREGCAT;

RUN;




%INCLUDE "CONSUMERWATCH-CMACRO.INC";

/*** MACRO TO RUN CATCHMENT LEVEL REPORTS BY REGION ****/

%MACRO RUNBYREG (REG=,    /*Region as it appears in TREND_A */
                 FOLDER=  /*Regional folder name           */
                );

   PROC FREQ DATA=TREND_A;
      TABLES REGION*REGCAT / LIST MISSING OUT=TEMP;
      WHERE (REGION=&REG AND REGCAT NE &REG) OR REGION='USA MHS';
   RUN;

   DATA TEMP;
      SET TEMP;

      /* DO NOT PRODUCE CONSUMER WATCH REPORTS FOR OUT OF CATCHMENT AREAS */

      IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;


   RUN;

   DATA _NULL_;
      SET TEMP END=FINISHED;

      LENGTH CMPRS $39;
```

```
        LENGTH NUM $4;

        CMPRS=COMPRESS(REGCAT)||".xls";
        NUM=COMPRESS(PUT(_N_,4.));

        CALL SYMPUT("REGCAT"||NUM,REGCAT);
        CALL SYMPUT("CMPRS"||NUM,CMPRS);


        IF FINISHED THEN DO;
            CALL SYMPUT("N",_N_);
        END;
    RUN;

    %MACRO PROCESS;
        %DO I=1 %TO &N;
            %RUNCW(AREA=&&REGCAT&I,NAME=&&CMPRS&I,FOLDER=&FOLDER);
        %END;
    %MEND PROCESS;

    %PROCESS;

%MEND RUNBYREG;

%RUNBYREG(REG="North Army",FOLDER=North);




/*
%RUNBYREG(REG="USA MHS",FOLDER=USAMHS);
%RUNBYREG(REG="North Air Force",FOLDER=North);

%RUNBYREG(REG="North Navy",FOLDER=North);
%RUNBYREG(REG="North Other",FOLDER=North);
%RUNBYREG(REG="North Joint Service",FOLDER=North);
%RUNBYREG(REG="South Air Force",FOLDER=South);
%RUNBYREG(REG="South Army",FOLDER=South);
%RUNBYREG(REG="South Navy",FOLDER=South);
%RUNBYREG(REG="South Other",FOLDER=South);

%RUNBYREG(REG="West Air Force",FOLDER=West);
%RUNBYREG(REG="West Army",FOLDER=West);
%RUNBYREG(REG="West Navy",FOLDER=West);
%RUNBYREG(REG="West Other",FOLDER=West);

%RUNBYREG(REG="Overseas Pacific",FOLDER=Overseas);
%RUNBYREG(REG="Overseas Europe",FOLDER=Overseas);
%RUNBYREG(REG="Overseas Latin America",FOLDER=Overseas);
```

H.2.A ConsumerWatch\LISTOFMTF-NORTH.SAS - Produce the list of MTF to run automated consumer watch report in Word-North.

```
********************************************************************************
* PROJECT: 6663-420
* PROGRAM: ListOfMTF-xxxxx.SAS
* PURPOSE: Produce the list of MTF to run automated consumer watch report in Word
* AUTHOR : Lucy Lu
* DATE   : 11/30/09
* NOTE   : Run listOfMTF-xxxxx.Sas first to copy the list of MTF in .lst file.
********************************************************************************;

OPTIONS PS=120 LS=256 NOCENTER /*MPRINT*/ NOFMTERR SPOOL ;
LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT  '..\loadweb';


%LET REG=("North Air Force","North Army","North Navy","North Other","North Joint Service");
%LET FOLDER=North;


/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/
DATA TREND_A;
   SET INT.TREND_A(RENAME=(REGCAT=XREGCAT) KEEP=REGCAT REGION);

   REGCAT=COMPRESS(XREGCAT,"'");

CMPRS=COMPRESS(REGCAT)||".xlsb";
CMPRS2=COMPRESS(REGCAT);

IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;

LENGTH MTFLIST $200;
MTFLIST='%RUNWD'||'('||'AREA='||TRIM(LEFT(REGCAT))||','||'NAME='
        ||TRIM(LEFT(CMPRS))||','||'NAME2='||TRIM(LEFT(CMPRS2))||','||'FOLDER='
        ||"&FOLDER"||')'||';';

IF (REGION in &REG AND REGCAT not in &REG) THEN OUTPUT;

RUN;

PROC SORT DATA=TREND_A(KEEP=MTFLIST) OUT=MTFLIST NODUPKEY;
BY MTFLIST; RUN;

TITLE "AREA = &FOLDER";
PROC PRINT DATA=MTFLIST NOOBS;
RUN;
```

H.2.B   ConsumerWatch\LISTOFMTF-OVERSEAS.SAS - Produce the list of MTF to run automated consumer watch report in Word-Overseas.

```
***********************************************************************************
* PROJECT: 6663-420
* PROGRAM: ListOfMTF.SAS
* PURPOSE: Produce the list of MTF to run automated consumer watch report in Word
* AUTHOR : Lucy Lu
* DATE   : 11/30/09
* NOTE   : Run listOfMTF-South.Sas first to copy the list of MTF in .lst file.
***********************************************************************************;

OPTIONS PS=120 LS=256 NOCENTER /*MPRINT*/ NOFMTERR SPOOL ;
LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT  '..\loadweb';

%LET REG=("Overseas Europe","Overseas Pacific");
%LET FOLDER=Overseas;

/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/
DATA TREND_A;
   SET INT.TREND_A(RENAME=(REGCAT=XREGCAT) KEEP=REGCAT REGION);

   REGCAT=COMPRESS(XREGCAT,"'");

CMPRS=COMPRESS(REGCAT)||".xls";
CMPRS2=COMPRESS(REGCAT);

IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;

LENGTH MTFLIST $200;
MTFLIST='%RUNWD'||'('||'AREA='||TRIM(LEFT(REGCAT))||','||'NAME='
        ||TRIM(LEFT(CMPRS))||','||'NAME2='||TRIM(LEFT(CMPRS2))||','||'FOLDER='
        ||"&FOLDER"||')'||';';

IF (REGION in &REG AND REGCAT not in &REG) THEN OUTPUT;

RUN;

PROC SORT DATA=TREND_A(KEEP=MTFLIST) OUT=MTFLIST NODUPKEY;
BY MTFLIST; RUN;

TITLE "AREA = &FOLDER";
PROC PRINT DATA=MTFLIST NOOBS;
RUN;
```

H.2.C ConsumerWatch\LISTOFMTF-SOUTH.SAS - Produce the list of MTF to run automated consumer watch report in Word-South.

```
*******************************************************************************
* PROJECT: 6663-420
* PROGRAM: ListOfMTF.SAS
* PURPOSE: Produce the list of MTF to run automated consumer watch report in Word
* AUTHOR : Lucy Lu
* DATE   : 11/30/09
*******************************************************************************;

OPTIONS PS=120 LS=256 NOCENTER /*MPRINT*/ NOFMTERR SPOOL ;
LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT  '..\loadweb';

%LET REG="South Air Force","South Army","South Navy","South Other";
%LET FOLDER=South;


/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/
DATA TREND_A;
    SET INT.TREND_A(RENAME=(REGCAT=XREGCAT) KEEP=REGCAT REGION);

    REGCAT=COMPRESS(XREGCAT,"'");

CMPRS=COMPRESS(REGCAT)||".xls";
CMPRS2=COMPRESS(REGCAT);
*%RUNWD(AREA=&&REGCAT&I,NAME=&&CMPRS&I,NAME2=&&CMPRS2&I,FOLDER=&FOLDER);

IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;

LENGTH MTFLIST $400;
MTFLIST='%RUNWD'||'('||'AREA='||TRIM(LEFT(REGCAT))||','||'NAME='
        ||TRIM(LEFT(CMPRS))||','||'NAME2='||TRIM(LEFT(CMPRS2))||','||'FOLDER='
        ||"&FOLDER"||')'||';';

IF (REGION in (&REG) AND REGCAT NOT in (&REG)) THEN OUTPUT;

RUN;

PROC SORT DATA=TREND_A(KEEP=MTFLIST) OUT=MTFLIST NODUPKEY;
BY MTFLIST; RUN;

TITLE "AREA = &FOLDER";
PROC PRINT DATA=MTFLIST NOOBS;
RUN;
```

H.2.D ConsumerWatch\LISTOFMTF-WEST.SAS - Produce the list of MTF to run automated consumer watch report in Word-West.

```
********************************************************************************
* PROJECT: 6663-420
* PROGRAM: ListOfMTF-xxxxx.SAS
* PURPOSE: Produce the list of MTF to run automated consumer watch report in Word
* AUTHOR : Lucy Lu
* DATE   : 11/30/09
* NOTE   : Run listOfMTF-xxxxx.Sas first to copy the list of MTF in .lst file.
********************************************************************************;

OPTIONS PS=120 LS=256 NOCENTER /*MPRINT*/ NOFMTERR SPOOL ;
LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT  '..\loadweb';


%LET REG=("West Air Force","West Army","West Navy","West Other");
%LET FOLDER=West;



/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/
DATA TREND_A;
    SET INT.TREND_A(RENAME=(REGCAT=XREGCAT) KEEP=REGCAT REGION);

    REGCAT=COMPRESS(XREGCAT,"'");

CMPRS=COMPRESS(REGCAT)||".xls";
CMPRS2=COMPRESS(REGCAT);

IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;

LENGTH MTFLIST $200;
MTFLIST='%RUNWD'||'('||'AREA='||TRIM(LEFT(REGCAT))||','||'NAME='
        ||TRIM(LEFT(CMPRS))||','||'NAME2='||TRIM(LEFT(CMPRS2))||','||'FOLDER='
        ||"&FOLDER"||')'||';';

IF (REGION in &REG AND REGCAT not in &REG) THEN OUTPUT;

RUN;

PROC SORT DATA=TREND_A(KEEP=MTFLIST) OUT=MTFLIST NODUPKEY;
BY MTFLIST; RUN;

TITLE "AREA = &FOLDER";
PROC PRINT DATA=MTFLIST NOOBS;
RUN;
```

H.3.A ConsumerWatch\CONSUMERWATCH-CMACRO-WORD.INC - Produce numbers for annual Consumer Watch reports.

```
*******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-Cmarco-WORD.INC
*
* AUTHOR : LUCY LU
* PURPOSE: Automate the copy and paste process, update the year, region,
*          response rate and sample size for annual catchment Consumer
*          Watch report.
*
* DATE   : 10/29/2009
*
* OUTPUT : WORD DOCUMENTS
*******************************************************************************;

OPTIONS NOXWAIT SPOOL NOXSYNC;


%MACRO RUNWD(AREA=,NAME=,NAME2=,FOLDER=);
*LLU 7/21/2010--DETECTING AVAILABILITY OF EXCEL, MINIMIZE WAITING TIME
 Wait until Excel ready;

FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;

   LENGTH FID RC START STOP TIME 8;
   FID = FOPEN('CMDS' , 'S');
   IF (FID LE 0) THEN DO;
      RC = SYSTEM('START EXCEL');
      START = DATETIME();
      STOP = START + 10;
      DO WHILE (FID LE 0);
         FID = FOPEN('CMDS' , 'S');
         TIME = DATETIME();
         IF (TIME GE STOP) THEN FID = 1;
      END;
   END;
   RC = FCLOSE(FID);
RUN;


%MACRO SETUP;
   DATA TEST _NULL_;

   SINGLE="'";
   DOUBLE='"';

   LENGTH OPENXLS OPENWRD SAVEWRD $120;
 *11/28/2010, temporary fix for xls.xlsb problem to meet the dealine. Need
   perm fix in Excel pmg;
   OPENXLS=SINGLE||"[OPEN("||DOUBLE||"&PATH.\&FOLDER.\&NAME2..xls.xlsb"||DOUBLE||")]"||SINGLE;
   OPENWRD=SINGLE||"[FileOpen.Name="||DOUBLE||"&PATH.\templateAnnual.doc"||DOUBLE||"]"||SINGLE;

SAVEWRD=SINGLE||"[FileSaveAs.Name="||DOUBLE||"&PATH.\&FOLDER.\&NAME2..DOC"||DOUBLE||"]"||SINGLE;

   CALL SYMPUT ("OPENXLS",TRIM(OPENXLS));
   CALL SYMPUT ("OPENWRD",TRIM(OPENWRD));
   CALL SYMPUT ("SAVEWRD",TRIM(SAVEWRD));

RUN;

%MEND SETUP;
%SETUP;

DATA _NULL_;
 FILE CMDS;
PUT &OPENXLS;
X=SLEEP(2);
PUT '[app.minimize()]';
```

```
RUN;

*7/23/2010 LLU, Wait until Word ready;
FILENAME CMNDS DDE "WINWORD|SYSTEM";

DATA _NULL_;
  LENGTH FID RC START STOP TIME 8;
  FID=FOPEN('CMNDS','S');
  IF (FID LE 0) THEN DO;
    RC=SYSTEM('START WINWORD');
    START=DATETIME();
    STOP=START+10;
    DO WHILE (FID LE 0);
      FID=FOPEN('CMNDS','S');
      TIME=DATETIME();
      IF (TIME GE STOP) THEN FID=1;
      END;
    END;
  RC=FCLOSE(FID);
RUN;

DATA _NULL_;
  FILE CMNDS;
  PUT &OPENWRD;
  X=SLEEP(2);
  PUT &SAVEWRD;
  PUT '[APPMINIMIZE]';
RUN;


%MACRO COPYIT;
%DO I=1 %TO 8;

   %IF &I NE 7 %THEN %DO;
      %LET WDMACRO=NEWPASTE&I;
      %LET EXMACRO=COPY&I;


      FILENAME CMDS DDE "EXCEL|SYSTEM";

      DATA _NULL_;
         FILE CMDS;
      X=SLEEP(3);
      RUN;


      DATA _NULL_;
      FILE CMDS;
      DDECommand = '[Run("' || "&exmacro" || '",0)]' ;
      PUT DDEcommand ;

      RUN;
      FILENAME CMDS CLEAR;

      FILENAME CMNDS DDE 'WINWORD|SYSTEM';

      DATA _NULL_;
      X=SLEEP(3);
      RUN;


      DATA _NULL_;
      FILE CMNDS;
      put '[ToolsMacro .Name = "' "&wdmacro" '"', .Run]';
      RUN;

      FILENAME CMNDS CLEAR;

      RUN;

   %END;
%END;
%MEND COPYIT;
```

```
%COPYIT;

/*
FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;
    FILE CMDS;
    PUT '[SAVE]';
    PUT '[QUIT]';
RUN; */

*READ THE SAMPLE SIZE AND RESPONSE RATE IN .OUT FILES
 AND CREATE MACRO VARIABLES for Word document;
%MACRO RATE1 (DAT);
  DATA &DAT;

      INFILE "&RATEPATH.\&DAT..OUT" LRECL=9999 RECFM=V;
      INPUT LINEIN $100 @; DROP LINEIN;
      IF _N_ GE 7 THEN DO;
          INPUT
             @001 DOMAIN     $CHAR40.
             @141 FRR_UNWT  4.3
             @147 POP       $CHAR7.;
              ;
           OUTPUT;
      END;
  RUN;

*MS 2007 doesnt take comma7 format. This is to hard code the comma into the text;
DATA &DAT;
    SET &DAT;
 LENGTH POP_UNWT $10;
    POP1=SUBSTR(RIGHT(POP),1,1);
    POP2=SUBSTR(RIGHT(POP),2,3);
    POP3=SUBSTR(RIGHT(POP),5,3);
    POP_UNWT=CATX(',',POP1,POP2,POP3);
RUN;

%MEND RATE1;

%RATE1(TABLE02A);  /*for USA MHS*/
%RATE1(XCATCH);    /*for catchment area*/

DATA ALLRATE;
  SET TABLE02A
      XCATCH
       ;

    DOMAIN=UPCASE(COMPRESS(DOMAIN,"' "));

    IF DOMAIN='' THEN DOMAIN="USAMHS";
    FRR_UNWT=FRR_UNWT*100;

 *PUT POP_UNWT=  FRR_UNWT=;
 IF DOMAIN=UPCASE("&NAME2") THEN OUTPUT;

RUN;


%LET FORMAT=FORMAT1;

%LET MARK1=MTF1;
%LET MARK2=size;
%LET MARK3=rate;
%LET MARK4=MTF2;
%LET MARK5=YourSay;
%LET MARK6=MTF3;



DATA _NULL_;
    SET ALLRATE;
```

```
CALL SYMPUT ("TEXT1", "&AREA");
CALL SYMPUT ("TEXT2", COMPRESS(POP_UNWT));
CALL SYMPUT ("TEXT3", COMPRESS(FRR_UNWT));
CALL SYMPUT ("TEXT4", "&AREA");
CALL SYMPUT ("TEXT5", "&YOURSAY");
CALL SYMPUT ("TEXT6", "&AREA");

RUN;

FILENAME CMNDS DDE "WINWORD|SYSTEM";
DATA _NULL_;
    FILE CMNDS;
    *X=SLEEP(2);
    PUT '[AppMinimize]';
RUN;


DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="MTF1"]';
 put '[FormatFont.Font="Arial",.Points="20"]';
 PUT "&TEXT1";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="SIZE"]';
 put '[FormatFont.Font="Arial",.Points="8"]';
 PUT "&TEXT2";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="RATE"]';
 put '[FormatFont.Font="Arial",.Points="8"]';
 PUT "&TEXT3";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="MTF2"]';
 put '[FormatFont.Font="Arial",.Points="8"]';
 PUT "&TEXT4";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="YourSay"]';
 put '[FormatFont.Font="Times New Roman",.Points="11"]';
 PUT "&TEXT5";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="MTF3"]';
 put '[FormatFont.Font="Arial",.Points="16"]';
 PUT "&TEXT6";
RUN;

/* The Triplet doeasn't work for MS 2007/SAS 9. Comment out here;
%MACRO DOWORD;

%DO I= 1 %TO 6;      *LLU 2/15/08. Problem with Banner in Word. No change in banner this time;

FILENAME CMNDS DDE "WINWORD|&PATH.\&FOLDER.\&FOLDER..doc!&&MARK&I." NOTAB;
```

```
DATA _NULL_;
 FILE CMNDS;

 PUT "&&TEXT&I.";

RUN;

FILENAME CMNDS CLEAR;

%END;

%MEND;

%DOWORD;

FILENAME CMNDS DDE 'WINWORD|SYSTEM';
DATA _NULL_;
 FILE CMNDS;

 PUT '[ToolsMacro .Name = "' "&FORMAT" '", .Run]';

RUN;
*/
*copy and paste figure 7--must do after changing subtitle on page 2;
%LET WDMACRO7=NEWPASTE7;
%LET EXMACRO7=COPY7;


FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;
    FILE CMDS;
X=SLEEP(3);
RUN;

DATA _NULL_;
  FILE CMDS;
  DDECommand = '[Run("' || "&exmacro7" || '",0)]' ;
  PUT DDEcommand ;

RUN;
FILENAME CMDS CLEAR;

FILENAME CMNDS DDE 'WINWORD|SYSTEM';

DATA _NULL_;
  FILE CMNDS;
put '[ToolsMacro .Name = "' "&wdmacro7" '", .Run]';
RUN;

FILENAME CMNDS CLEAR;

RUN;


DATA _NULL_;
X=SLEEP(.2);
RUN;

*savs as pdf;
%LET CMACRO=SaveAspdf;

FILENAME CMNDS DDE 'WINWORD|SYSTEM';
DATA _NULL_;
 FILE CMNDS;

PUT '[ToolsMacro .Name = "' "&CMACRO" '", .Run]';
run;


FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;
```

```
    FILE CMDS;
    *PUT '[SAVE]';  *no save for Excel;
    PUT '[CLOSE(FALSE)]';
    PUT '[QUIT]';
RUN;

/*The following code is reserved for future use;
FILENAME CMNDS DDE 'WINWORD|SYSTEM';

DATA _NULL_;
 FILE CMNDS;

 PUT '[fileSave] ';
 PUT '[FileClose 2] ';
RUN;*/

%MEND;
```

H.3.B   ConsumerWatch\CONSUMERWATCH-WORD-CNORTH.SAS - Run annual automated word MTF TRICARE Consumer Watch reports-North.

```
*****************************************************************************
PROJECT: 6663-420
PROGRAM: consumerwatch-word-CNorth.sas
PURPOSE: Automatet the Consumer Watch Report
         Only be able to automate one Word product at a time, multiple file-open
         and File-save causes SAS to lock up with JAWs screen reader unless
         fixing the problem by downloading "Hot Fix" in SAS institute website.
AUTHOR : Lucy Lu
DATE   : 11/30/09
NOTE   : This is the second step to automnate the Consumer Watch report.
         1. step 1--run listOfMTF-xxxx.sas
         2. Step 2--copy the list of MTF in listOfMTF.lst file and run this macro.
*****************************************************************************;
OPTIONS PS=63 LS=200 COMPRESS=NO ERRORS=2 MPRINT NOCENTER NOFMTERR SPOOL;


LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT  '..\loadweb';

/*********************/
/* TIME PERIOD MACROS */
/*********************/

%LET YEAR  = 2013;
%LET YEARP1 = 2012;
%LET YEARP2 = 2011;
%LET YOURSAY= MTF;

%LET PATH=L:\&YEAR.\Programs\ConsumerWatch;
%LET RATEPATH=..\..\Data\Response_Rate\xcatch;


/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

%INCLUDE "CONSUMERWATCH-CMACRO-WORD.INC";


%RUNWD(AREA=375th Med Grp-Scott,NAME=375thMedGrp-Scott.xlsb,NAME2=375thMedGrp-
Scott,FOLDER=North);
%RUNWD(AREA=633rd Med Grp Langley-Eustis,NAME=633rdMedGrpLangley-
Eustis.xlsb,NAME2=633rdMedGrpLangley-Eustis,FOLDER=North);
%RUNWD(AREA=66th Med Grp-Hanscom,NAME=66thMedGrp-Hanscom.xlsb,NAME2=66thMedGrp-
Hanscom,FOLDER=North);
%RUNWD(AREA=779th Med Grp-Andrews,NAME=779thMedGrp-Andrews.xlsb,NAME2=779thMedGrp-
Andrews,FOLDER=North);
%RUNWD(AREA=88th Med Grp-Wright-Patterson,NAME=88thMedGrp-Wright-Patterson.xlsb,NAME2=88thMedGrp-
Wright-Patterson,FOLDER=North);
%RUNWD(AREA=Blanchfield ACH-Ft. Campbell,NAME=BlanchfieldACH-
Ft.Campbell.xlsb,NAME2=BlanchfieldACH-Ft.Campbell,FOLDER=North);
%RUNWD(AREA=Ft Belvoir Community Hosp-FBCH,NAME=FtBelvoirCommunityHosp-
FBCH.xlsb,NAME2=FtBelvoirCommunityHosp-FBCH,FOLDER=North);
%RUNWD(AREA=Ireland ACH-Ft. Knox,NAME=IrelandACH-Ft.Knox.xlsb,NAME2=IrelandACH-
Ft.Knox,FOLDER=North);
%RUNWD(AREA=Kenner AHC-Ft. Lee,NAME=KennerAHC-Ft.Lee.xlsb,NAME2=KennerAHC-Ft.Lee,FOLDER=North);
%RUNWD(AREA=Kimbrough Amb Car Cen-Ft Meade,NAME=KimbroughAmbCarCen-
FtMeade.xlsb,NAME2=KimbroughAmbCarCen-FtMeade,FOLDER=North);
%RUNWD(AREA=McDonald AHC-Ft. Eustis,NAME=McDonaldAHC-Ft.Eustis.xlsb,NAME2=McDonaldAHC-
Ft.Eustis,FOLDER=North);
%RUNWD(AREA=NBHC Little Creek,NAME=NBHCLittleCreek.xlsb,NAME2=NBHCLittleCreek,FOLDER=North);
%RUNWD(AREA=NBHC Navsta
Sewells,NAME=NBHCNavstaSewells.xlsb,NAME2=NBHCNavstaSewells,FOLDER=North);
%RUNWD(AREA=NBHC Oceana,NAME=NBHCOceana.xlsb,NAME2=NBHCOceana,FOLDER=North);
%RUNWD(AREA=NH Camp Lejeune,NAME=NHCampLejeune.xlsb,NAME2=NHCampLejeune,FOLDER=North);
%RUNWD(AREA=NHC Annapolis,NAME=NHCAnnapolis.xlsb,NAME2=NHCAnnapolis,FOLDER=North);
%RUNWD(AREA=NHC Cherry Point,NAME=NHCCherryPoint.xlsb,NAME2=NHCCherryPoint,FOLDER=North);
%RUNWD(AREA=NHC Patuxent River,NAME=NHCPatuxentRiver.xlsb,NAME2=NHCPatuxentRiver,FOLDER=North);
%RUNWD(AREA=NHC Quantico,NAME=NHCQuantico.xlsb,NAME2=NHCQuantico,FOLDER=North);
%RUNWD(AREA=NMC Portsmouth,NAME=NMCPortsmouth.xlsb,NAME2=NMCPortsmouth,FOLDER=North);
```

```
%RUNWD(AREA=Naval Hlth Clinic New
England,NAME=NavalHlthClinicNewEngland.xlsb,NAME2=NavalHlthClinicNewEngland,FOLDER=North);
%RUNWD(AREA=Walter Reed Natl Mil Med
Cntr,NAME=WalterReedNatlMilMedCntr.xlsb,NAME2=WalterReedNatlMilMedCntr,FOLDER=North);
%RUNWD(AREA=Womack AMC-Ft. Bragg,NAME=WomackAMC-Ft.Bragg.xlsb,NAME2=WomackAMC-
Ft.Bragg,FOLDER=North);

/*--dont need to run for pdf report--;

%RUNWD(AREA=North Region-Air force,NAME=NorthRegion-Airforce.xlsb,NAME2=NorthRegion-
Airforce,FOLDER=North);
%RUNWD(AREA=North Region-Other,NAME=NorthRegion-Other.xlsb,NAME2=NorthRegion-Other,FOLDER=North);
```

H.3.C ConsumerWatch\CONSUMERWATCH-WORD-COVERSEAS.SAS - Run annual automated word MTF TRICARE Consumer Watch reports-Overseas.

```
********************************************************************************
PROJECT: 6663-420
PROGRAM: consumerwatch-word-Coverseas.sas
PURPOSE: Automatet the Consumer Watch Report
         Only be able to automate one Word product at a time, multiple file-open
         and File-save causes SAS to lock up with JAWs screen reader unless
         fixing the problem by downloading "Hot Fix" in SAS institute website.
AUTHOR : Lucy Lu
DATE   : 11/30/09
NOTE   : This is the second step to automnate the Consumer Watch report.
         1. step 1--run listOfMTF-xxxx.sas
         2. Step 2--copy the list of MTF in listOfMTF.lst file and run this macro.
********************************************************************************;
OPTIONS PS=63 LS=200 COMPRESS=NO ERRORS=2 MPRINT NOCENTER NOFMTERR SPOOL;


LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT  '..\loadweb';

/*********************/
/* TIME PERIOD MACROS */
/*********************/

%LET YEAR  = 2013;
%LET YEARP1 = 2012;
%LET YEARP2 = 2011;
%LET YOURSAY= MTF;

%LET PATH=L:\&YEAR.\Programs\ConsumerWatch;
%LET RATEPATH=..\..\Data\Response_Rate\xcatch;

/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

%INCLUDE "consumerwatch-Cmacro-word.inc";


%RUNWD(AREA=18th Med Grp-Kadena AB,NAME=18thMedGrp-KadenaAB.xls,NAME2=18thMedGrp-
KadenaAB,FOLDER=Overseas);
%RUNWD(AREA=374th Med Grp-Yokota AB,NAME=374thMedGrp-YokotaAB.xls,NAME2=374thMedGrp-
YokotaAB,FOLDER=Overseas);
%RUNWD(AREA=48th Med Grp-Lakenheath,NAME=48thMedGrp-Lakenheath.xls,NAME2=48thMedGrp-
Lakenheath,FOLDER=Overseas);
%RUNWD(AREA=51st Med Grp-Osan AB,NAME=51stMedGrp-OsanAB.xls,NAME2=51stMedGrp-
OsanAB,FOLDER=Overseas);
%RUNWD(AREA=52nd Med Group-Spangdahlem,NAME=52ndMedGroup-Spangdahlem.xls,NAME2=52ndMedGroup-
Spangdahlem,FOLDER=Overseas);
%RUNWD(AREA=86th Medical Group-Ramstein,NAME=86thMedicalGroup-
Ramstein.xls,NAME2=86thMedicalGroup-Ramstein,FOLDER=Overseas);
%RUNWD(AREA=Bavaria Meddac,NAME=BavariaMeddac.xls,NAME2=BavariaMeddac,FOLDER=Overseas);
%RUNWD(AREA=Landstuhl Regional
Medcen,NAME=LandstuhlRegionalMedcen.xls,NAME2=LandstuhlRegionalMedcen,FOLDER=Overseas);
%RUNWD(AREA=NH Guam-Agana,NAME=NHGuam-Agana.xls,NAME2=NHGuam-Agana,FOLDER=Overseas);
%RUNWD(AREA=NH Okinawa,NAME=NHOkinawa.xls,NAME2=NHOkinawa,FOLDER=Overseas);
%RUNWD(AREA=NH Yokosuka,NAME=NHYokosuka.xls,NAME2=NHYokosuka,FOLDER=Overseas);


/*--dont need to run for pdf report--;

%RUNWD(AREA=Europe-Air force,NAME=Europe-Airforce.xls,NAME2=Europe-Airforce,FOLDER=Overseas);
%RUNWD(AREA=Europe-Navy,NAME=Europe-Navy.xls,NAME2=Europe-Navy,FOLDER=Overseas);
```

H.3.D   ConsumerWatch\CONSUMERWATCH-WORD-CSOUTH.SAS - Run annual automated word MTF TRICARE Consumer Watch reports-South.

```
*******************************************************************************
PROJECT: 6663-420
PROGRAM: consumerwatch-word-Coverseas.sas
PURPOSE: Automatet the Consumer Watch Report
         Only be able to automate one Word product at a time, multiple file-open
         and File-save causes SAS to lock up with JAWs screen reader unless
         fixing the problem by downloading "Hot Fix" in SAS institute website.
AUTHOR : Lucy Lu
DATE   : 11/30/09
NOTE   : This is the second step to automnate the Consumer Watch report.
         1. step 1--run listOfMTF-xxxx.sas
         2. Step 2--copy the list of MTF in listOfMTF.lst file and run this macro.
*******************************************************************************;
OPTIONS PS=63 LS=200 COMPRESS=NO ERRORS=2 MPRINT NOCENTER NOFMTERR SPOOL;


LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT  '..\loadweb';

/*********************/
/* TIME PERIOD MACROS */
/*********************/

%LET YEAR   = 2013;
%LET YEARP1 = 2012;
%LET YEARP2 = 2011;
%LET YOURSAY= MTF;

%LET PATH=L:\&YEAR.\Programs\ConsumerWatch;
%LET RATEPATH=..\..\Data\Response_Rate\xcatch;


/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

%INCLUDE "CONSUMERWATCH-CMACRO-WORD.INC";

%RUNWD(AREA=14th Med Grp-Columbus,NAME=14thMedGrp-Columbus.xls,NAME2=14thMedGrp-
Columbus,FOLDER=South);
%RUNWD(AREA=17th Med Grp-Goodfellow,NAME=17thMedGrp-Goodfellow.xls,NAME2=17thMedGrp-
Goodfellow,FOLDER=South);
%RUNWD(AREA=19th Medical Group-Little Rock,NAME=19thMedicalGroup-
LittleRock.xls,NAME2=19thMedicalGroup-LittleRock,FOLDER=South);
%RUNWD(AREA=1st Spec Ops Med Grp-Hurlburt,NAME=1stSpecOpsMedGrp-
Hurlburt.xls,NAME2=1stSpecOpsMedGrp-Hurlburt,FOLDER=South);
%RUNWD(AREA=20th Med Grp-Shaw,NAME=20thMedGrp-Shaw.xls,NAME2=20thMedGrp-Shaw,FOLDER=South);
%RUNWD(AREA=2nd Med Grp-Barksdale,NAME=2ndMedGrp-Barksdale.xls,NAME2=2ndMedGrp-
Barksdale,FOLDER=South);
%RUNWD(AREA=325th Med Grp-Tyndall,NAME=325thMedGrp-Tyndall.xls,NAME2=325thMedGrp-
Tyndall,FOLDER=South);
%RUNWD(AREA=359th Med Grp-Randolph,NAME=359thMedGrp-Randolph.xls,NAME2=359thMedGrp-
Randolph,FOLDER=South);
%RUNWD(AREA=42nd Medical Group-Maxwell,NAME=42ndMedicalGroup-Maxwell.xls,NAME2=42ndMedicalGroup-
Maxwell,FOLDER=South);
%RUNWD(AREA=45th Med Grp-Patrick,NAME=45thMedGrp-Patrick.xls,NAME2=45thMedGrp-
Patrick,FOLDER=South);
%RUNWD(AREA=59th Med Wing-Lackland,NAME=59thMedWing-Lackland.xls,NAME2=59thMedWing-
Lackland,FOLDER=South);
%RUNWD(AREA=6th Med Grp-MacDill,NAME=6thMedGrp-MacDill.xls,NAME2=6thMedGrp-MacDill,FOLDER=South);
%RUNWD(AREA=72nd Med Grp-Tinker,NAME=72ndMedGrp-Tinker.xls,NAME2=72ndMedGrp-Tinker,FOLDER=South);
%RUNWD(AREA=78th Med Grp-Robins,NAME=78thMedGrp-Robins.xls,NAME2=78thMedGrp-Robins,FOLDER=South);
%RUNWD(AREA=7th Med Grp-Dyess,NAME=7thMedGrp-Dyess.xls,NAME2=7thMedGrp-Dyess,FOLDER=South);
%RUNWD(AREA=81st Med Grp-Keesler,NAME=81stMedGrp-Keesler.xls,NAME2=81stMedGrp-
Keesler,FOLDER=South);
%RUNWD(AREA=82nd Med Grp-Sheppard,NAME=82ndMedGrp-Sheppard.xls,NAME2=82ndMedGrp-
Sheppard,FOLDER=South);
%RUNWD(AREA=96th Med Grp-Eglin,NAME=96thMedGrp-Eglin.xls,NAME2=96thMedGrp-Eglin,FOLDER=South);
%RUNWD(AREA=Bayne-Jones ACH-Ft. Polk,NAME=Bayne-JonesACH-Ft.Polk.xls,NAME2=Bayne-JonesACH-
Ft.Polk,FOLDER=South);
```

```
%RUNWD(AREA=Brooke AMC-Ft. Sam Houston,NAME=BrookeAMC-Ft.SamHouston.xls,NAME2=BrookeAMC-
Ft.SamHouston,FOLDER=South);
%RUNWD(AREA=Darnall ACH-Ft. Hood,NAME=DarnallACH-Ft.Hood.xls,NAME2=DarnallACH-
Ft.Hood,FOLDER=South);
%RUNWD(AREA=Eisenhower AMC-Ft. Gordon,NAME=EisenhowerAMC-Ft.Gordon.xls,NAME2=EisenhowerAMC-
Ft.Gordon,FOLDER=South);
%RUNWD(AREA=Fox AHC-Redstone Arsenal,NAME=FoxAHC-RedstoneArsenal.xls,NAME2=FoxAHC-
RedstoneArsenal,FOLDER=South);
%RUNWD(AREA=Lyster AHC-Ft. Rucker,NAME=LysterAHC-Ft.Rucker.xls,NAME2=LysterAHC-
Ft.Rucker,FOLDER=South);
%RUNWD(AREA=Moncrief ACH-Ft. Jackson,NAME=MoncriefACH-Ft.Jackson.xls,NAME2=MoncriefACH-
Ft.Jackson,FOLDER=South);
%RUNWD(AREA=NBHC Mayport,NAME=NBHCMayport.xls,NAME2=NBHCMayport,FOLDER=South);
%RUNWD(AREA=NH Beaufort,NAME=NHBeaufort.xls,NAME2=NHBeaufort,FOLDER=South);
%RUNWD(AREA=NH Jacksonville,NAME=NHJacksonville.xls,NAME2=NHJacksonville,FOLDER=South);
%RUNWD(AREA=NH Pensacola,NAME=NHPensacola.xls,NAME2=NHPensacola,FOLDER=South);
%RUNWD(AREA=NHC Corpus Christi,NAME=NHCCorpusChristi.xls,NAME2=NHCCorpusChristi,FOLDER=South);
%RUNWD(AREA=Naval Health Clinic
Charleston,NAME=NavalHealthClinicCharleston.xls,NAME2=NavalHealthClinicCharleston,FOLDER=South);
%RUNWD(AREA=Reynolds ACH-Ft. Sill,NAME=ReynoldsACH-Ft.Sill.xls,NAME2=ReynoldsACH-
Ft.Sill,FOLDER=South);


/*--dont need to run for pdf report--;
%RUNWD(AREA=South Region-Air force,NAME=SouthRegion-Airforce.xls,NAME2=SouthRegion-
Airforce,FOLDER=South);
```

H.3.E ConsumerWatch\CONSUMERWATCH-WORD-CWEST.SAS - Run annual automated word MTF TRICARE Consumer Watch reports-West.

```
*****************************************************************************
PROJECT: 6663-420
PROGRAM: consumerwatch-word-Coverseas.sas
PURPOSE: Automatet the Consumer Watch Report
         Only be able to automate one Word product at a time, multiple file-open
         and File-save causes SAS to lock up with JAWs screen reader unless
         fixing the problem by downloading "Hot Fix" in SAS institute website.
AUTHOR : Lucy Lu
DATE   : 11/30/09
NOTE   : This is the second step to automnate the Consumer Watch report.
         1. step 1--run listOfMTF-xxxx.sas
         2. Step 2--copy the list of MTF in listOfMTF.lst file and run this macro.
*****************************************************************************;
OPTIONS PS=63 LS=200 ERRORS=2 MPRINT NOCENTER NOFMTERR SPOOL;


LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT  '..\loadweb';

/*********************/
/* TIME PERIOD MACROS */
/*********************/

%LET YEAR  = 2013;
%LET YEARP1 = 2012;
%LET YEARP2 = 2011;
%LET YOURSAY= MTF;

%LET PATH=L:\&YEAR.\Programs\ConsumerWatch;
%LET RATEPATH=..\..\Data\Response_Rate\xcatch;


/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

%INCLUDE "CONSUMERWATCH-CMACRO-WORD.INC";


%RUNWD(AREA=10th Med Group-USAF Academy CO,NAME=10thMedGroup-
USAFAcademyCO.xls,NAME2=10thMedGroup-USAFAcademyCO,FOLDER=West);
%RUNWD(AREA=21st Med Grp-Peterson,NAME=21stMedGrp-Peterson.xls,NAME2=21stMedGrp-
Peterson,FOLDER=West);
%RUNWD(AREA=30th Med Grp-Vandenberg,NAME=30thMedGrp-Vandenberg.xls,NAME2=30thMedGrp-
Vandenberg,FOLDER=West);
%RUNWD(AREA=341st Med Grp-Malmstrom,NAME=341stMedGrp-Malmstrom.xls,NAME2=341stMedGrp-
Malmstrom,FOLDER=West);
%RUNWD(AREA=355th Med Grp-Davis Monthan,NAME=355thMedGrp-DavisMonthan.xls,NAME2=355thMedGrp-
DavisMonthan,FOLDER=West);
%RUNWD(AREA=366th Med Grp-Mountain Home,NAME=366thMedGrp-MountainHome.xls,NAME2=366thMedGrp-
MountainHome,FOLDER=West);
%RUNWD(AREA=377th Med Grp-Kirtland,NAME=377thMedGrp-Kirtland.xls,NAME2=377thMedGrp-
Kirtland,FOLDER=West);
%RUNWD(AREA=3rd Med Grp-Elmendorf,NAME=3rdMedGrp-Elmendorf.xls,NAME2=3rdMedGrp-
Elmendorf,FOLDER=West);
%RUNWD(AREA=509th Med Grp-Whiteman,NAME=509thMedGrp-Whiteman.xls,NAME2=509thMedGrp-
Whiteman,FOLDER=West);
%RUNWD(AREA=55th Med Grp-Offutt,NAME=55thMedGrp-Offutt.xls,NAME2=55thMedGrp-Offutt,FOLDER=West);
%RUNWD(AREA=56th Med Grp-Luke,NAME=56thMedGrp-Luke.xls,NAME2=56thMedGrp-Luke,FOLDER=West);
%RUNWD(AREA=5th Med Grp-Minot,NAME=5thMedGrp-Minot.xls,NAME2=5thMedGrp-Minot,FOLDER=West);
%RUNWD(AREA=60th Med Grp-Travis,NAME=60thMedGrp-Travis.xls,NAME2=60thMedGrp-Travis,FOLDER=West);
%RUNWD(AREA=61st Med Group-Los Angeles,NAME=61stMedGroup-LosAngeles.xls,NAME2=61stMedGroup-
LosAngeles,FOLDER=West);
%RUNWD(AREA=75th Med Grp-Hill,NAME=75thMedGrp-Hill.xls,NAME2=75thMedGrp-Hill,FOLDER=West);
%RUNWD(AREA=90th Med Grp-F.E. Warren,NAME=90thMedGrp-F.E.Warren.xls,NAME2=90thMedGrp-
F.E.Warren,FOLDER=West);
%RUNWD(AREA=92nd Med Grp-Fairchild,NAME=92ndMedGrp-Fairchild.xls,NAME2=92ndMedGrp-
Fairchild,FOLDER=West);
%RUNWD(AREA=95th Med Grp-Edwards,NAME=95thMedGrp-Edwards.xls,NAME2=95thMedGrp-
Edwards,FOLDER=West);
```

```
%RUNWD(AREA=99th Med Grp-OCallaghan Hosp,NAME=99thMedGrp-OCallaghanHosp.xls,NAME2=99thMedGrp-
OCallaghanHosp,FOLDER=West);
%RUNWD(AREA=Evans ACH-Ft. Carson,NAME=EvansACH-Ft.Carson.xls,NAME2=EvansACH-
Ft.Carson,FOLDER=West);
%RUNWD(AREA=Irwin ACH-Ft. Riley,NAME=IrwinACH-Ft.Riley.xls,NAME2=IrwinACH-Ft.Riley,FOLDER=West);
%RUNWD(AREA=L. Wood ACH-Ft. Leonard Wood,NAME=L.WoodACH-Ft.LeonardWood.xls,NAME2=L.WoodACH-
Ft.LeonardWood,FOLDER=West);
%RUNWD(AREA=Madigan AMC-Ft. Lewis,NAME=MadiganAMC-Ft.Lewis.xls,NAME2=MadiganAMC-
Ft.Lewis,FOLDER=West);
%RUNWD(AREA=Munson AHC-Ft. Leavenworth,NAME=MunsonAHC-Ft.Leavenworth.xls,NAME2=MunsonAHC-
Ft.Leavenworth,FOLDER=West);
%RUNWD(AREA=NBHC NAS North
Island,NAME=NBHCNASNorthIsland.xls,NAME2=NBHCNASNorthIsland,FOLDER=West);
%RUNWD(AREA=NBHC NTC San Diego,NAME=NBHCNTCSanDiego.xls,NAME2=NBHCNTCSanDiego,FOLDER=West);
%RUNWD(AREA=NBHC Port Hueneme,NAME=NBHCPortHueneme.xls,NAME2=NBHCPortHueneme,FOLDER=West);
%RUNWD(AREA=NH Bremerton,NAME=NHBremerton.xls,NAME2=NHBremerton,FOLDER=West);
%RUNWD(AREA=NH Camp Pendleton,NAME=NHCampPendleton.xls,NAME2=NHCampPendleton,FOLDER=West);
%RUNWD(AREA=NH LeMoore,NAME=NHLeMoore.xls,NAME2=NHLeMoore,FOLDER=West);
%RUNWD(AREA=NH Oak Harbor,NAME=NHOakHarbor.xls,NAME2=NHOakHarbor,FOLDER=West);
%RUNWD(AREA=NHC Hawaii,NAME=NHCHawaii.xls,NAME2=NHCHawaii,FOLDER=West);
%RUNWD(AREA=NMC San Diego,NAME=NMCSanDiego.xls,NAME2=NMCSanDiego,FOLDER=West);
%RUNWD(AREA=R W Bliss AHC-Ft. Huachuca,NAME=RWBlissAHC-Ft.Huachuca.xls,NAME2=RWBlissAHC-
Ft.Huachuca,FOLDER=West);
%RUNWD(AREA=TRICARE Outpatient-Chula Vista,NAME=TRICAREOutpatient-
ChulaVista.xls,NAME2=TRICAREOutpatient-ChulaVista,FOLDER=West);
%RUNWD(AREA=Tripler AMC-Ft. Shafter,NAME=TriplerAMC-Ft.Shafter.xls,NAME2=TriplerAMC-
Ft.Shafter,FOLDER=West);
%RUNWD(AREA=Weed ACH-Ft. Irwin,NAME=WeedACH-Ft.Irwin.xls,NAME2=WeedACH-Ft.Irwin,FOLDER=West);
%RUNWD(AREA=William Beaumont AMC-Ft. Bliss,NAME=WilliamBeaumontAMC-
Ft.Bliss.xls,NAME2=WilliamBeaumontAMC-Ft.Bliss,FOLDER=West);

/*--dont need to run for pdf report--;
%RUNWD(AREA=West Region-Air force,NAME=WestRegion-Airforce.xls,NAME2=WestRegion-
Airforce,FOLDER=West);
```

H.4.A Q3FY2013\PROGRAMS\ConsumerWatch\CONSUMERWATCH.SAS - Run CONUS TRICARE Consumer Watch reports - Run Quarterly.

```
*******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*          TO PRODUCE EXCEL TABLE.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004.
*
* UPDATE:  4/26/2005 FOR Q1 2005.
* UPDATE:  8/4/2005 FOR Q2 2005.
* UPDATE:  12/15/2005 FOR Q4 2005.
* UPDATE:  04/04/2006 FOR Q2 FISCAL YEAR 2006, LUCY Lu. STARTING THIS QUARTER,
*          THE PERIOD IS CHANGED TO FISCAL YEAR.
* UPDATE:  09/01/2006 Lucy Lu FOR FY 3 2006.
* UPDATE:  10/05/2006 Lucy Lu FOR FY 4 2006.
* MODIFIED 7/30/2007 BY LUCY LU
*          UNIFY THE PERDIOD MACRO VARIABLES WITH BENEFICIARY REPORT CARDS PROGRAMS
*          CURRNT   ===> PERIOD4
*          CURRNTQ  ===> PERIOD4Q
*          PREV1    ===> PERIOD3
*          PREV1Q   ===> PERIOD3Q
*          PREV2    ===> PERIOD2
*          PREV2Q   ===> PERION2Q
*          PREV3    ===> PERIOD1
*          PREV3Q   ===> PERIOND1Q
* UPDATED  12/27/2008 BY LUCY LU FOR Q1 FY 2008
*          AUTOMATE THE CONSUMER WATCH REPORT PRODUCTION
* MODIFIED 5/11/09 BY LUCY LU
*          1.MACRO INCLUDE PROGRAM IS MODIFIED BY REMOVING VALUE OF
*            'Courteous and Helpful Office Staff'. THE PROGRAM WILL DELETE
*            RELATED CODE.
*          2.THE EXCEL AND WORD TEMPLATES ARE MODIFIED TO REMOVE THE CHARTS
*            FOR  'Courteous and Helpful Office Staff'.
*          3.MACRO VARIABLES %LET PERIODxQ WILL BE FIXED AT Q4-Q1.
*            NO CHANGE NEEDED IN EACH QUARTER SINCE THEY ARE THE PROXIES FOR
*            DATASET NAMES ONLY.
*
* MODIFIED 7/22/2010 LUCY LU
*          MODIFY MACRO VARIABLES TO REFLECT THE CHANGE OF INCLUDE MACRO
*          PROGRAM. SEE consumerwatch-macro.inc FOR DETAILS.
*          1.CONSOLIDATE USMHS, REGION, SERVICE PROGRAMS INTO ONE SAS PROGRAM.
*          2.REPLACE PERIOD MACRO VARIABLES WITH CURRENTQ AND CURRENTY.
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\LOADWEB\TOTAL_Q.SAS7BDAT
*
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO.INC
*******************************************************************************;
OPTIONS MPRINT;

LIBNAME CURNTR '..\Loadweb';

*LIBNAME CURNTR 'L:\Q3FY2010\Programs\LoadWeb'; *TEMP;

*starting 2006, the period is changed to fiscal year, LLU 4/5/06;

%LET CURRENTY=2013;       *CURRENT FISCAL YEAR;
%LET CURRENTQ=3;          *CURRENT FISCAL QUARTER;


%LET PATH=L:\Q&CURRENTQ.FY&CURRENTY.\Programs\ConsumerWatch;
*%LET PATH=L:\Q4FY&CURRENTY.\Programs\ConsumerWatch; *TEMP;


TITLE "DOD CONSUMER WATCH Q&CURRENTQ FY &CURRENTY";

%INCLUDE "CONSUMERWATCH_MACRO.INC";
```

```
%RUNCW(AREA=USA MHS,FOLDER=USMHS);
/*

%RUNCW(AREA=NAVY,FOLDER=Navy);
%RUNCW(AREA=AIR FORCE,FOLDER=AirForce);
%RUNCW(AREA=ARMY,FOLDER=Army);
%RUNCW(AREA=WEST,FOLDER=West);
%RUNCW(AREA=NORTH,FOLDER=North);

%RUNCW(AREA=SOUTH,FOLDER=South);


%RUNCW(AREA=JOINT SERVICE,FOLDER=JointService);
%RUNCW(AREA=Overseas Europe,FOLDER=Europe);
%RUNCW(AREA=Overseas Pacific,FOLDER=Pacific);
*/
```

```
********************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-MACRO.INC
* PURPOSE: To produce numbers that go into data sheet in Excel to produce graphs
*          for regional consumer watch
* AUTHOR : MIKI SATAKE
* DATE   : 4/24/01
* UPDATED: 7/16/01 FOR QUARTER 2 BY NATALIE JUSTH
* UPDATED: 10/16/01 FOR QUARTER 3 BY NATALIE JUSTH
* UPDATED: 1/11/02 FOR QUARTER 4 BY NATALIE JUSTH
* UPDATED AND RENAMED: 4/9/02 FOR QUARTER 1 2002 BY NATALIE JUSTH
* UPDATED: 7/5/02 FOR QUARTER 2 2002 BY NATALIE JUSTH
* UPDATED: 7/15/02 FOR QUARTER 3 2002 BY NATALIE JUSTH
* UPDATED: 11/12/02 FOR QUARTER 4 2002 BY NATALIE JUSTH
* UPDATED: 4/3/03 FOR QUARTER 1 2003 BY NATALIE JUSTH
* UPDATED: 5/19/03 FOR QUARTER 2 2003 BY NATALIE JUSTH
* UPDATED: 8/28/03 FOR QUARTER 3 2003 BY NATALIE JUSTH
* UPDATED: 11/14/03 FOR QUARTER 4 2003 BY NATALIE JUSTH
* UPDATED: 05/18/2004 FOR QUARTER 1 2004 BY KEITH RATHBUN
* UPDATED: 06/30/2004 FOR QUARTER 2 2004 BY LUCY LU
* UPDATED: 06/30/2004 FOR QUARTER 3 2004 BY LUCY LU. CHANGING XREGION TO XTNEXREG.
* UPDATED: 10/07/2004 BY LUCY LU. ADD THE CODE TO COMPARE CONSUMER WATCH
*          WITH REPORT CARDS IN SCORES AND SIGNIFICANCE.*
* MODIFIED 2/10/05 BY LUCY LU:
*          1). CREATE UNIVERSAL MACRO PROGRAM BASED ON PROGRAM CONSUMERWATCH-R.SAS
*              TO ELIMINATE REDUNDANCY AND INCREASE THE EFFECTIVENESS OF PROGRAMMING.
*          2). ADD ADDITIONAL PREVENTION MEASURE "SMOKING CESSATION"
*              INTO PREVENTIVE CARE TABLE.
* MODIFIED 06/2/2005 BY LUCY LU FOR Q1 2005:
*          1). REMOVE CHOLESTEROL MEASUREMENT AND ADD BMI MEASUREMENT
*          2). COMMENT OUT DISENROLL CODE--NO DISENROLL DATA IN Q1 2005
*          3). ADD SPECIALIST RATING.
* MODIFIED 11/16/2006 BY LUCY LU FOR FY Q4 2006
*           ADD PURCHASE CARE VERSION-- CHANGE PRIME ENROLLEE TO
*           Enrollees with Civilian PCM.
* MODIFIED 6/4/2007 BY LUCY LU. UNIFY THE MACRO PROGRAMS FOR CONSUMER WATCH.
*          !! NEED TO DEFIND MACRO VARIABLE &POP IN SAS PROGRAMS:
*          DIRECT CARE CONSUMDER WATCH: &POP=='Prime Enrollees'
*          PURCHASE CARE CONSUMDER WATCH: &POP=='Enrollees with Civilian PCM'
* MODIFIED 7/30/2007 BY LUCY LU
*          UNIFY THE PERDIOD MACRO VARIABLES WITH BENEFICIARY REPORT CARDS PROGRAMS
*          CURRNT  ===> PERIOD4
*          CURRNTQ ===> PERIOD4Q
*          PREV1   ===> PERIOD3
*          PREV1Q  ===> PERIOD3Q
*          PREV2   ===> PERIOD2
*          PREV2Q  ===> PERION2Q
*          PREV3   ===> PERIOD1
*          PREV3Q  ===> PERIOND1Q
* MODIFIED 5/11/09 BY LUCY LU
*          1. STARTING THIS QUARTER, THE DATA DOES NOT INCLUDE THE VALUE OF
*             'Courteous and Helpful Office Staff'. THE PROGRAM WILL DELETE
*              RELATED CODE.
*          2. DELTED MACRO VAR &VAL AND REPLACED BY EXISTING MACRO VAR &AREA.
*
* MODIFIED 7/22/2010 BY LUCY LU
*          1. AUTOMATE PERIOD (QAURTER/YEAR) TO MINIMIZE POSSIBLE ERROR
*          2. ADD MACRO TO MINIMIZE EXCEL WAITING, REDUCE PROGRAM
*             RUNNING TIME
*          3. ELIMINATE UNNECESSARY MACRO VARIABLES PERIOD1Q-PERIOD4Q AND
*             CONSOLIDATE MACRO PROGRAM
*          4. REPLACE MACRO VAR &POP WITH 'Prime Enrollees'.
*
* INPUT  : DATA FROM CONSUMER REPORTS:..\..\PROGRAMS\LOADWEB\TOTAL_Q.SAS7BDAT
*
* OUTPUT : INTO EXCEL SPREADSHEET
********************************************************************************;
```

```
OPTIONS PS=60 LS=120 ERRORS=2 NOCENTER NOFMTERR NOXWAIT NOXSYNC SPOOL;

*LLU 7/21/2010--AUTOMATING PERIOD, MINIMIZE POSSIBLE ERROR;
DATA M1;

*Set the first month of each quarter with order of running quarter 1 in FY;
DO MONTH='October', 'July', 'April', 'January';
   OUTPUT;
END;
RUN;

%GLOBAL  PERIOD4 PERIOD3 PERIOD2 PERIOD1;
DATA _NULL_;
   SET M1;


INDEX=_N_;
IF &CURRENTQ =1 THEN DO;
   ORDER=INDEX; YR= &CURRENTY -1;
END;
IF &CURRENTQ = 2 THEN DO;
   IF INDEX = 4 THEN DO; ORDER=1; YR=&CURRENTY; END; ELSE
   IF INDEX < 4 THEN DO; ORDER = INDEX+1; YR=&CURRENTY-1; END;
END;
IF &CURRENTQ = 3 THEN DO;
   IF INDEX >=3 THEN DO; ORDER=INDEX-2; YR=&CURRENTY; END; ELSE
   IF INDEX < 3 THEN DO; ORDER=INDEX+2; YR=&CURRENTY-1; END;
END;
IF &CURRENTQ = 4 THEN DO;
   IF INDEX IN (2,3,4) THEN DO; ORDER=INDEX-1; YR=&CURRENTY; END; ELSE
   IF INDEX =1 THEN DO;  ORDER=4; YR=&CURRENTY-1;  END; /*ELSE
   IF INDEX =4 THEN DO;  ORDER=3; YR=&CURRENTY;   END;*/
END;

LENGTH PERIOD $15;
PERIOD=TRIM(LEFT(MONTH))||','||' '||(PUT(YR,4.));
IF ORDER=1  THEN CALL SYMPUT('PERIOD4', TRIM(LEFT(PERIOD)));
IF ORDER=2  THEN CALL SYMPUT('PERIOD3', TRIM(LEFT(PERIOD)));
IF ORDER=3  THEN CALL SYMPUT('PERIOD2', TRIM(LEFT(PERIOD)));
IF ORDER=4  THEN CALL SYMPUT('PERIOD1', TRIM(LEFT(PERIOD)));

RUN;

%PUT PERIOD4 = &PERIOD4(current quarter);
%PUT PERIOD3 = &PERIOD3;
%PUT PERIOD2 = &PERIOD2;
%PUT PERIOD1 = &PERIOD1;




%MACRO RUNCW (AREA=,          /* Region/Service/conus                    */
              FOLDER=,        /* Folder containing excel template        */
              CURRENT=CURNTR.TOTAL_Q
              );

FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;

   LENGTH FID RC START STOP TIME 8;
   FID = FOPEN('CMDS' , 'S');
   IF (FID LE 0) THEN DO;
      RC = SYSTEM('START EXCEL');
      START = DATETIME();
      STOP = START + 10;
      DO WHILE (FID LE 0);
         FID = FOPEN('CMDS' , 'S');
         TIME = DATETIME();
         IF (TIME GE STOP) THEN FID = 1;
      END;
   END;
   RC = FCLOSE(FID);
RUN;
```

```
*LLU 7/21/2010--DETECTING AVAILABILITY OF EXCEL, MINIMIZE WAITING TIME;
%MACRO SETUP;

DATA _NULL_;
    SINGLE="'";
    DOUBLE='"';

LENGTH OPENXLS SAVEXLS $120;
   OPENXLS=SINGLE||"[OPEN("||DOUBLE||"&PATH.\TEMPLATE.XLSB"||DOUBLE||")]"||SINGLE;
   SAVEXLS=SINGLE||"[SAVE.AS("||DOUBLE||"&PATH.\&FOLDER.\&FOLDER..XLSB"||DOUBLE||")]"||SINGLE;

   CALL SYMPUT ("OPENXLS",TRIM(OPENXLS));
   CALL SYMPUT ("SAVEXLS",TRIM(SAVEXLS));

RUN;

%MEND SETUP;
%SETUP;

DATA _NULL_;

   FILE CMDS;
   PUT &OPENXLS;
   X=SLEEP(2);
   PUT '[ERROR(FALSE)]';
   PUT &SAVEXLS;
   PUT '[app.minimize()]';

RUN;


TITLE2 "&AREA.";

/* This macro pulls data from the specified dataset to be used in the Consumer Watch */
%MACRO GETDATA (DATASET=,    /* Current quarter data set  */
                MAJGRP=,     /* Value of variable MAJGRP  */
                REGION=,     /* Value of variable REGION  */
                REGCAT=,     /* Value of variable REGCAT  */
                BENEFIT=,    /* Value of variable BENEFIT */
                BENTYPE=,    /* Value of variable BENTYPE */
                TIMEPD=,     /* Value of variable TIMEPD  */
                OUTDATA=     /* Name of output data set   */
                );
PROC FREQ NOPRINT DATA=&DATASET;
   WHERE MAJGRP = &MAJGRP
     AND REGION IN &REGION
     AND REGCAT IN &REGCAT
     AND BENEFIT IN &BENEFIT
     AND BENTYPE = &BENTYPE
     AND TIMEPD = &TIMEPD;
   TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SCORE*N_OBS*N_WGT*SIG/ OUT=&OUTDATA(DROP=COUNT
PERCENT);
RUN;
%MEND GETDATA;

/* This macro re-calculates SCORE based on the quarterly benchmark */
%MACRO NEWSCORE (FIGURE=);    * Figure number in consumer watch reports;
*/


*----------------------------------------------------------------------
 7/20/2010 LLu, eliminate macro variables  PERIOD1Q-PERIOD4Q and
 consolidate the macro code:
       Figx_1=current quarter
       Figx_2=previous quarter 1
       Figx_3=previous quarter 2
       Figx_4=previous quarter 3
----------------------------------------------------------------------;

%DO QUARTER = 1 %TO 4;
```

```
DATA FIG&FIGURE._&QUARTER FIGB_&QUARTER(KEEP=SCORE N);
   SET FIG&FIGURE._&QUARTER;
N=1;
   IF REGION='Benchmark' THEN OUTPUT FIGB_&QUARTER;
      ELSE OUTPUT FIG&FIGURE._&QUARTER;

RUN;

/*ADD CODE HERE TO PRESERVE ABOVE DATASET FOR LATER COMPARISON. LLU 10/7/04*/

DATA CFIG&FIGURE._&QUARTER;
   SET FIG&FIGURE._&QUARTER;

KEEP MAJGRP REGION BENEFIT BENTYPE TIMEPD SCORE SIG;
RUN;


DATA FIG&FIGURE._&QUARTER(DROP=RSCORE);
   MERGE FIGB_&QUARTER(RENAME=(SCORE=RSCORE))
         FIG&FIGURE._&QUARTER;
BY N;
 *  SCORE=SCORE-RSCORE;
RUN;
%END;

DATA FIG&FIGURE(DROP=BSCORE);
   SET BENCH FIG&FIGURE._1 FIG&FIGURE._2 FIG&FIGURE._3 FIG&FIGURE._4;
   RETAIN BSCORE;
   IF REGION = 'Benchmark' THEN DO;
      ROW = 3;
      BSCORE=SCORE;
   END;
   ELSE IF TIMEPD = "&PERIOD1" THEN DO;
      ROW = 4;
  *    SCORE=SCORE+BSCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
   END;
   ELSE IF TIMEPD = "&PERIOD2" THEN DO;
      ROW = 5;
  *   SCORE=SCORE+BSCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
   END;
   ELSE IF TIMEPD = "&PERIOD3" THEN DO;
      ROW = 6;
   *  SCORE=SCORE+BSCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
   END;
   ELSE IF TIMEPD = "&PERIOD4" THEN DO;
      ROW=7;
  *    SCORE=SCORE+BSCORE;
   END;
   COL2 = SCORE;   *3/4/08 LLu, increase the score by 100 to align with fig. 5-10;

   COL3 = SIG;
RUN;
PROC SORT;
   BY ROW;
RUN;
%MEND NEWSCORE;

********************************************************************************
* FIGURE 1: Health Care Rating
********************************************************************************;
TITLE2 'Figure 1: Health Care Rating';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Health Care'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD4"),
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
```

```
                MAJGRP="Prime Enrollees",
                REGION=("&AREA",'Benchmark'),
                REGCAT=("&AREA",'Benchmark'),
                BENEFIT=('Health Care'),
                BENTYPE=('Composite'),
                TIMEPD=("&PERIOD4"),
                OUTDATA=FIG1_1);
%GETDATA (DATASET=&CURRENT,
                MAJGRP="Prime Enrollees",
                REGION=("&AREA",'Benchmark'),
                REGCAT=("&AREA",'Benchmark'),
                BENEFIT=('Health Care'),
                BENTYPE=('Composite'),
                TIMEPD=("&PERIOD3"),
                OUTDATA=FIG1_2);
%GETDATA (DATASET=&CURRENT,
                MAJGRP="Prime Enrollees",
                REGION=("&AREA",'Benchmark'),
                REGCAT=("&AREA",'Benchmark'),
                BENEFIT=('Health Care'),
                BENTYPE=('Composite'),
                TIMEPD=("&PERIOD2"),
                OUTDATA=FIG1_3);
%GETDATA (DATASET=&CURRENT,
                MAJGRP="Prime Enrollees",
                REGION=("&AREA",'Benchmark'),
                REGCAT=("&AREA",'Benchmark'),
                BENEFIT=('Health Care'),
                BENTYPE=('Composite'),
                TIMEPD=("&PERIOD1"),
                OUTDATA=FIG1_4);

%NEWSCORE (FIGURE=1);



******************************************************************************
* DDE LINK
******************************************************************************;
FILENAME TBL DDE "EXCEL|RATINGS!R18C2:R22C3";

DATA _NULL_;
   SET FIG1;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT COL2 '09'X COL3;
RUN;

******************************************************************************
* FIGURE 2: Health Plan Rating
******************************************************************************;
TITLE2 'Figure 2: Health Plan Rating';
%GETDATA (DATASET=&CURRENT,
                MAJGRP="Prime Enrollees",
                REGION=('Benchmark'),
                REGCAT=('Benchmark'),
                BENEFIT=('Health Plan'),
                BENTYPE=('Composite'),
                TIMEPD=("&PERIOD4"),
                OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
                MAJGRP="Prime Enrollees",
                REGION=("&AREA",'Benchmark'),
                REGCAT=("&AREA",'Benchmark'),
                BENEFIT=('Health Plan'),
                BENTYPE=('Composite'),
                TIMEPD=("&PERIOD4"),
                OUTDATA=FIG2_1);
%GETDATA (DATASET=&CURRENT,
                MAJGRP="Prime Enrollees",
                REGION=("&AREA",'Benchmark'),
                REGCAT=("&AREA",'Benchmark'),
                BENEFIT=('Health Plan'),
```

```
            BENTYPE=('Composite'),
            TIMEPD=("&PERIOD3"),
            OUTDATA=FIG2_2);
%GETDATA (DATASET=&CURRENT,
            MAJGRP="Prime Enrollees",
            REGION=("&AREA",'Benchmark'),
            REGCAT=("&AREA",'Benchmark'),
            BENEFIT=('Health Plan'),
            BENTYPE=('Composite'),
            TIMEPD=("&PERIOD2"),
            OUTDATA=FIG2_3);
%GETDATA (DATASET=&CURRENT,
            MAJGRP="Prime Enrollees",
            REGION=("&AREA",'Benchmark'),
            REGCAT=("&AREA",'Benchmark'),
            BENEFIT=('Health Plan'),
            BENTYPE=('Composite'),
            TIMEPD=("&PERIOD1"),
            OUTDATA=FIG2_4);

%NEWSCORE (FIGURE=2);



*******************************************************************************
* DDE LINK (EXCEL file has to be open )
*******************************************************************************;
FILENAME TBL DDE "EXCEL|RATINGS!R18C6:R22C7";

DATA _NULL_;
   SET FIG2;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT COL2 '09'X COL3;
RUN;

*******************************************************************************
* FIGURE 3: Personal Provider Rating
*******************************************************************************;
TITLE2 'Figure 3: Personal Provider Rating';
%GETDATA (DATASET=&CURRENT,
            MAJGRP="Prime Enrollees",
            REGION=('Benchmark'),
            REGCAT=('Benchmark'),
            BENEFIT=('Personal Doctor'),
            BENTYPE=('Composite'),
            TIMEPD=("&PERIOD4"),
            OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
            MAJGRP="Prime Enrollees",
            REGION=("&AREA",'Benchmark'),
            REGCAT=("&AREA",'Benchmark'),
            BENEFIT=('Personal Doctor'),
            BENTYPE=('Composite'),
            TIMEPD=("&PERIOD4"),
            OUTDATA=FIG3_1);
%GETDATA (DATASET=&CURRENT,
            MAJGRP="Prime Enrollees",
            REGION=("&AREA",'Benchmark'),
            REGCAT=("&AREA",'Benchmark'),
            BENEFIT=('Personal Doctor'),
            BENTYPE=('Composite'),
            TIMEPD=("&PERIOD3"),
            OUTDATA=FIG3_2);
%GETDATA (DATASET=&CURRENT,
            MAJGRP="Prime Enrollees",
            REGION=("&AREA",'Benchmark'),
            REGCAT=("&AREA",'Benchmark'),
            BENEFIT=('Personal Doctor'),
            BENTYPE=('Composite'),
            TIMEPD=("&PERIOD2"),
            OUTDATA=FIG3_3);
%GETDATA (DATASET=&CURRENT,
```

```
              MAJGRP="Prime Enrollees",
              REGION=("&AREA",'Benchmark'),
              REGCAT=("&AREA",'Benchmark'),
              BENEFIT=('Personal Doctor'),
              BENTYPE=('Composite'),
              TIMEPD=("&PERIOD1"),
              OUTDATA=FIG3_4);

   %NEWSCORE (FIGURE=3);


   *******************************************************************************
   * DDE LINK (EXCEL file has to be open )
   ******************************************************************************;
   FILENAME TBL DDE "EXCEL|RATINGS!R18C10:R22C11";

   DATA _NULL_;
      SET FIG3;
      FILE TBL NOTAB LRECL=200;
      X=SLEEP(.1);
      PUT COL2 '09'X COL3;
   RUN;

   *******************************************************************************
   * FIGURE 4: Specialist Rating--added for Q1 2005, LLu 6/2/05
   ******************************************************************************;
   TITLE2 'Figure 4: Specialist Rating';
   %GETDATA (DATASET=&CURRENT,
              MAJGRP="Prime Enrollees",
              REGION=('Benchmark'),
              REGCAT=('Benchmark'),
              BENEFIT=('Specialty Care'),
              BENTYPE=('Composite'),
              TIMEPD=("&PERIOD4"),
              OUTDATA=BENCH);
   %GETDATA (DATASET=&CURRENT,
              MAJGRP="Prime Enrollees",
              REGION=("&AREA",'Benchmark'),
              REGCAT=("&AREA",'Benchmark'),
              BENEFIT=('Specialty Care'),
              BENTYPE=('Composite'),
              TIMEPD=("&PERIOD4"),
              OUTDATA=FIG4_1);
   %GETDATA (DATASET=&CURRENT,
              MAJGRP="Prime Enrollees",
              REGION=("&AREA",'Benchmark'),
              REGCAT=("&AREA",'Benchmark'),
              BENEFIT=('Specialty Care'),
              BENTYPE=('Composite'),
              TIMEPD=("&PERIOD3"),
              OUTDATA=FIG4_2);
   %GETDATA (DATASET=&CURRENT,
              MAJGRP="Prime Enrollees",
              REGION=("&AREA",'Benchmark'),
              REGCAT=("&AREA",'Benchmark'),
              BENEFIT=('Specialty Care'),
              BENTYPE=('Composite'),
              TIMEPD=("&PERIOD2"),
              OUTDATA=FIG4_3);
   %GETDATA (DATASET=&CURRENT,
              MAJGRP="Prime Enrollees",
              REGION=("&AREA",'Benchmark'),
              REGCAT=("&AREA",'Benchmark'),
              BENEFIT=('Specialty Care'),
              BENTYPE=('Composite'),
              TIMEPD=("&PERIOD1"),
              OUTDATA=FIG4_4);

   %NEWSCORE (FIGURE=4);



   *******************************************************************************
```

```
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;
FILENAME TBL DDE "EXCEL|RATINGS!R18C14:R22C15";

DATA _NULL_;
   SET FIG4;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT COL2 '09'X COL3;
RUN;

*****************************************************************************
* FIGURE 5: Access Composites
*****************************************************************************;
TITLE2 'Figure 5: Access Composites';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD4"),
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD4"),
          OUTDATA=FIG5_1);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD3"),
          OUTDATA=FIG5_2);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD2"),
          OUTDATA=FIG5_3);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD1"),
          OUTDATA=FIG5_4);

*MOD 7/20/2010 LLu;

%MACRO COMPSCORE (FIGNUM=);     *Use macro for figures 5, 6, and 7;

%DO QUARTER = 1 %TO 4;

DATA FIG&FIGNUM._&QUARTER FIGB_&QUARTER (KEEP=SCORE BENEFIT SIG);
   SET FIG&FIGNUM._&QUARTER;
   IF REGION = 'Benchmark' THEN OUTPUT FIGB_&QUARTER;
      ELSE OUTPUT FIG&FIGNUM._&QUARTER;
RUN;
PROC SORT DATA=FIG&FIGNUM._&QUARTER;
   BY BENEFIT;
RUN;
PROC SORT DATA=FIGB_&QUARTER;
   BY BENEFIT;
RUN;
```

```
/*ADD CODE HERE TO PRESERVE THE SCORES IN CONUS_Q DATASET FOR LATER COMPARISON. LLU 10/7/04*/
DATA CFIG&FIGNUM._&QUARTER;
    SET FIG&FIGNUM._&QUARTER;

KEEP MAJGRP REGION BENEFIT BENTYPE TIMEPD SCORE SIG;
RUN;


DATA FIG&FIGNUM._&QUARTER(DROP=RSCORE);
    MERGE FIGB_&QUARTER(RENAME=(SCORE=RSCORE))
         FIG&FIGNUM._&QUARTER;
    BY BENEFIT;
*   SCORE=SCORE-RSCORE;
RUN;
%END;

%MEND COMPSCORE;

%COMPSCORE (FIGNUM=5);

/*LLU 10/8/04, TO PRESERVE KEY VARS FOR LATER COMPARISON*/
DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE RENAME=(SCORE1=COL4))
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7))
      ;
    SET BENCH FIG5_1 FIG5_2 FIG5_3 FIG5_4;
    BY BENEFIT;
    RETAIN BSCORE;
    IF REGION = 'Benchmark' THEN DO;
      BSCORE=SCORE;
      ROW = 18;
      SCORE1 = SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD1" THEN DO;
      ROW = 18;
*      SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD2" THEN DO;
      ROW = 19;
 *      SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD3" THEN DO;
      ROW = 20;
  *    SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD4" THEN DO;
      ROW = 21;
  *    SCORE=BSCORE+SCORE;
      SCORE1 = SCORE;
    END;

    IF (BENEFIT = 'Getting Needed Care' AND REGION NE 'Benchmark') THEN OUTPUT COL2 COL6;
    IF (BENEFIT = 'Getting Needed Care' AND REGION = 'Benchmark') THEN OUTPUT COL3;
    IF (BENEFIT = 'Getting Care Quickly' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
    IF (BENEFIT = 'Getting Care Quickly' AND REGION = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
```

```
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 10/7/04*/

DATA FIG5A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG5B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG5AB;
   SET FIG5A FIG5B;
  BY ROW;
RUN;



DATA FIG5;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4)
         COL5 COL6 COL7;
   BY ROW;
RUN;


**********************************************
* DDE LINK (EXCEL file has to be open )
**********************************************;
FILENAME TBL DDE "EXCEL|COMPOSITES!R18C2:R21C2";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C3:R18C3";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT COL3;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C4:R21C4";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT COL4;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C5:R18C5";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT COL5;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R23C2:R26C4";

DATA _NULL_;
   SET FIG5;
```

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```
    FILE TBL NOTAB LRECL=200;
    X=SLEEP(.1);
    PUT COL6 '09'X '09'X COL7;
RUN;

*******************************************************
* FIGURE 6: Office Composites
*******************************************************;
 /*LLU 5/11/09, DELETE datasets COL2,3,6 WITH SCORES OF
      'Courteous and Helpful Office Staff'*/

TITLE2 'Figure 6: Office Composites';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD4"),
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD4"),
          OUTDATA=FIG6_1);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD3"),
          OUTDATA=FIG6_2);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD2"),
          OUTDATA=FIG6_3);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD1"),
          OUTDATA=FIG6_4);

%COMPSCORE (FIGNUM=6);

/*LLU 10/8/04, TO PRESERVE KEY VARS FOR LATER COMPARISON*/
DATA COL4(DROP=SCORE RENAME=(SCORE1=COL4))
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7))
     ;
   SET BENCH FIG6_1 FIG6_2 FIG6_3 FIG6_4;
   BY BENEFIT;
   RETAIN BSCORE;
   IF REGION = 'Benchmark' THEN DO;
     BSCORE=SCORE;
     ROW = 18;
     SCORE1 = SCORE;
   END;
   ELSE IF TIMEPD = "&PERIOD1" THEN DO;
     ROW = 18;
  *    SCORE=BSCORE+SCORE;
     IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
```

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```
      END;
      ELSE IF TIMEPD = "&PERIOD2" THEN DO;
         ROW = 19;
      *   SCORE=BSCORE+SCORE;
         IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
            ELSE SCORE1=SCORE;
      END;
      ELSE IF TIMEPD = "&PERIOD3" THEN DO;
         ROW = 20;
       *  SCORE=BSCORE+SCORE;
         IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
            ELSE SCORE1=SCORE;
      END;
      ELSE IF TIMEPD = "&PERIOD4" THEN DO;
         ROW = 21;
        * SCORE=BSCORE+SCORE;
         SCORE1 = SCORE;
      END;

      IF (BENEFIT = 'How Well Doctors Communicate' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
      IF (BENEFIT = 'How Well Doctors Communicate' AND REGION = 'Benchmark') THEN OUTPUT COL5;

   RUN;


   PROC SORT DATA=COL4; BY ROW; RUN;
   PROC SORT DATA=COL5; BY ROW; RUN;
   PROC SORT DATA=COL7; BY ROW; RUN;


   DATA FIG6;
      MERGE COL4(KEEP=ROW COL4)
            COL5 COL7;
      BY ROW;
   RUN;


   /*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 6. LLU 10/7/04*/
   DATA FIG6AB;
      MERGE  COL4 COL7;
     BY ROW;
   RUN;


   ****************************************************************
   * DDE LINK (EXCEL file has to be open )
   ***************************************************************;


   FILENAME TBL DDE "EXCEL|COMPOSITES!R18C9:R21C9";

   DATA _NULL_;
      SET FIG6;
      FILE TBL NOTAB LRECL=200;
      X=SLEEP(.1);
      PUT COL4;
   RUN;

   FILENAME TBL DDE "EXCEL|COMPOSITES!R18C10:R18C10";

   DATA _NULL_;
      SET FIG6;
      FILE TBL NOTAB LRECL=200;
      X=SLEEP(.1);
      PUT COL5;
   RUN;

   FILENAME TBL DDE "EXCEL|COMPOSITES!R23C9:R26C9";

   DATA _NULL_;
      SET FIG6;
      FILE TBL NOTAB LRECL=200;
      X=SLEEP(.1);
```

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```
    PUT COL7;
RUN;

*****************************************************************
* FIGURE 7: Claims/Service Composites
*****************************************************************;
TITLE2 'Figure 7: Claims/Service Composites';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD4"),
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD4"),
          OUTDATA=FIG7_1);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD3"),
          OUTDATA=FIG7_2);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD2"),
          OUTDATA=FIG7_3);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="Prime Enrollees",
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          BENTYPE=('Composite'),
          TIMEPD=("&PERIOD1"),
          OUTDATA=FIG7_4);

%COMPSCORE (FIGNUM=7);

/*LLU 10/8/04, TO PRESERVE KEY VARS FOR LATER COMPARISON*/
DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE RENAME=(SCORE1=COL4))
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
   SET BENCH FIG7_1 FIG7_2 FIG7_3 FIG7_4;
   BY BENEFIT;
   RETAIN BSCORE;
   IF REGION = 'Benchmark' THEN DO;
      BSCORE=SCORE;
      ROW = 18;
      SCORE1 = SCORE;
   END;
   ELSE IF TIMEPD = "&PERIOD1" THEN DO;
      ROW = 18;
  *    SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&PERIOD2" THEN DO;
      ROW = 19;
```

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```
    *   SCORE=BSCORE+SCORE;
        IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
            ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD3" THEN DO;
        ROW = 20;
     *   SCORE=BSCORE+SCORE;
        IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
            ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD4" THEN DO;
        ROW = 21;
     *  SCORE=BSCORE+SCORE;
        SCORE1 = SCORE;
    END;

    IF (BENEFIT = 'Customer Service' AND REGION NE 'Benchmark') THEN OUTPUT COL2 COL6;
    IF (BENEFIT = 'Customer Service' AND REGION = 'Benchmark') THEN OUTPUT COL3;
    IF (BENEFIT = 'Claims Processing' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
    IF (BENEFIT = 'Claims Processing' AND REGION = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 7. LLU 10/7/04*/

DATA FIG7A;
    MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG7B;
    MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG7AB;
    SET FIG7A FIG7B;
  BY ROW;
RUN;


DATA FIG7;
    MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
    BY ROW;
RUN;


*******************************************************************************
* DDE LINK (EXCEL file has to be open )
*******************************************************************************;
FILENAME TBL DDE "EXCEL|COMPOSITES!R18C14:R21C14";

DATA _NULL_;
    SET FIG7;
    FILE TBL NOTAB LRECL=200;
    X=SLEEP(.1);
    PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C15:R18C15";

DATA _NULL_;
    SET FIG7;
    FILE TBL NOTAB LRECL=200;
    X=SLEEP(.1);
```

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```
      PUT COL3;
   RUN;

   FILENAME TBL DDE "EXCEL|COMPOSITES!R18C16:R21C16";

   DATA _NULL_;
      SET FIG7;
      FILE TBL NOTAB LRECL=200;
      X=SLEEP(.1);
      PUT COL4;
   RUN;

   FILENAME TBL DDE "EXCEL|COMPOSITES!R18C17:R18C17";

   DATA _NULL_;
      SET FIG7;
      FILE TBL NOTAB LRECL=200;
      X=SLEEP(.1);
      PUT COL5;
   RUN;

   FILENAME TBL DDE "EXCEL|COMPOSITES!R23C14:R26C16";

   DATA _NULL_;
      SET FIG7;
      FILE TBL NOTAB LRECL=200;
      X=SLEEP(.1);
      PUT COL6 '09'X '09'X COL7;
   RUN;

   ********************************************************************************
   * TABLE 1: Preventive Care
   ********************************************************************************;
   PROC FREQ NOPRINT DATA=&CURRENT;
      WHERE MAJGRP IN ("Prime Enrollees",'Benchmark')
        AND REGION = "&AREA"
        AND REGCAT = "&AREA"
        AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
        AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                        'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit')
        AND TIMEPD = "&PERIOD4";
      TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_1(DROP=COUNT PERCENT);
      TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*N_OBS/ OUT=TAB2_1(DROP=COUNT PERCENT);
   RUN;
   PROC FREQ NOPRINT DATA=&CURRENT;
      WHERE MAJGRP = "Prime Enrollees"
        AND REGION = "&AREA"
        AND REGCAT = "&AREA"
        AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
        AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                        'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
        AND TIMEPD = "&PERIOD3";
      TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_2(DROP=COUNT PERCENT);
   RUN;
   PROC FREQ NOPRINT DATA=&CURRENT;
      WHERE MAJGRP = "Prime Enrollees"
        AND REGION = "&AREA"
        AND REGCAT = "&AREA"
        AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
        AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                        'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
        AND TIMEPD = "&PERIOD2";
      TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_3(DROP=COUNT PERCENT);
   RUN;
   PROC FREQ NOPRINT DATA=&CURRENT;
      WHERE MAJGRP = "Prime Enrollees"
        AND REGION = "&AREA"
        AND REGCAT = "&AREA"
        AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
        AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                        'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
        AND TIMEPD = "&PERIOD1";
      TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_4(DROP=COUNT PERCENT);
```

```
RUN;
DATA TAB1_1;
   SET TAB1_1;
   IF MAJGRP = 'Benchmark' THEN DO;
      ROW=42;
      IF BENTYPE='Mammography' THEN COL2=SCORE;
         ELSE IF BENTYPE='Pap Smear' THEN COL3=SCORE;
         ELSE IF BENTYPE='Hypertension' THEN COL4=SCORE;
         ELSE IF BENTYPE='Prenatal Care' THEN COL5=SCORE;
         ELSE IF BENTYPE='Percent Not Obese' THEN COL6=SCORE;
         ELSE IF BENTYPE = 'Non-Smoking Rate' THEN COL7=SCORE;
         ELSE IF BENTYPE ='Counselled To Quit' THEN COL8=SCORE;
   END;
      ELSE DO;
      ROW = 40;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         COL5=SCORE;
         COL12=SIG;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         COL6=SCORE;
         COL13=SIG;
      END;
      ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
         COL7=SCORE;
         COL14=SIG;
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
    END;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB2_1;
   SET TAB2_1;
   ROW=41;
   IF MAJGRP="Prime Enrollees";
   IF BENTYPE='Mammography' THEN COL2=N_OBS;
      ELSE IF BENTYPE='Pap Smear' THEN COL3=N_OBS;
      ELSE IF BENTYPE='Hypertension' THEN COL4=N_OBS;
      ELSE IF BENTYPE='Prenatal Care' THEN COL5=N_OBS;
      ELSE IF BENTYPE='Percent Not Obese' THEN COL6=N_OBS;
      ELSE IF BENTYPE='Non-Smoking Rate' THEN COL7=N_OBS;
       ELSE IF BENTYPE='Counselled To Quit' THEN COL8=N_OBS;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB1_2;
   SET TAB1_2;
   ROW=39;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
```

```
                COL4=SCORE;
                COL11=SIG;
            END;
            ELSE IF BENTYPE='Prenatal Care' THEN DO;
                COL5=SCORE;
                COL12=SIG;
            END;
            ELSE IF BENTYPE='Percent Not Obese' THEN DO;
                COL6=SCORE;
                COL13=SIG;
            END;
            ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
                COL7=SCORE;
                COL14=SIG;
            END;
            ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
                COL8=SCORE;
                COL15=SIG;
            END;
        PROC SORT;
        BY ROW;
    RUN;
    DATA TAB1_3;
        SET TAB1_3;
        ROW=38;
            IF BENTYPE='Mammography' THEN DO;
                COL2=SCORE;
                COL9=SIG;
            END;
            ELSE IF BENTYPE='Pap Smear' THEN DO;
                COL3=SCORE;
                COL10=SIG;
            END;
            ELSE IF BENTYPE='Hypertension' THEN DO;
                COL4=SCORE;
                COL11=SIG;
            END;
            ELSE IF BENTYPE='Prenatal Care' THEN DO;
                COL5=SCORE;
                COL12=SIG;
            END;
            ELSE IF BENTYPE='Percent Not Obese' THEN DO;
                COL6=SCORE;
                COL13=SIG;
            END;
        ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
                COL7=SCORE;
                COL14=SIG;
            END;
            ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
                COL8=SCORE;
                COL15=SIG;
            END;
        PROC SORT;
        BY ROW;

    RUN;
    DATA TAB1_4;
        SET TAB1_4;
        ROW=37;
            IF BENTYPE='Mammography' THEN DO;
                COL2=SCORE;
                COL9=SIG;
            END;
            ELSE IF BENTYPE='Pap Smear' THEN DO;
                COL3=SCORE;
                COL10=SIG;
            END;
            ELSE IF BENTYPE='Hypertension' THEN DO;
                COL4=SCORE;
                COL11=SIG;
            END;
            ELSE IF BENTYPE='Prenatal Care' THEN DO;
```

```
              COL5=SCORE;
              COL12=SIG;
           END;
           ELSE IF BENTYPE='Percent Not Obese' THEN DO;
              COL6=SCORE;
              COL13=SIG;
           END;
        ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
              COL7=SCORE;
              COL14=SIG;
           END;
           ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
              COL8=SCORE;
              COL15=SIG;
           END;
       PROC SORT;
       BY ROW;
    RUN;

    DATA TAB1;
       MERGE TAB1_4 TAB1_3 TAB1_2 TAB1_1 TAB2_1;
       BY ROW;
    RUN;
    DATA COL2(DROP=COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
         COL3(DROP=COL2 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
         COL4(DROP=COL2 COL3 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
         COL5(DROP=COL2 COL3 COL4 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
         COL6(DROP=COL2 COL3 COL4 COL5 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
         COL7(DROP=COL2 COL3 COL4 COL5 COL6 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
         COL8(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
         COL9(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL10 COL11 COL12 COL13 COL14 COL15)
         COL10(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL11 COL12 COL13 COL14 COL15)
         COL11(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL12 COL13 COL14 COL15)
         COL12(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL13 COL14 COL15)
       COL13(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL14 COL15)
         COL14(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL15)
         COL15(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14);

       SET TAB1;

       IF COL2 NE . THEN OUTPUT COL2;
       IF COL3 NE . THEN OUTPUT COL3;
       IF COL4 NE . THEN OUTPUT COL4;
       IF COL5 NE . THEN OUTPUT COL5;
       IF COL6 NE . THEN OUTPUT COL6;
       IF COL7 NE . THEN OUTPUT COL7;
       IF COL8 NE . THEN OUTPUT COL8;
       IF COL9 NE . THEN OUTPUT COL9;
       IF COL10 NE . THEN OUTPUT COL10;
       IF COL11 NE . THEN OUTPUT COL11;
       IF COL12 NE . THEN OUTPUT COL12;
       IF COL13 NE . THEN OUTPUT COL13;
       IF COL14 NE . THEN OUTPUT COL14;
       IF COL15 NE . THEN OUTPUT COL15;
    RUN;

    PROC SORT DATA=COL2; BY ROW; RUN;
    PROC SORT DATA=COL3; BY ROW; RUN;
    PROC SORT DATA=COL4; BY ROW; RUN;
    PROC SORT DATA=COL5; BY ROW; RUN;
    PROC SORT DATA=COL6; BY ROW; RUN;
    PROC SORT DATA=COL7; BY ROW; RUN;
    PROC SORT DATA=COL8; BY ROW; RUN;
    PROC SORT DATA=COL9; BY ROW; RUN;
    PROC SORT DATA=COL10; BY ROW; RUN;
    PROC SORT DATA=COL11; BY ROW; RUN;
    PROC SORT DATA=COL12; BY ROW; RUN;
    PROC SORT DATA=COL13; BY ROW; RUN;
    PROC SORT DATA=COL14; BY ROW; RUN;
    PROC SORT DATA=COL15; BY ROW; RUN;

    DATA TABLE1;
       MERGE COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15;
```

```
   BY ROW;
RUN;

********************************************************************************
* DDE LINK (EXCEL file has to be open )
********************************************************************************;
FILENAME TBL DDE "EXCEL|TABLES!R3C10:R8C24";

DATA _NULL_;
   SET TABLE1;
   FILE TBL NOTAB LRECL=200;
   IF ROW NE 42 THEN DO;
   PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X COL8 '09'X COL9 '09'X
COL10
      '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
   END;
   ELSE DO;    *no benchmark for counselling;
   PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X '-' '09'X COL9 '09'X
COL10
      '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
   END;
RUN;

/*Run Excel macro signif,  May 9 2006, LLU*/

options noxsync;
*-- Specify XL filename ;

*%let excelf = &FOLDER..XLSB ;

*-- Specify XL macro name ;
%let macron = signif ;


FILENAME CMDS DDE "EXCEL|SYSTEM";


DATA _NULL_;
  FILE CMDS;
  DDECommand = '[Run("' || "&macron" || '",0)]' ;
  put DDEcommand ;

RUN;

/*
DATA _NULL_;
   FILE CMDS;
   PUT '[SAVE]';
   PUT '[QUIT]';
RUN; */

DATA _NULL_;
   FILE CMDS;
   PUT '[CLOSE(TRUE)]';
RUN;

********************************************************************************
      COMPARE SCORES AND SIG B/T CONSUMER WATCH AND REPORT CARDS.
      SET 0.015 DIFFERENCE AS THRESHOLD.
      LUCY LU 10/07/2004
********************************************************************************;

PROC SORT DATA=FIG1(DROP=SCORE);               *FROM CONSUMER WATCH. LLU 10/8/04;
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=FIG2(DROP=SCORE);
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=FIG3(DROP=SCORE);
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=FIG5AB OUT=FIG5;
BY BENEFIT TIMEPD REGION;
```

```
PROC SORT DATA=FIG6AB OUT=FIG6;
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=FIG7AB OUT=FIG7;
BY BENEFIT TIMEPD REGION;
RUN;




%MACRO COMPARE(I=, TITL=);


DATA CFIG&I;                    *FROM CONUS. LLU 10/8/04;

  SET CFIG&I._1
      CFIG&I._2
      CFIG&I._3
      CFIG&I._4
      ;
RUN;


PROC SORT DATA=FIG&I;
BY BENEFIT TIMEPD REGION;
RUN;

PROC SORT DATA=CFIG&I;
BY BENEFIT TIMEPD REGION;
RUN;

DATA COMBFIG&I;
   MERGE CFIG&I.(IN=F1) FIG&I(IN=F2);
BY BENEFIT TIMEPD REGION;


IF F1 AND F2;

FIG = &I;

IF FIG <=4 THEN DO;
   SCORE2=COL2;
   SIG2=COL3;
END;

ELSE IF FIG >4 THEN DO;
   IF COL2 >= 0 THEN SCORE2=COL2;
   ELSE IF COL4 >0 THEN SCORE2=COL4;

   IF COL6 >= .Z THEN SIG2=COL6;
   ELSE IF COL7>=.Z THEN SIG2=COL7;
END;


   SCOREDIF=SCORE2-SCORE;
   SIGDIF=SIG2-SIG;


IF ABS(SCOREDIF)>.015 OR SIGDIF>0 THEN FLAG=1;
ELSE FLAG=0;

KEEP BENEFIT TIMEPD REGION SCORE SIG SCORE2 SIG2 SCOREDIF SIGDIF FLAG;

LABEL
FLAG="DIFF IN SCORES >0.015 OR/AND DIFF IN SIG >0"
SCORE="SCORES FROM CONUS"
SCORE2="SCORES FROM CONSUMER WATCH"
SIG="SIG FROM CONUS"
SIG2="SIG FROM CONSUMER WATCH"
;
```

```
TITLE  "  ";
TITLE2 "**********************************************************";
TITLE3 "CONSUMER WATCH, &AREA ";

PROC PRINT L NOOBS;
TITLE4 "Compare &TITL.";
RUN;


%MEND COMPARE;


%COMPARE(I=1, TITL=Health Care Rating);
%COMPARE(I=2, TITL=Health Plan Rating);
%COMPARE(I=3, TITL=Personal Provider Rating);
%COMPARE(I=4, TITL=Specialist Rating);

%COMPARE(I=5, TITL=Access composites);

%COMPARE(I=6, TITL=Office composites);
%COMPARE(I=7, TITL=Claims/Service composites);



%MEND RUNCW;
```

H.5.A Q3FY2013\PROGRAMS\ConsumerWatch\CONSUMERWATCH_WORD.SAS - Run the automation of the MS Word Consumer Watch report production.

```
********************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-Word.SAS
*
* PURPOSE: CALL CONSUMERWATCH-MACRO-WORD.INC PROGRAM
*          TO PRODUCE WORD DOCUMENT FOR Consumer Watch report.
*
* WRITTEN: 2/21/2008 LUCY LU
*
* INPUT  : EXCEL CHARTS
*
* OUTPUT : WORD DOCUMENTS
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO-WORD.INC
* MODIFIED : 4/2/2010 BY LUCY LU, SEE COMMENT ON INCLUDE FILE.
* MODIFIED : 7/23/2010 BY LUCY LU. COMBINE ALL 3 WORD PROGRAMS (USMHS,
*            REGION, SERVICE) INTO A SINGLE PROGRAM.
********************************************************************************;
OPTIONS MPRINT;


%LET QUARTER=3;                             *CURRENT QUARTER;
%LET PERIOD=April 2012 to March 2013;       *FISCAL YEAR PRIOR TO CURRENT QUARTER;
%LET YEAR=2013;                             *CURRENT FISCAL YEAR;
%LET QUARTER3=third;                        *CURRENT QUARTER;


%LET PATH=L:\Q&QUARTER.FY&YEAR.\Programs\ConsumerWatch;
%LET RATEPATH=..\..\Data\Afinal\Response_Rate;
*%LET RATEPATH=L:\Q3FY2010\Data\AFinal\Response_Rate;           *TEMP;

%INCLUDE "consumerwatch_macro_word.inc";


*%RUNWD(FOLDER=Army,YOURSAY=your service);
%RUNWD(FOLDER=North,YOURSAY=your region);
%RUNWD(FOLDER=West,YOURSAY=your region);
%RUNWD(FOLDER=South,YOURSAY=your region);
%RUNWD(FOLDER=Navy,YOURSAY=your service);
%RUNWD(FOLDER=JointService,NAME=Joint Service,YOURSAY=your service);

%RUNWD(FOLDER=Europe,YOURSAY=your region);
%RUNWD(FOLDER=Pacific,YOURSAY=your region);
%RUNWD(FOLDER=USMHS,NAME=US MHS,YOURSAY=US MHS);
%RUNWD(FOLDER=AirForce,NAME=Air Force,YOURSAY=your service);
```

H.5.B   Q3FY2013\PROGRAMS\ConsumerWatch\CONSUMERWATCH_MACRO_WORD.INC - Automate the MS Word Consumer Watch report production.

```
********************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-marco-WORD.INC
*
* AUTHOR : LUCY LU
* PURPOSE: Automate the copy and paste process, update the year, region,
*          response rate and sample size for quarterly Consumer
*          Watch report.
*
* DATE   : 03/31/2009
*
* OUTPUT : WORD DOCUMENTS
* MODIFIED: 04/12/2010 BY LUCY LU
*            1. Charts in Word are linked to Excel and automated updated once Excel
*               makes change.
*            2. Excel Triplet doeasn't work for MS 2007/SAS 9. Using direct VBA
*               code in SAS.
*            3. The final product is in pdf format. Word report is intentionally
*               unsaved to reserve bookmarks.
* MODIFIED: 06/4/2010 BY LUCY LU
*            1. Replicating the template of Q2 2010 report found the lower quality
*               of charts in Word report. Using copy and paste instead of link.
*            2. The final products are in Word and pdf format.
* MODIFIED 7/23/2010 BY LUCY LU
*           ADD MACRO TO MINIMIZE EXCEL AND WORD WAITING, REDUCE PROGRAM
*           RUNNING TIME
* MODIFIED 2/25/2013 BY LUCY LU
*           ADD NEW FILE TO READ RESPONSE RATE FOR JOINT SERVICE
********************************************************************************;

OPTIONS NOXWAIT SPOOL NOXSYNC;

*LLU 7/21/2010--DETECTING AVAILABILITY OF EXCEL, MINIMIZE WAITING TIME;


%MACRO RUNWD(FOLDER=,NAME=&FOLDER,YOURSAY= );

*7/23/2010 LLU, Wait until Excel ready;

FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;

   LENGTH FID RC START STOP TIME 8;
   FID = FOPEN('CMDS' , 'S');
   IF (FID LE 0) THEN DO;
      RC = SYSTEM('START EXCEL');
      START = DATETIME();
      STOP = START + 10;
      DO WHILE (FID LE 0);
         FID = FOPEN('CMDS' , 'S');
         TIME = DATETIME();
         IF (TIME GE STOP) THEN FID = 1;
      END;
   END;
   RC = FCLOSE(FID);
RUN;


%MACRO SETUP;
   DATA TEST _NULL_;

   SINGLE="'";
   DOUBLE='"';

   LENGTH OPENXLS OPENWRD SAVEWRD $120;
   OPENXLS=SINGLE||"[OPEN("||DOUBLE||"&PATH.\&FOLDER.\&FOLDER..xlsb"||DOUBLE||")]"||SINGLE;
   OPENWRD=SINGLE||"[FileOpen.Name="||DOUBLE||"&PATH.\template.docm"||DOUBLE||"]"||SINGLE;
```

```
SAVEWRD=SINGLE||"[FileSaveAs.Name="||DOUBLE||"&PATH.\&FOLDER.\&FOLDER..DOCM"||DOUBLE||"]"||SINGLE
;

    CALL SYMPUT ("OPENXLS",TRIM(OPENXLS));
    CALL SYMPUT ("OPENWRD",TRIM(OPENWRD));
    CALL SYMPUT ("SAVEWRD",TRIM(SAVEWRD));

RUN;

%MEND SETUP;
%SETUP;

DATA _NULL_;
 FILE CMDS;
PUT &OPENXLS;
X=SLEEP(2);
PUT '[app.minimize()]';
RUN;

*7/23/2010 LLU, Wait until Word ready;
FILENAME CMNDS DDE "WINWORD|SYSTEM";

DATA _NULL_;
  LENGTH FID RC START STOP TIME 8;
  FID=FOPEN('CMNDS','S');
  IF (FID LE 0) THEN DO;
    RC=SYSTEM('START WINWORD');
    START=DATETIME();
    STOP=START+10;
    DO WHILE (FID LE 0);
      FID=FOPEN('CMNDS','S');
      TIME=DATETIME();
      IF (TIME GE STOP) THEN FID=1;
      END;
    END;
  RC=FCLOSE(FID);
RUN;

DATA _NULL_;
  FILE CMNDS;
  PUT &OPENWRD;
  X=SLEEP(2);
  PUT &SAVEWRD;
  PUT '[APPMINIMIZE]';
RUN;

%MACRO COPYIT;
%DO I=1 %TO 8;


    %LET WDMACRO=NEWPASTE&I;
    %LET EXMACRO=COPY&I;

FILENAME CMDS DDE "EXCEL|SYSTEM";

      DATA _NULL_;
      FILE CMDS;
      DDECommand = '[Run("' || "&exmacro" || '",0)]' ;
      PUT DDEcommand ;

      RUN;
      FILENAME CMDS CLEAR;

      FILENAME CMNDS DDE 'WINWORD|SYSTEM';

      /*DATA _NULL_;
      X=SLEEP(2);
      RUN;*/


      DATA _NULL_;
      FILE CMNDS;
```

```
              put '[ToolsMacro .Name = "' "&wdmacro" '", .Run]';
              RUN;

              FILENAME CMNDS CLEAR;

              RUN;


   %END;
   %MEND COPYIT;
   %COPYIT;


   *READ THE SAMPLE SIZE AND RESPONSE RATE IN .OUT FILES
    AND CREATE MACRO VARIABLES for Word document;
   %MACRO RATE1 (DAT);
     DATA &DAT;

          INFILE "&RATEPATH.\&DAT..OUT" LRECL=9999 RECFM=V;
          INPUT LINEIN $100 @; DROP LINEIN;
          IF _N_ GE 7 THEN DO;
              INPUT
                 @001 DOMAIN    $CHAR40.
                 @141 FRR_UNWT  4.3
                 @147 POP       $CHAR7.;
                  ;
               OUTPUT;
          END;
     RUN;

   *MS 2007 doesnt take comma7 format. This is hard code the comma into text;
   DATA &DAT;
      SET &DAT;
    LENGTH POP_UNWT $10;
      POP1=SUBSTR(RIGHT(POP),1,1);
      POP2=SUBSTR(RIGHT(POP),2,3);
      POP3=SUBSTR(RIGHT(POP),5,3);
      POP_UNWT=CATX(',',POP1,POP2,POP3);
   RUN;

   %MEND RATE1;

   %RATE1(TABLE02A);
   %RATE1(XTNEXREG);
   %RATE1(XOCONUS);
   %RATE1(SERVAFF);
   %RATE1(JSFLAG);

   DATA ALLRATE;
     SET TABLE02A
         XTNEXREG
         XOCONUS
         SERVAFF
         JSFLAG
         ;

      DOMAIN=COMPRESS(DOMAIN);
      IF UPCASE(DOMAIN)=UPCASE('WesternPacific') THEN DOMAIN='PACIFIC';
      IF UPCASE(DOMAIN)=UPCASE('Y') THEN DOMAIN='JOINTSERVICE';

      IF DOMAIN='' THEN DOMAIN="USMHS";
      FRR_UNWT=FRR_UNWT*100;

    *PUT POP_UNWT=  FRR_UNWT=;
    IF UPCASE("&FOLDER.")=UPCASE(DOMAIN) THEN OUTPUT;

   RUN;


   DATA _NULL_;
      SET ALLRATE;
```

```
CALL SYMPUT ("SIZE1", COMPRESS(POP_UNWT));
CALL SYMPUT ("RATE1", COMPRESS(FRR_UNWT));

RUN;

FILENAME CMNDS DDE "WINWORD|SYSTEM";
/*
DATA _NULL_;
   FILE CMNDS;
   *X=SLEEP(2);
   PUT '[AppMinimize]';
RUN;
*/

DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Region1"]';
 put '[FormatFont.Font="Arial",.Points="20"]';
 PUT "&NAME";
RUN;

DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Quarter1"]';
 put '[FormatFont.Font="Arial",.Points="20"]';
 PUT "&QUARTER";
RUN;

DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Year1"]';
 put '[FormatFont.Font="Arial",.Points="20"]';
 PUT "&YEAR";
RUN;


DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="SIZE"]';
 put '[FormatFont.Font="Arial",.Points="10"]';
 PUT "&SIZE1";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="RATE"]';
 put '[FormatFont.Font="Arial",.Points="10"]';
 PUT "&RATE1";
RUN;

DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Region2"]';
 put '[FormatFont.Font="Arial",.Points="10"]';
 PUT "&NAME";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="YourSay"]';
 put '[FormatFont.Font="Times New Roman",.Points="11"]';
 PUT "&YOURSAY";
RUN;

DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Quarter3"]';
 put '[FormatFont.Font="Times New Roman",.Points="11"]';
 PUT "&QUARTER3";
RUN;
```

```
DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="year3"]';
 put '[FormatFont.Font="Times New Roman",.Points="11"]';
 PUT "&YEAR";
RUN;

DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Period"]';
 put '[FormatFont.Font="Times New Roman",.Points="11"]';
 PUT "&PERIOD";
RUN;


DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="Region3"]';
 put '[FormatFont.Font="Arial",.Points="16"]';
 PUT "&NAME";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="Quarter2"]';
 put '[FormatFont.Font="Arial",.Points="16"]';
 PUT "&QUARTER";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="Year2"]';
 put '[FormatFont.Font="Arial",.Points="16"]';
 PUT "&YEAR";
RUN;

*savs as pdf;
%LET CMACRO=SaveAspdf;

FILENAME CMNDS DDE 'WINWORD|SYSTEM';
DATA _NULL_;
 FILE CMNDS;

PUT '[ToolsMacro .Name = "' "&CMACRO" '"', .Run]';
run;


FILENAME CMDS DDE 'EXCEL|SYSTEM';

DATA _NULL_;
    FILE CMDS;
    *PUT '[SAVE]';  *no save for Excel;
    PUT '[CLOSE(FALSE)]';
    PUT '[ERROR(FALSE)]';
    PUT '[QUIT]';
RUN;


/* reserved for future use;
FILENAME CMNDS DDE 'WINWORD|SYSTEM';
DATA _NULL_;
 FILE CMNDS;

 PUT '[fileSave] ';
 PUT '[FileClose 2] ';
RUN;*/

%MEND;
```

APPENDIX I

SAS CODE FOR STATISTICAL AND WEB SPECIFICATIONS FOR THE 2013 TRICARE PURCHASED CARE BENEFICIARY REPORTS - QUARTERS I-III

I.1.A   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\STEP1Q.SAS - Create and recode variables used in Adult Beneficiary Reports - Run Quarterly.

```
****************************************************************************
*
*  PROJECT:  DoD – Quarterly Adult Report Cards
*  PROGRAM:  STEP1Q.SAS
*  PURPOSE:  Create Dummy and Recode Variables used in Adult Report Card
*                    Create a Female dummy variable
*                    Create an Education dummy variable
*                    Create 15 region dummies combining regions.
*                            7 & 8 into region 8. That is, there
*                            isn't a region 7 dummy.
*                    Create 7 age dummy variables.
*
*            We require the most desired code to be the highest value.
*            Recode the dependent variables into:
*                    1 - the least desirable value
*                    2 - the 2nd least desirable value
*                    3 - the most desirable value
*                    . - missing
*
*            Create 7 variables GROUP1 - GROUP7
*                    IF (XINS_COV IN (1,2,6) AND H10004>=2) THEN GROUP1 = 1
*                    IF (XENR_PCM IN (1,2,6) AND H10004>=2) THEN GROUP2 = 1
*                    IF (XENR_PCM = 3,7      AND H10004>=2) THEN GROUP3 = 1
*                    IF XINS_COV IN (3)                     THEN GROUP4 = 1
*                            /*JSO 08/24/2006, Deleted 4,5*/
*                    IF XBNFGRP = 1                    THEN GROUP5 = 1
*                    IF XBNFGRP = 2                    THEN GROUP6 = 1
*                    IF XBNFGRP IN (3,4)               THEN GROUP7 = 1
*                    GROUP8 is output for all beneficiaries
*
*  MODIFIED: 1) February 2001 By Keith Rathbun, Update for quarterly
*                adult report cards.  Removed permanent dataset ENTIRE.SD2.
*            2) August 2001 By Keith Rathbun, Updated DSN and LIBNAME
*                for 3rd quarter adult report cards.
*            3) OCTOBER 2001 BY DANIELE BEAHM, Because there was no post-
*                stratification done in Q3, changed all references of the
*                POSTSTR variable to ADJ_CELL
*            4) JANUARY 2002 BY DANIELE BEAHM, Modified group3 to include
*                XENR_PCM
*            5) April 2002 By Mike Scott, Updated variable names for 2002
*                survey.
*            6) July 2002 By Mike Scott: See Note #2.  Replaced variable
*                S02S01 with H04075 (new health status variable), deleted
*                code to recode S02S01 to H00077, and changed H00077/R00077
*                rename/recode to H04075/R04075 rename/recode.  The Hispanic/
*                Latino variable is not present.
*            7) January 2003 By Mike Scott, Changed ADJ_CELL to COM_SAMP.
*            8) March 2003 By Mike Scott, Updated variable names for 2003
*                survey.
*            9) June 2003 By Mike Scott, Updated for Q2 2003.
*            10) July 2003 By Mike Scott, Changed COM_SAMP to ADJ_CELL.
*            11) October 2003 By Mike Scott, Updated for Q3 2003.
*            12) January 2004 By Mike Scott, Updated for Q4 2003, and changed
*                DAGEQY to FIELDAGE.
*            13) March 2004 By Mike Scott, Updated for Q1 2004.
*            14) April 2004 By Keith Rathbun, Removed reverse coding for
*                H04031.  2004 survey question wording is 'Within 15 minutes'
*                instead of "More than 15 Minutes".  Added service affiliation
*                variables so only one version of this program is needed to
*                handle the consumer watch processing.
*             15) June 2004 by Regina Gramss, Updated for Q2 2004.
*            16) Sept 2004 by Regina Gramss, changed XRegion to xtenxreg, updated for Q3 2004.
*            17) Jan 2005 by Regina Gramss, changed XTENXREG to XSERVREG to include
*                service affiliation.  Regions have been changed from 4 categories to 16.
*            18) Apr 2005 by Regina Gramss, updated field names for 2005 data.
*            19) Jul 2005 by Regina Gramss, updated for Q2 2005
*            20) Oct 2005 by Regina Gramss, updated for Q3 2005
*            21) Dec 2005 by Regina Gramss, updated for Q4 2005
*            22) March 21, 2006 by Keith Rathbun, updated variable names
```

```
*                      for Q2 FY 2006.  Changed references to ADJ_CELL to be STRATUM.
*            23) July 12, 2006 by Justin Oh, updated for Q3 FY 2006
*            24) Aug 22, 2006 by Justin Oh, changed overseas to 3 regions.
*                Regions have been changed from 16 categories to 24.
*                Added XOCONUS to the Keep statement for Overseas classifications.
*                Changed XSERVREG for Overseas (Europe,Pacific,Latin America).
*                Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                        IF XINS_COV IN (3)     THEN GROUP4 = 1
*                Since only XINS_COV IN (1,2,3,6) is kept, (4,5) not needed.
*            25) Oct 03, 2006 by Justin Oh, changed input data HCS063_1 to HCS064_1
*                for Q4FY2006 reports.
*            26) Apr 05, 2007 by Justin Oh, Added %LET BCHTYPE to select BCH types
*                Benchmark OR PurchasedBenchmark.
*            27) Apr 05, 2007 by Justin Oh, Added changes to select RC types
*                ReportCards OR PurchasedReportCards.
*            28) Apr 26, 2007 by Justin Oh, Added codes, variables for new
*                reservists logic.
*            29) May 15, 2007 by Justin Oh, Changed XINS_COV to NXNS_COV to assign
*                Groups 1,3, and 4 for new reservists logic.
*            30) Jul 30, 2007 by Justin Oh, Added added DBENCAT conditions to assign
*                Groups All, 4, 5, and 6.
*            31) Oct 02, 2007 by Justin Oh, changed input data HCS073_1 to HCS074_1
*                for Q4FY2007 reports.
*            32) January 10, 2008 by Keith Rathbun, updated variable names
*                for Q1 FY 2008.
*            33) Apr 11, 2008 by Justin Oh, changed input data HCS081_1 to HCS082_1
*                for Q2FY2008 reports.
*            34) June 13, 2008 by Keith Rathbun, changed input data HCS082_1 to HCS083_1
*                for Q3FY2008 reports.
*            35) Jan 16, 2009 by Mike Rudacille, changed CONUS variable to USA
*            36) Jan 21, 2009 by Mike Rudacille, changed 2009 questionnaire variables
*                applicable to both V3 and V4 from V3 names to V4 names
*            37) March 11, 2009 by Keith Rathbun, changed input data HCS091_1 to HCS092_1
*                for Q2FY2009 reports.
*            38) April 6, 2009 by Mike Rudacille, changed variable names to reflect
*                modifications to beneficiary reports necessary for V4
*            39) June 22, 2009 By Keith Rathbun, Change weight variable from
*                FWRWT_V4 back to FWRWT.  Changed input data HCS092_1 to HCS093_1
*                for Q3FY2009 reports.
*            40) Sept 30, 2009 By Mike Rudacille, Changed input data HCS093_1 to HCS094_1
*                for Q4FY2009 reports.
*            41) December 17, 2009 By Emma Ernst, Updated program for Q1FY2010.  Updated Variables
names
*                and input dataset.
*            42) March 2, 2010 By Mike Rudacille, Changed input data HCS101_1 to HCS102_1
*            43) March 25, 2010 By Mike Rudacille, Changed input data HCS102_1 to HCS102_2.
*                The FIELDAGE var is no longer included in the HCSyyq_1 dataset.
*            44) June 19, 2010 By Mike Rudacille, Changed input data HCS102_2 to HCS103_2.
*            45) August 28, 2010 By Mike Rudacille, Changed input data HCS103_2 to HCS104_2.
*            46) December 1, 2010 By Mike Rudacille, Updated program for Q1FY2011. Updated
Variable names
*                and input dataset.
*            47) February 24, 2011 By Mike Rudacille, Changed input data HCS111_2 to HCS112_2.
*            48) December 10, 2011 By Mike Rudacille, Updated program for Q1FY2012. Updated
Variable names
*                and input dataset.
*            49) March 5, 2012 By Amanda Kudis, Updated program for Q2FY2012.
*            50) June 21, 2012 By Amanda Kudis, Updated program for Q3FY2012.
*            51) August 23, 2012 By Christine Cheu, Updated program for Q4FY2012.
*            52) November 3, 2012 By Mike Rudacille, Updated for handling of Joint Service
facilities
*            53) December 27, 2012 By Aimee Valenzuela, Update program for Q1FY2013.Updated
Variable names
*                and input dataset.
*            54) March 23, 2013 By Mike Rudacille, Update program for Q2FY2013.
*
*  INPUTS:   1) HCSyyq_2 - DoD Quarterly HCS Database
*
*  OUTPUTS:  1) GROUP1-8.sas7bdat - DoD Quarterly GROUP files as defined above
*
*  INCLUDES: 1) CONVERT.SAS - Convert item responses to proportional
*                             values for consistency w/ TOPS
*
```

```
*  NOTES:     1) Groups 1-3 modified 10/09/2000
*
*            2) In Q1_2002, S02S01 was renamed and recoded to H00077 (health
*               status variable for 2000).  H02077 was the Hispanic/Latino
*               variable.  In Q2_2002, H02077 is health status, and H02079
*               is the Hispanic/Latino variable.  To make the Quarter 2 data
*               file (HSC022_1.sd2) more consistent with the Quarter 1 file,
*               the health status variable which was H02077 is now H04075,
*               and the Hispanic/Latino variable which was H02079 is now
*               H02077.
*
*************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards                ***/
%LET RCTYPE = PurchasedReportCards;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR NOOVP COMPRESS=YES;
LIBNAME OUT      "DATA";
LIBNAME IN1      "..\..\..\Data\AFinal";
LIBNAME LIBRARY  "..\..\..\Data\Afinal\fmtlib";

TITLE1    'Program Saved as: STEP1Q.SAS';

%LET WGT = FWRWT;

proc format;
     value servreg 1 = 'North Army'
                   2 = 'North Air Force'
                   3 = 'North Navy'
                   4 = 'North Other'
                   5 = 'North Joint Service'
                   6 = 'South Army'
                   7 = 'South Air Force'
                   8 = 'South Navy'
                   9 = 'South Other'
                  10 = 'South Joint Service'
                  11 = 'West Army'
                  12 = 'West Air Force'
                  13 = 'West Navy'
                  14 = 'West Other'
                  15 = 'West Joint Service'
                  16 = 'Europe Army'
                  17 = 'Europe Air Force'
                  18 = 'Europe Navy'
                  19 = 'Europe Other'
                  20 = 'Europe Joint Service'
                  21 = 'Pacific Army'
                  22 = 'Pacific Air Force'
                  23 = 'Pacific Navy'
                  24 = 'Pacific Other'
                  25 = 'Pacific Joint Service'
                  26 = 'Latin America Army'
                  27 = 'Latin America Air Force'
                  28 = 'Latin America Navy'
                  29 = 'Latin America Other'
                  30 = 'Latin America Joint Service';

DATA ENTIRE;
   SET IN1.HCS133_2(KEEP=
                MPRID
                XCATCH     /*MER 11/03/12*/
                FIELDAGE   /*MJS 01/26/04*/
                XTNEXREG
                SERVAFF    /*KRR 04/09/04*/
                DBENCAT    /*JSO 04/26/2007, added for reservists logic*/
                USA
                ENBGSMPL
                SREDA
                XSEXA
                XBNFGRP
                STRATUM    /*KRR 04/03/2006, changed from ADJ_CELL*/
                XINS_COV
                XENR_PCM
```

```
                XOCONUS    /*JSO 08/24/2006, Overseas Region Indicator*/
                &WGT.
                /* Getting Needed Care */
                H13033
                H13029
                /* Getting Care Quickly */
                H13007
                H13010
                /* How Well Doctors Communicate */
                H13021
                H13022
                H13023
                H13024
                /* Customer Service */
                H13041
                H13042
                /* Claims Processing */
                H13046
                H13047  /***************************/
                H13065  /* Health Status          */
                H13018  /* Health Care Rating      */
                H13048  /* Health Plan Rating      */
                H13027  /* Personal Doctor Rating  */
                H13031  /* Specialist Rating       */
                H13003  /* Health Plan Used        *//*JSO 04/26/2007, added for reservists
logic*/
                H13004  /* How Long in Health Plan */
                        /***************************/
            );
    FORMAT _ALL_;
    IF SERVAFF='A' THEN XSERVAFF=1;              *Army;
        ELSE IF SERVAFF='F' THEN XSERVAFF=2;    *Air Force;
        ELSE IF SERVAFF='N' THEN XSERVAFF=3;    *Navy;
        ELSE XSERVAFF=4;                        *Other;

    IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

    IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

    IF XTNEXREG = . THEN DELETE;  /* RSG 02/2005 USE CACSMPL TO DELETE MISSING FIELDS*/

    IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/  /*MER 07/12/11
Added 10,11*/

    NXNS_COV = XINS_COV;                    /*JSO 04/26/2007 added for reservists logic*/
                                            /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
    IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
    IF DBENCAT IN('GRD','IGR') AND H13003 = 3 THEN DO;
        NXNS_COV = 3;
        XENR_PCM = .;
    END;
                    /* Note:  use tmp_cell in step2q.sas */
    LENGTH TMP_CELL XSERVREG 8;
    TMP_CELL = STRATUM; /*KRR 04/03/2006, changed from ADJ_CELL*/

    IF XTNEXREG = 1 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 1;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
        ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
        ELSE XSERVREG = 5;
    END;

    IF XTNEXREG = 2 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 6;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
        ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
        ELSE XSERVREG = 10;
    END;

    IF XTNEXREG = 3 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 11;
```

```
              ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
              ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
              ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
              ELSE XSERVREG = 15;
         END;

      IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
         IF XOCONUS = 1 THEN DO;
              IF      XSERVAFF = 1 THEN XSERVREG = 16;
              ELSE IF XSERVAFF = 2 THEN XSERVREG = 17;
              ELSE IF XSERVAFF = 3 THEN XSERVREG = 18;
              ELSE IF XSERVAFF = 4 THEN XSERVREG = 19;
              ELSE                     XSERVREG = 20;
         END;
         IF XOCONUS = 2 THEN DO;
              IF      XSERVAFF = 1 THEN XSERVREG = 21;
              ELSE IF XSERVAFF = 2 THEN XSERVREG = 22;
              ELSE IF XSERVAFF = 3 THEN XSERVREG = 23;
              ELSE IF XSERVAFF = 4 THEN XSERVREG = 24;
              ELSE                     XSERVREG = 25;
         END;
         IF XOCONUS = 3 THEN DO;
              IF      XSERVAFF = 1 THEN XSERVREG = 26;
              ELSE IF XSERVAFF = 2 THEN XSERVREG = 27;
              ELSE IF XSERVAFF = 3 THEN XSERVREG = 28;
              ELSE IF XSERVAFF = 4 THEN XSERVREG = 29;
              ELSE                     XSERVREG = 30;
         END;
      END;

RUN;

*****************************************************************************
* Create AGE, FEMALE and GROUP (Beneficiary/Enrollment)
* subsets. Create the region dummies.  Recode region 7 to region 8.
*****************************************************************************;
DATA ENTIRE;
   SET ENTIRE;
   LENGTH DEFAULT = 4;
   IF FIELDAGE NE "  " THEN DO;   /*MJS 01/26/04*/
      AGE1824=0;
      AGE2534=0;
      AGE3544=0;
      AGE4554=0;
      AGE5564=0;
      AGE6574=0;
      AGE75UP=0;
      IF      ( '018' <= FIELDAGE <= '024' ) THEN AGE1824=1;   /*MJS 01/26/04*/
      ELSE IF ( '025' <= FIELDAGE <= '034' ) THEN AGE2534=1;
      ELSE IF ( '035' <= FIELDAGE <= '044' ) THEN AGE3544=1;
      ELSE IF ( '045' <= FIELDAGE <= '054' ) THEN AGE4554=1;
      ELSE IF ( '055' <= FIELDAGE <= '064' ) THEN AGE5564=1;
      ELSE IF ( '065' <= FIELDAGE <= '074' ) THEN AGE6574=1;
      ELSE IF (          FIELDAGE  > '074' ) THEN AGE75UP=1;
   END;

   ***********************************************************************
   * Create the FEMALE dummy variable.
   ***********************************************************************;
   IF XSEXA = 2 THEN
      FEMALE = 1;
   ELSE
      FEMALE = 0;

   ***********************************************************************
   * Create the beneficiary group/enrollment group subsets.
   ***********************************************************************;
   GROUP1 = 0;
   GROUP2 = 0;
   GROUP3 = 0;
   GROUP4 = 0;
   GROUP5 = 0;
   GROUP6 = 0;
```

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```
    GROUP7 = 0;
    GROUP8 = 1;      * EVERYONE;

    IF (NXNS_COV IN (1,2,6)  AND H13004>=2) THEN GROUP1 = 1;
    IF (XENR_PCM IN (1,2,6)  AND H13004>=2) THEN GROUP2 = 1;
    /* JSO 04/05/2007 conditions to run RC type */
    IF "&RCTYPE" = 'ReportCards' AND (XENR_PCM IN (3,7) AND H13004>=2) THEN GROUP3 = 1;
    ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND ((XENR_PCM IN (3,7) AND H13004>=2) OR NXNS_COV
IN (3,9,10)) THEN GROUP3 = 1;
    IF NXNS_COV IN  (3,9,10)     THEN GROUP4 = 1; /*JSO 08/24/2006, Deleted 4,5*//*JSO 07/30/2007,
Added 9*/ /*MER 07/12/11 Added 10*/
    IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN GROUP5 = 1;
                                        /*JSO 07/30/2007, added DBENCAT conditions*/
    IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN GROUP6 = 1;
                                        /*JSO 07/30/2007, added DBENCAT conditions*/
    IF XBNFGRP IN (3,4)      THEN GROUP7 = 1;

    *************************************************************************
    * Recode variables with Never, Sometimes, Usually and Always:
    *     Recode Never & Sometimes (1 & 2) to 1.
    *     Recode Usually (3) to 2.
    *     Recode Always (4) to 3.
    *************************************************************************;

    IF H13007 = 1      THEN R13007 = 1;
    ELSE IF H13007 = 2 THEN R13007 = 1;
    ELSE IF H13007 = 3 THEN R13007 = 2;
    ELSE IF H13007 = 4 THEN R13007 = 3;
    ELSE IF H13007 < 0 THEN R13007 = .;

    IF H13010 = 1      THEN R13010 = 1;
    ELSE IF H13010 = 2 THEN R13010 = 1;
    ELSE IF H13010 = 3 THEN R13010 = 2;
    ELSE IF H13010 = 4 THEN R13010 = 3;
    ELSE IF H13010 < 0 THEN R13010 = .;

    IF H13021 = 1      THEN R13021 = 1;
    ELSE IF H13021 = 2 THEN R13021 = 1;
    ELSE IF H13021 = 3 THEN R13021 = 2;
    ELSE IF H13021 = 4 THEN R13021 = 3;
    ELSE IF H13021 < 0 THEN R13021 = .;

    IF H13022 = 1      THEN R13022 = 1;
    ELSE IF H13022 = 2 THEN R13022 = 1;
    ELSE IF H13022 = 3 THEN R13022 = 2;
    ELSE IF H13022 = 4 THEN R13022 = 3;
    ELSE IF H13022 < 0 THEN R13022 = .;

    IF H13023 = 1      THEN R13023 = 1;
    ELSE IF H13023 = 2 THEN R13023 = 1;
    ELSE IF H13023 = 3 THEN R13023 = 2;
    ELSE IF H13023 = 4 THEN R13023 = 3;
    ELSE IF H13023 < 0 THEN R13023 = .;

    IF H13024 = 1      THEN R13024 = 1;
    ELSE IF H13024 = 2 THEN R13024 = 1;
    ELSE IF H13024 = 3 THEN R13024 = 2;
    ELSE IF H13024 = 4 THEN R13024 = 3;
    ELSE IF H13024 < 0 THEN R13024 = .;

    IF H13029 = 1      THEN R13029 = 1;
    ELSE IF H13029 = 2 THEN R13029 = 1;
    ELSE IF H13029 = 3 THEN R13029 = 2;
    ELSE IF H13029 = 4 THEN R13029 = 3;
    ELSE IF H13029 < 0 THEN R13029 = .;

    IF H13033 = 1      THEN R13033 = 1;
    ELSE IF H13033 = 2 THEN R13033 = 1;
    ELSE IF H13033 = 3 THEN R13033 = 2;
    ELSE IF H13033 = 4 THEN R13033 = 3;
    ELSE IF H13033 < 0 THEN R13033 = .;

    IF H13041 = 1      THEN R13041 = 1;
```

```
      ELSE IF H13041 = 2 THEN R13041 = 1;
      ELSE IF H13041 = 3 THEN R13041 = 2;
      ELSE IF H13041 = 4 THEN R13041 = 3;
      ELSE IF H13041 < 0 THEN R13041 = .;

      IF H13042 = 1      THEN R13042 = 1;
      ELSE IF H13042 = 2 THEN R13042 = 1;
      ELSE IF H13042 = 3 THEN R13042 = 2;
      ELSE IF H13042 = 4 THEN R13042 = 3;
      ELSE IF H13042 < 0 THEN R13042 = .;

      IF H13046 = 1      THEN R13046 = 1;
      ELSE IF H13046 = 2 THEN R13046 = 1;
      ELSE IF H13046 = 3 THEN R13046 = 2;
      ELSE IF H13046 = 4 THEN R13046 = 3;
      ELSE IF H13046 < 0 THEN R13046 = .;

      IF H13047 = 1      THEN R13047 = 1;
      ELSE IF H13047 = 2 THEN R13047 = 1;
      ELSE IF H13047 = 3 THEN R13047 = 2;
      ELSE IF H13047 = 4 THEN R13047 = 3;
      ELSE IF H13047 < 0 THEN R13047 = .;

      ***************************************************************************
      * Recode variables to one missing condition ".".
      * This also renames all the "Hyyxxx" to "Ryyxxx".
      ***************************************************************************;
      R13027 = H13027;  IF R13027 < 0 THEN R13027 = .;
      R13031 = H13031;  IF R13031 < 0 THEN R13031 = .;
      R13018 = H13018;  IF R13018 < 0 THEN R13018 = .;
      R13048 = H13048;  IF R13048 < 0 THEN R13048 = .;
      R13065 = H13065;  IF R13065 < 0 THEN R13065 = .;

      ***************************************************************************
      * Create region and service affiliation dummies.
      ***************************************************************************;
      IF XSERVREG NE . THEN DO;  /*JSO 08/24/2006, Changed 16 to 24*/ /*MER 11/03/2012, Changed 24
   to 30*/
         ARRAY REGDUMS (30) REG01 REG02 REG03 REG04 REG05 REG06
                            REG07 REG08 REG09 REG10 REG11 REG12
                            REG13 REG14 REG15 REG16 REG17 REG18
                            REG19 REG20 REG21 REG22 REG23 REG24
                            REG25 REG26 REG27 REG28 REG29 REG30;
         DO I = 1 TO 30;
            REGDUMS(I)=0;
         END;
         IF        XSERVREG= 1  THEN REG01  =1;
         ELSE IF   XSERVREG= 2  THEN REG02  =1;
         ELSE IF   XSERVREG= 3  THEN REG03  =1;
         ELSE IF   XSERVREG= 4  THEN REG04  =1;
         ELSE IF   XSERVREG= 5  THEN REG05  =1;
         ELSE IF   XSERVREG= 6  THEN REG06  =1;
         ELSE IF   XSERVREG= 7  THEN REG07  =1;
         ELSE IF   XSERVREG= 8  THEN REG08  =1;
         ELSE IF   XSERVREG= 9  THEN REG09  =1;
         ELSE IF   XSERVREG= 10 THEN REG10  =1;
         ELSE IF   XSERVREG= 11 THEN REG11  =1;
         ELSE IF   XSERVREG= 12 THEN REG12  =1;
         ELSE IF   XSERVREG= 13 THEN REG13  =1;
         ELSE IF   XSERVREG= 14 THEN REG14  =1;
         ELSE IF   XSERVREG= 15 THEN REG15  =1;
         ELSE IF   XSERVREG= 16 THEN REG16  =1;
         ELSE IF   XSERVREG= 17 THEN REG17  =1;
         ELSE IF   XSERVREG= 18 THEN REG18  =1;
         ELSE IF   XSERVREG= 19 THEN REG19  =1;
         ELSE IF   XSERVREG= 20 THEN REG20  =1;
         ELSE IF   XSERVREG= 21 THEN REG21  =1;
         ELSE IF   XSERVREG= 22 THEN REG22  =1;
         ELSE IF   XSERVREG= 23 THEN REG23  =1;
         ELSE IF   XSERVREG= 24 THEN REG24  =1;
         ELSE IF   XSERVREG= 25 THEN REG25  =1;
         ELSE IF   XSERVREG= 26 THEN REG26  =1;
         ELSE IF   XSERVREG= 27 THEN REG27  =1;
```

```
        ELSE IF  XSERVREG= 28 THEN REG28  =1;
        ELSE IF  XSERVREG= 29 THEN REG29  =1;
        ELSE IF  XSERVREG= 30 THEN REG30  =1;

        ARRAY SRVDUMS (5) SRV01 SRV02 SRV03 SRV04 SRV05; /*MER 11/03/2012 Changed from 4 to 5*/
        DO I = 1 TO 5;    /*Needed for consumer watch ONLY */
           SRVDUMS(I)=0;
        END;

        IF       XSERVAFF = 1 THEN SRV01 = 1;
        ELSE IF  XSERVAFF = 2 THEN SRV02 = 1;
        ELSE IF  XSERVAFF = 3 THEN SRV03 = 1;
        ELSE IF  XSERVAFF = 4 THEN SRV04 = 1;
        ELSE IF  XSERVAFF = 5 THEN SRV05 = 1;

     END;

RUN;


*****************************************************************************
* Recode item responses to proportional values using CONVERT.SAS.
*****************************************************************************;
%INCLUDE "CONVERT.SAS";

%CONT2(DSN=ENTIRE, NUM=4,  Y=R13018 R13048 R13027 R13031);
%CONT3(DSN=ENTIRE, NUM=12, Y=R13007 R13010 R13029 R13033
                             R13021 R13022 R13023 R13024
                             R13041 R13042 R13046 R13047);

*****************************************************************************
* Sort the main file to reorder it by MPRID.
*****************************************************************************;
PROC SORT DATA=ENTIRE; BY MPRID; RUN;

*****************************************************************************
* Print the contents of ENTIRE dataset.
*****************************************************************************;
PROC CONTENTS DATA=ENTIRE;
   TITLE2 'Contents of ENTIRE';
RUN;


*****************************************************************************
* Print some of the recoded records.
*****************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE and SEX dummies';
   VAR MPRID
       FIELDAGE   /*MJS 01/26/04*/
       XTNEXREG
       XSERVAFF
       XSERVREG
       USA
       ENBGSMPL
       XSEXA
       STRATUM   /*KRR 04/03/2006 Changed from ADJ_CELL*/
       XINS_COV
       NXNS_COV  /*JSO 04/26/2007, added for reservists logic*/
       DBENCAT   /*JSO 04/26/2007, added for reservists logic*/
       XENR_PCM
       &WGT.
       ;
RUN;

*****************************************************************************
* Print some of the recoded records.
*****************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE and SEX dummies';
   VAR FIELDAGE   /*MJS 01/26/04*/
       AGE1824
       AGE2534
       AGE3544
```

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```
            AGE4554
            AGE5564
            AGE6574
            AGE75UP

            XSEXA
            FEMALE

            ENBGSMPL
            XINS_COV
            NXNS_COV
            XENR_PCM
            XBNFGRP
            GROUP1
            GROUP2
            GROUP3
            GROUP4
            GROUP5
            GROUP6
            GROUP7
                ;
RUN;

PROC PRINT DATA=ENTIRE(OBS=60);
    TITLE2 'Print of recoded question variables';
    VAR H13007  R13007
        H13010  R13010
        H13021  R13021
        H13022  R13022
        H13023  R13023
        H13024  R13024
        H13029  R13029
        H13033  R13033
        H13041  R13041
        H13042  R13042
        H13046  R13046
        H13047  R13047
        H13018  R13018
        H13027  R13027
        H13031  R13031
        H13048  R13048
        H13065  R13065
            ;
RUN;


/*JSO 08/24/2006, Changed 16 to 24*/
/*MER 11/03/2012, Changed 24 to 30*/
PROC PRINT DATA=ENTIRE(OBS=60);
    TITLE2 'Print of recoded REGION variables';
    VAR XSERVREG
        REG01
        REG02
        REG03
        REG04
        REG05
        REG06
        REG07
        REG08
        REG09
        REG10
        REG11
        REG12
        REG13
        REG14
        REG15
        REG16
        REG17
        REG18
        REG19
        REG20
        REG21
        REG22
```

```
        REG23
        REG24
        REG25
        REG26
        REG27
        REG28
        REG29
        REG30;
RUN;

/*MER 11/03/2012 Changed 4 to 5*/
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded service affiliation variables';
   VAR XSERVREG
       XSERVAFF
       XOCONUS /*JSO 08/24/2006, Changed Overseas Regions*/
       SRV01
       SRV02
       SRV03
       SRV04
       SRV05
      ;
RUN;

****************************************************************************
* Create the 7 subgroups for processing by STEP2.SAS.
****************************************************************************;
DATA OUT.GROUP1
     OUT.GROUP2
     OUT.GROUP3
     OUT.GROUP4
     OUT.GROUP5
     OUT.GROUP6
     OUT.GROUP7
     OUT.GROUP8;

     SET ENTIRE;

     DROP
        H13007
        H13010
        H13021
        H13022
        H13023
        H13024
        H13029
        H13033
        H13041
        H13042
        H13046
        H13047
        H13018
        H13027
        H13031
        H13048
        H13065
          ;
       IF GROUP1 = 1 THEN OUTPUT OUT.GROUP1;
       IF GROUP2 = 1 THEN OUTPUT OUT.GROUP2;
       IF GROUP3 = 1 THEN OUTPUT OUT.GROUP3;
       IF GROUP4 = 1 THEN OUTPUT OUT.GROUP4;
       IF GROUP5 = 1 THEN OUTPUT OUT.GROUP5;
       IF GROUP6 = 1 THEN OUTPUT OUT.GROUP6;
       IF GROUP7 = 1 THEN OUTPUT OUT.GROUP7;
       OUTPUT OUT.GROUP8;
RUN;
```

I.1.B   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\Convert.SAS - Convert Item Responses To Proportional Values.

```
*****************************************************************************
*
* PROGRAM:  CONVERT.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (8687-330)
* PURPOSE:  CONVERT ITEM RESPONSES TO PROPORTIONAL VALUES FOR CONSISTENCY
*           WITH THE TOPS SURVEY.
* WRITTEN:  October 2000 BY ERIC SCHONE
*
* MODIFIED: October 2000 BY KEITH RATHBUN, Added PROLOG.  Also, added DSN
*           to argument lists.
*
* INPUTS:  1) User-specified SAS Dataset
*
* OUTPUTS: 1) User-specified SAS Dataset with recoded values
*
* NOTES:
*
* 1) Arguments for the CONT1-CONT3 macros are as follows:
*    a) SAS dataset name (dsn)
*    b) Number of variables to be converted (num)
*    c) List of variables to be converted (y)
* 2) These macros assume that the response items have already been
*    converted/recoded to CAHPS scales.
*
*****************************************************************************
* CONT1 - Convert big problem, small problem, not a problem questions to
*         proportional values.
*****************************************************************************;
%macro cont1(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i = 1 to &num;
      if vars(i) ne . and vars(i) ne 3 then vars(i) = 0;
      if vars(i) = 3 then vars(i) = 1;
   end;
run;
%mend cont1;


*****************************************************************************
* CONT2 - Convert rating questions to proportional values.
*****************************************************************************;
%macro cont2(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) < 8 then vars(i) = 0;
      if vars(i) in (8,9,10) then vars(i) = 1;
   end;
run;
%mend cont2;


*****************************************************************************
* CONT3 - Convert Never, Sometimes, Usually, Always questions to
*         proportional values.
*****************************************************************************;
%macro cont3(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) >= 2 then vars(i) = 2;
      vars(i) = vars(i) - 1;
   end;
run;
%mend cont3;
```

I.1.C Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\STEP2Q.SAS - Calculate CAHPS Adjusted Scores - Run Quarterly.

```
****************************************************************************
*
*  Project:  DoD - Quarterly Adult Report Cards
*  Program:  STEP2Q.SAS
*  Purpose:  Generate risk-adjusted CAHPS Scores for Adult Report Card.
*
*  Requires: Program STEP1Q.SAS must be run prior to running this program.
*
*  The adult report card contains a large number of risk-adjusted scores.
*  Some scores are calculated from responses to individual survey questions.
*  Composite scores are calculated by combining scores from individual
*  questions.  The scores then are compared with external civilian
*  benchmarks.  The programming tasks involved in building the report
*  card are:
*
*       1) Preparing data for analyses
*       2) Estimating risk adjustment models
*       3) Calculating risk-adjusted values and variances
*       4) Calculating benchmarks
*       5) Comparing risk-adjusted values to benchmarks
*          and hypothesis testing
*
*
*  Previous Program:  STEP1Q.SAS
*
*  Modified: 1) 04/10/02 By Mike Scott, Updated variable names for 2002
*               survey.
*            2) 07/11/02 By Mike Scott, Changed R00077 to R04075, since
*               H02077 (health status) is back and was recoded to R04075
*               in STEP1Q.
*            3) 03/21/03 By Mike Scott, Updated variable names for 2003
*               survey.
*            4) 03/24/04 By Mike Scott, Updated for 2004 survey.
*            5) 09/24/2004 By Regina Gramss, Updated to use XTNEXREG instead of XREGION
*               and to update for Q3 2004 data.
*            6) 01/25/2005 By Regina Gramss, Changed codes to use XSERVREG instead of
*               XTNEXREG to include service affiliation.
*            7) 04/2005 By Regina Gramss, Updated field names from 2004 to 2005
*            8) 07/2005 By Regina Gramss, Updated for Q2 2005
*            9) 10/2005 By Regina Gramss, Updated for Q3 2005
*           10) 12/2005 By Regina Gramss, Updated for Q4 2005
*           11) March 21, 2006 by Keith Rathbun, updated variable names
*               for Q2 FY 2006.
*           12) 07/2006 By Justin Oh, Updated for Q3 FY 2006
*           13) Aug 24, 2006 by Justin Oh, changed overseas to 3 regions.
*               Regions have been changed from 16 categories to 24.
*           14) April 7, 2009 by Mike Rudacille, changed variable names to reflect
*               modifications to beneficiary reports necessary for V4
*           15) June 22, 2009 By Keith Rathbun, Change weight variable from
*               FWRWT_V4 back to FWRWT.
*           16) December 17, 2009 by Emma Ernst, updated Variables names for
*               Q1FY2010.
*           17) December 1, 2010 by Mike Rudacille, updated Variable names for Q1FY2011
*           18) December 10, 2011 by Mike Rudacille, updated Variable names for Q1FY2012
*           19) November 3, 2012 by Mike Rudacille, updated for handling of
*               Joint Service facilities
*           20) December 27, 2012 by Aimee Valenzuela, updated variable names for Q1FY2013
*
****************************************************************************;
OPTIONS NOCENTER LS=132 PS=79 SOURCE NOOVP COMPRESS=YES;
LIBNAME IN1      "DATA";
LIBNAME OUT      "DATA";
LIBNAME OUT2     "DATA\ADULTHATFILES";
LIBNAME LIBRARY "..\..\..\Data\Afinal\fmtlib";

/* RSG 02/2005 hard coded skelreg so data does not have to be copied from quarter to quarter*/
/* JSO 08/24/2006, Changed from 16 to 24 Regions */ /* MER 11/03/2012, Changed from 24 to 30
Regions */
```

```
DATA SKELREG (COMPRESS=NO);
   INPUT XSERVREG;
   DATALINES;
      1
      2
      3
      4
      5
      6
      7
      8
      9
      10
      11
      12
      13
      14
      15
      16
      17
      18
      19
      20
      21
      22
      23
      24
      25
      26
      27
      28
      29
      30
;
RUN;

*****************************************************************************
*****************************************************************************
* Set GLOBAL parameters here.
*****************************************************************************
****************************************************************************;

*****************************************************************************
* Set the number of Dependent variables to process.
* One does not need to start at 1, but the max must be >= min.
****************************************************************************;
%LET MIN_VAR =  1;
%LET MAX_VAR = 16;

*****************************************************************************
* Set the number of subgroups to process.
****************************************************************************;
%LET MIN_GRP = 1;
%LET MAX_GRP = 8;

*****************************************************************************
* These are expected to remain the same for a particular dependent
* variable run.
****************************************************************************;
%LET WGT      = FWRWT;
%LET IND_VAR1 = R13065;
%LET IND_VAR2 =  ;  * FEMALE;
%LET IND_VAR3 =  ;  * SREDHIGH;
%LET DEBUGFLG = 0;   * Set to 1 if you want extra printout;


%LET TITL1 = Prime Enrollees;
%LET TITL2 = Enrollees w/military PCM;
%LET TITL3 = Enrollees w/civilian PCM;
%LET TITL4 = Nonenrollees;
%LET TITL5 = Active Duty;
%LET TITL6 = Active Duty Dependents;
%LET TITL7 = Retirees and Dependents;
```

```
%LET TITL8 = All Beneficiaries;


*****************************************************************************
* GETTING NEEDED CARE.
*****************************************************************************;
%LET DEPVAR1  = R13029;
%LET DEPVAR2  = R13033;


*****************************************************************************
* GETTING NEEDED CARE QUICKLY.
*****************************************************************************;
%LET DEPVAR3  = R13007;
%LET DEPVAR4  = R13010;


*****************************************************************************
* HOW WELL DOCTORS COMMUNICATE.
*****************************************************************************;
%LET DEPVAR5  = R13021;
%LET DEPVAR6  = R13022;
%LET DEPVAR7  = R13023;
%LET DEPVAR8  = R13024;


*****************************************************************************
* CUSTOMER SERVICE.
*****************************************************************************;
%LET DEPVAR9  = R13041;
%LET DEPVAR10 = R13042;


*****************************************************************************
* CLAIMS PROCESSING.
*****************************************************************************;
%LET DEPVAR11 = R13046;
%LET DEPVAR12 = R13047;


*****************************************************************************
* RATING ALL HEALTH CARE: 0 - 10.
*****************************************************************************;
%LET DEPVAR13 = R13018;


*****************************************************************************
* RATING OF HEALTH PLAN: 0 - 10.
*****************************************************************************;
%LET DEPVAR14 = R13048;


*****************************************************************************
* RATING OF PERSONAL DR: 0 - 10.
*****************************************************************************;
%LET DEPVAR15 = R13027;


*****************************************************************************
* SPECIALITY CARE: 0 - 10.
*****************************************************************************;
%LET DEPVAR16 = R13031;

%MACRO SCORE;
************************************;
* use this macro for all groups;
* super region variables are to be used     ;
************************************;
%PUT *************************************;
%PUT STARTING MACRO SCORE;
%PUT "GROUP    = " GROUP&IGRP;
%PUT "TITLE    = " &&DEPVAR&IVAR  &&TITL&IGRP;
%PUT "DEP_VAR  = " &&DEPVAR&IVAR;
%PUT "IND_VAR1 = " &IND_VAR1;
%PUT "IND_VAR2 = " &IND_VAR2;
%PUT "IND_VAR3 = " &IND_VAR3;
%PUT "WGT      = " &WGT;
%PUT *************************************;


*---------------------------------------------------;
* If the current group is 1 use the skeleton files;
```

```
* else used the previous groups output file;
* The mrgfile is added to by each subgroup;
*------------------------------------------------;
%LET RMRGFILE = OUT.R_&&DEPVAR&IVAR;
%IF "&IGRP" = "1" %THEN %LET RMRGFILE = SKELREG;


* run regression using the region level variables;
* output a BETA file (1 record) and the subgroup;
* file with residuals attached (many records);
PROC REG DATA = GROUP&IGRP OUTEST=BETAS;
     TITLE2 "Regression Model for GROUP&igrp for regions";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
     WEIGHT &WGT;
     %INCLUDE 'REGRSREG.INC';
     OUTPUT OUT = OUT2.H&IGRP&&DEPVAR&IVAR(KEEP=MPRID &WGT TMP_CELL
                       PRED&IGRP RESID&IGRP XSERVREG &&DEPVAR&IVAR)
               P = PRED&IGRP
               R = RESID&IGRP;

RUN;


* print of HCSDB file with the residuals and predicted values;
%IF &DEBUGFLG > 0  %THEN %DO;
     PROC PRINT DATA=OUT2.H&IGRP&&DEPVAR&IVAR (OBS=70);
          TITLE2 "OUT2.H&IGRP&&DEPVAR&IVAR:  file with predicted values and the RESID&IGRP";
          TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
          VAR MPRID XSERVREG &&DEPVAR&IVAR RESID&IGRP PRED&IGRP;
     RUN;

     PROC PRINT DATA=BETAS;
          TITLE2 "BETAS:  file with coefficients";
          TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
     RUN;
%END;


*----------------------------------------;
*----- get the standard err/variance ----;
*----------------------------------------;
%LET DEP = &&DEPVAR&IVAR;
%R_SUDAAN(OUT2.H&IGRP&&DEPVAR&IVAR);



* calculate prelim adjusted scores for the risk-adjusters;
* merge adjuster means with the adjuster coefficients;
* then sum their products. Finally add in the intercept;
 DATA ADJUST;
    SET MEANFILE;
    IF _N_ = 1 THEN SET BETAS(DROP = _TYPE_);
    %INCLUDE 'RISKARRY.INC';
    %INCLUDE 'RISKMEAN.INC';
    DO I = 1 TO DIM(COEFFS);
       IF COEFFS(I) = . THEN COEFFS(I) = 0;
       IF MEANS(I) = .  THEN MEANS(I)  = 0;
       ADJUST + ( COEFFS(I) * MEANS(I) );
    END;
    ADJUST = ADJUST + INTERCEPT;
 RUN;


* add the region coefficients to the adjusted value from above;
* output one record per region with the region;
* level adjusted scores;
DATA COEFFREG(KEEP=XSERVREG NEWADJST);
    SET ADJUST;
    %INCLUDE 'REGARRAY.INC';
    LENGTH NAME $8;
    DO I=1 TO DIM(REGRHS);
        CALL VNAME(REGRHS(I),NAME);
        XSERVREG=INPUT(SUBSTR(NAME,4,2),2.);
        IF REGRHS(I) = . THEN REGRHS(I) = 0;
        NEWADJST=ADJUST + REGRHS(I);
```

```
            OUTPUT;
        END;
RUN;


* sum of wgts for each region;
PROC MEANS DATA=GROUP&IGRP NWAY NOPRINT ;
  CLASS XSERVREG;
  VAR   &WGT;
  OUTPUT OUT=REG_WGTS (DROP = _TYPE_ _FREQ_ ) N=REGCNT&IGRP SUM=REGWGT&IGRP;
RUN;


* merge the COEFFREG file with the region;
* adjusted scores to the region level total weight;
* merge by the region.  Creates a region level;
* file with the total sample weight of the region;
DATA COEFFREG;
      MERGE COEFFREG(IN=IN1)
            REG_WGTS(IN=IN2   KEEP=XSERVREG REGCNT&IGRP REGWGT&IGRP);
      BY XSERVREG;
      IF IN1;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=MEANFILE;
        TITLE2 'Print of MEANFILE';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=ADJUST;
        TITLE2 'Print of ADJUST';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
        TITLE2 'Print of COEFFREG: Region Adjusted Scores';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=REG_WGTS;
        TITLE2 'Print of REG_WGTS: Region Area Sum of WGTS';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
        TITLE2 'Print of COEFFREG: Regions Adjusted Scores - with sum of wgts and region';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


* Calculate region level adjusted scores from the;
* region level adjusted scores in COEFFREG;
PROC MEANS DATA=COEFFREG NWAY NOPRINT;
  WEIGHT REGWGT&IGRP;
  CLASS  XSERVREG;
  VAR    NEWADJST;
  OUTPUT OUT=REGFILE1 (DROP = _TYPE_ _FREQ_) MEAN=ADJ&IGRP;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=REGFILE1;
        TITLE2 'Print of REGFILE1: Region Scores';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;

* merge the previous groups region results (if any);
* with the region level std errs and the region;
* level results from catchment results collapsed to region;
```

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```
DATA OUT.R_&&DEPVAR&IVAR;
    MERGE &RMRGFILE(IN=INS)
          R&IGRP&&DEPVAR&IVAR
          REG_WGTS(KEEP = REGCNT&IGRP REGWGT&IGRP XSERVREG)
          REGFILE1(KEEP = ADJ&IGRP XSERVREG);
    BY XSERVREG;
    DEPENDNT = "&&DEPVAR&IVAR";
    IF INS;
RUN;

* merge the previous groups regional results (if any);
* with the region level std err and the region;
* level results from the current group/dependent var;
DATA OUT.R_&&DEPVAR&IVAR;
    MERGE OUT.R_&&DEPVAR&IVAR(IN=INS)
          R&IGRP&&DEPVAR&IVAR     /*KRR - removed perm dataset ref to OUT2 */
          REG_WGTS
          REGFILE1;
    BY XSERVREG;
    DEPENDNT = "&&DEPVAR&IVAR";
    IF INS;
RUN;

PROC PRINT DATA=OUT.R_&&DEPVAR&IVAR;
    TITLE2 "Print of XSERVREG variables in &&DEPVAR&IVAR";
    TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
RUN;
%MEND SCORE;

%MACRO MAKE_INC;
***************************************;
* creates include files for later Procs;
* Needs to be run each time.  Called    ;
* in the outer (beneficiary loop).      ;
* I chose this method because it was    ;
* clearer(to me at least).             ;
* This macro needs to be run once per   ;
* Dep var per subgroup.                 ;
***************************************;

* Drop records where the dependent var is missing;
* Drop records with missing catchment or region values;
  DATA GROUP&IGRP;
      SET IN1.GROUP&IGRP;
      IF &&DEPVAR&IVAR NOT = .;
  RUN;

 DATA _NULL_;
      SET GROUP&IGRP END = EOF;
      IF &&DEPVAR&IVAR NOT = .;

      ARRAY AGECNT(7) 8 aCNT1 - aCNT7;
      RETAIN AGECNT 0;
      RETAIN CNT 0;
      ARRAY AGENAM(7)  $8 AGENAM1 - AGENAM7;
      ARRAY AGENAMX(7) $8 AGENAMX1 - AGENAMX7;
      RETAIN AGENAM;
      RETAIN AGENAMX;
      ARRAY REGCNT(30)  8 REGCNT01- REGCNT30; /*JSO 08/24/2006, Changed from 16 to 24*/
                                              /*MER 11/03/2012, Changed from 24 to 30*/
      RETAIN CATCNT 0;
      RETAIN REGCNT 0;

      * create a name array for the parent age dummies;
      IF _N_ = 1 THEN DO;
         AGENAM(1) = "AGE1824";
         AGENAM(2) = "AGE2534";
         AGENAM(3) = "AGE3544";
         AGENAM(4) = "AGE4554";
         AGENAM(5) = "AGE5564";
         AGENAM(6) = "AGE6574";
         AGENAM(7) = "AGE75UP";
       END;
```

```
      * total record count;
      CNT + 1;

      * count records in each age group;
      * we will use only age groups with more;
      * than 2 obs;
      IF AGE1824  = 1 THEN AGECNT(1) + 1;
      IF AGE2534  = 1 THEN AGECNT(2) + 1;
      IF AGE3544  = 1 THEN AGECNT(3) + 1;
      IF AGE4554  = 1 THEN AGECNT(4) + 1;
      IF AGE5564  = 1 THEN AGECNT(5) + 1;
      IF AGE6574  = 1 THEN AGECNT(6) + 1;
      IF AGE75UP  = 1 THEN AGECNT(7) + 1;

      * count records in each XSERVREG group;
      * we will only use XSERVREGs with more than than 2 obs;
      * I am using the region value as the subscript;
      * to make the code simpler and more readable;
      IF 1<= XSERVREG <=30  THEN DO; /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24
to 30*/
          REGCNT(XSERVREG) = REGCNT(XSERVREG) + 1;
      END;

      IF EOF THEN GOTO ENDFILE;
      RETURN;

ENDFILE:
      * create a title common to all procs in the current group;
      TITLE  " &&DEPVAR&IVAR  &&TITL&IGRP";

      * display counts in the log;
      %IF &DEBUGFLG > 0  %THEN %DO;
         PUT ' ';
         PUT 'AT EOF:';
         PUT "TOTAL CNT = "    CNT;
         PUT AGENAM(1) "  " AGECNT(1)=;
         PUT AGENAM(2) "  " AGECNT(2)=;
         PUT AGENAM(3) "  " AGECNT(3)=;
         PUT AGENAM(4) "  " AGECNT(4)=;
         PUT AGENAM(5) "  " AGECNT(5)=;
         PUT AGENAM(6) "  " AGECNT(6)=;
         PUT AGENAM(7) "  " AGECNT(7)=;
         PUT " ";

         DO I = 1 TO 30;  /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to 30*/
            IF(REGCNT(I) > 0) THEN DO;
                PUT  'REG' I Z2. REGCNT(I) 6.;
            END;
         END;
         PUT ' ';


       %END;    *** of debug test;

      *-----------------------------------------------------------;
      * This include is for the regression using regions;
      * in this case we drop the last XSERVREG;
      FILE 'REGRSREG.INC';
      PUT @6  "MODEL  &&DEPVAR&IVAR = ";
      IF "&IND_VAR1" NE "" THEN PUT @12 "&IND_VAR1"; /* KRR - only output when present */
      IF "&IND_VAR2" NE "" THEN PUT @12 "&IND_VAR2"; /* KRR - only output when present */
      IF "&IND_VAR3" NE "" THEN PUT @12 "&IND_VAR3"; /* KRR - only output when present */

      CNT2 = 0;
      * setup an array of those age groups that have > 1 obs;
      DO I = 1 TO 7;
         IF AGECNT(I) > 1 THEN DO;
            CNT2 + 1;
            AGENAMX(CNT2) = AGENAM(I);
         END;
      END;
```

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```
* now drop the last category to create;
* an omitted category which is required;
* to solve the regression properly;
DO I = 1 TO CNT2-1;
   PUT @12 AGENAMX(I);
END;


* ditto for the catchment areas with > 0 obs;
* in this case we drop the the first USABLE category;
* this is not consistent with the catchment area code;
* but this is the method that Portia used;
FIRST = 0;          /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to 30*/
DO I = 1 TO 30;   * skip the 1st region with 1+ obs;
   IF REGCNT(I) > 0 THEN DO;
       IF FIRST = 1 THEN PUT @12 'REG' I Z2.;
       FIRST = 1;
   END;
END;
PUT @11 ';';


*--------------------------------------------------------;
* now create the complete var statement;
* for the Proc MEANS used to replace the;
* independent variables missing values;
* we assume the age groups will always be used;
* These are also called the RISK FACTORS;
FILE 'RISKVARS.INC';
PUT @10  "VAR";
DO I = 1 TO CNT2;
   PUT @12 AGENAMX(I);
END;

* not all the other dependent variables will be used;
* only write them out if they are not null;
CNT3 = 0;
IF "&IND_VAR1" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR1";
END;

IF "&IND_VAR2" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR2";
END;

IF "&IND_VAR3" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR3";
END;
PUT @11 ';';


*--------------------------------------------------------;
* create an ARRAY statement of the desired risk factors;
* called adjusters in the specs and in the code;
FILE 'RISKARRY.INC';
PUT @10  "ARRAY COEFFS(*) $8";
DO I = 1 TO CNT2;
   PUT @12 AGENAMX(I);
END;

CNT3 = 0;
IF "&IND_VAR1" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR1";
END;

IF "&IND_VAR2" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR2";
END;
```

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```
      IF "&IND_VAR3" NE "" THEN DO;
          CNT3 + 1;
          PUT @12 "&IND_VAR3";
      END;
      PUT @11 ';';


      *------------------------------------------------------;
      * create an ARRAY of mean names for the output;
      * from a proc MEANS of the Risk Factors in RISKARRY;
      FILE 'RISKMEAN.INC';
      IND_CNT = CNT2 + CNT3;
      PUT @6 "ARRAY MEANS(*) $8";
      DO I = 1 TO IND_CNT;
          PUT @12 "MEAN" I Z2.;
      END;
      PUT @11 ';';

*   ------------------------------------------------------;
*   create the equivalent of the following statement;
*   OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN=MEAN1-MEAN&MEAN_CNT;
      FILE 'MEANFILE.INC';
      PUT @6 "OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN = ";
      DO I = 1 TO IND_CNT;
          PUT @12 "MEAN" I Z2.;
      END;
      PUT @11 ';';


      *------------------------------------------------------;
      * create a super region area array;
      * with at least ONE obs;
      FILE 'REGARRAY.INC';
      PUT @10  "ARRAY REGRHS(*) $8";
      DO I = 1 TO 30;              /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to
30*/
          IF REGCNT(I) > 0 THEN DO; *** ems 7/12/00 changed "> 1" to "> 0";
              PUT  @16 'REG' I Z2.;
          END;
      END;
      PUT @11 ';';
 RUN;

 * Create the means of the adjuster variables;
 * They will be used to replace missing adjuster variables;
 * calculate weighted means;
 PROC MEANS DATA=GROUP&IGRP;
   WEIGHT &WGT;
   %INCLUDE 'RISKVARS.INC';
   %INCLUDE 'MEANFILE.INC';
 RUN;



%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=MEANFILE;
        TITLE2 "Print of MEANFILE for Risk Adjuster variables";
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;

DATA GROUP&IGRP;
     SET GROUP&IGRP;
     IF _N_ = 1 THEN SET MEANFILE;
     %INCLUDE 'RISKARRY.INC';
     %INCLUDE 'RISKMEAN.INC';
     DO I = 1 TO DIM(COEFFS);
        IF COEFFS(I) = . THEN DO;
            COEFFS(I) = MEANS(I);
        END;
     END;
RUN;
/* PROC MEANS DATA=out.group8;
   WEIGHT &WGT;
```

```
      %INCLUDE 'RISKVARS.INC';
      %INCLUDE 'MEANFILE.INC';
 RUN;*/
 %MEND MAKE_INC;


 %MACRO R_SUDAAN(INFILE);
 *****************************************************
 * Use this macro to create standard err (variances)
 * for XSERVREGs.
 ****************************************************;
 %PUT ***************************************;
 %PUT STARTING MACRO R_SUDAAN (XSERVREG);
 %PUT ***************************************;

 DATA &INFILE;
    SET &INFILE;
    IF 1<= XSERVREG <= 30;  /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to 30*/
 RUN;


 * Sort data by TMP_CELL;
 PROC SORT DATA=&INFILE;
    BY TMP_CELL;
 RUN;

 %IF &DEBUGFLG > 5  %THEN %DO;
    PROC PRINT DATA=&INFILE(OBS=5);
         TITLE2 'Print of the input file to SUDAAN (XSERVREG)';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
 %END;


 * Calculate values for super regions;
 PROC DESCRIPT DATA=&INFILE DESIGN=STRWR NOPRINT;
    WEIGHT &WGT;
    SETENV DECWIDTH=4;
    NEST TMP_CELL / missunit;
    VAR RESID&IGRP;
    TABLES XSERVREG;
    SUBGROUP XSERVREG;
    LEVELS 30;   /*JSO 08/24/2006, Changed from 16 to 24*/ /*MER 11/3/12 24 to 30*/
    OUTPUT  SEMEAN
          / REPLACE TABLECELL=DEFAULT
             FILENAME=RS&DEP;
    RUN;

    DATA R&IGRP&&DEPVAR&IVAR;
         SET RS&DEP;
         KEEP XSERVREG SEMEAN;
         IF SEMEAN NE .;
         RENAME SEMEAN = SEMEAN&IGRP;
    RUN;


    PROC PRINT DATA=R&IGRP&&DEPVAR&IVAR;
       TITLE2 "Print XSERVREG DESCRIPT DATA=R&IGRP&&DEPVAR&IVAR";
       TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

 %MEND  R_SUDAAN;


 %**********************************;
 %*  call the macros;
 %**********************************;

 %MACRO MAINLOOP(MIN_VAR,MAX_VAR,MIN_GRP,MAX_GRP);
     %* loop over the set of dependent variables;
         %DO IVAR = &MIN_VAR %TO &MAX_VAR;
            %DO IGRP = &MIN_GRP %TO &MAX_GRP;
               %MAKE_INC;
               %SCORE;
```

```
        %END;
    %END;

%MEND;

%MAINLOOP(&MIN_VAR,&MAX_VAR,&MIN_GRP,&MAX_GRP);
```

I.1.D   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\REGRSREG.INC -
Include file1 in step2q.sas.

```
MODEL  R13031 =
     R13065
     AGE1824
     AGE2534
     AGE3544
     AGE4554
     REG02
     REG03
     REG04
     REG05
     REG06
     REG07
     REG08
     REG09
     REG11
     REG12
     REG13
     REG14
     REG16
     REG17
     REG18
     REG19
     REG21
     REG22
     REG23
     REG24
     REG26
     REG28
     REG29
     ;
```

I.1.E   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\RISKARRY.INC -
Include file2 in step2q.sas.

```
ARRAY COEFFS(*) $8
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R13065
 ;
```

**I.1.F   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\RISKMEAN.INC -
Include file3 in step2q.sas.**

```
ARRAY MEANS(*) $8
      MEAN01
      MEAN02
      MEAN03
      MEAN04
      MEAN05
      MEAN06
    ;
```

**I.1.G   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\REGARRAY.INC -
Include file4 in step2q.sas.**

```
ARRAY REGRHS(*) $8
        REG01
        REG02
        REG03
        REG04
        REG05
        REG06
        REG07
        REG08
        REG09
        REG11
        REG12
        REG13
        REG14
        REG16
        REG17
        REG18
        REG19
        REG21
        REG22
        REG23
        REG24
        REG26
        REG28
        REG29
    ;
```

I.1.H   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\RISKVARS.INC -
Include file5 in step2q.sas.

```
VAR
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R13065
 ;
```

**I.1.I   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\MEANFILE.INC -
Include file6 in step2q.sas.**

```
OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN =
        MEAN01
        MEAN02
        MEAN03
        MEAN04
        MEAN05
        MEAN06
     ;
```

I.1.J   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\COMPOSIT.SAS - Calculate CAHPS Composite Scores - Run Quarterly.

```
*****************************************************************************
* Project:  DoD - Quarterly Adult Report Cards
* Program:  COMPOSIT.SAS
* Purpose:  Generate Quarterly Adult Report Card composite scores
* Requires: Programs STEP1Q.SAS and STEP2Q.SAS must be run prior
*           to this program.
*
* Modified: 1) 02/27/2001 By Keith Rathbun, Small changes to input DSNs to
*              accommodate the move of ALLSCORE.SAS functionality into the
*              STEP2Q.SAS program.
*           2) 01/08/2002 By Daniele Beahm, Changed versions in libname statements
*              so program can be run with SAS v8 and still produce SAS v612 datasets.
*           3) 04/10/2002 By Mike Scott, Updated variable names for 2002
*              survey.
*           4) 03/21/2003 By Mike Scott, Updated variable names for 2003
*              survey.
*           5) 03/24/2004 By Mike Scott, Updated for 2004.
*           6) 06/15/2004 By Regina Gramss, Update for Q2, added in
*              codes to compensate for any negative trend and to
*              print out the number of nonmissing data producing the
*              negative trend - those equal to or more than 30 nonmissing
*              data need to be further evaluated.
*           7) 09/2004 By Regina Gramss, Update for Q3, added in codes to
*              use XTNEXREG field instead of XREGION.
*           8) 01/2005 By Regina Gramss, Changed codes to use XSERVREG instead of
*              XTNEXREG, to incorporate service affliliation.
*           9) 04/2005 By Regina Gramss, Updated field names from 2004 to 2005.
*          10) 01/31/2006 By Regina Gramss, deleted following lines for "data r_&var1":
*              "%if &i~=8 %then %do" (keep set statement then delete the following:)
*              "%end
*               %else %do
*               set in2.h5&var1(rename=(resid5=r_&var1)) in2.h6&var1(rename=(resid6=r_&var1))
in2.h7&var1(rename=(resid7=r_&var1))
*               %end"
*          11) 03/21/2006 By Keith Rathbun, Updated variable names for 2003
*              survey.
*          12) 04/30/2008 By Justin Oh, Added Eric's upcase command to _name_ on line 204
*          13) April 7, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          14) June 22, 2009 By Keith Rathbun, Change weight variable from
*              FWRWT_V4 back to FWRWT.
*          15) December 17, 2009 By Emma Ernst, updated variable names for Q1FY2010
*          16) December 1, 2010 By Mike Rudacille, updated variable names for Q1FY2011
*          17) December 27, 2012 By Aimee Valenzuela, updated variable names for Q1FY2013
*
*****************************************************************************;
OPTIONS NOCENTER LS=132 PS=78 SOURCE SOURCE2 MLOGIC MPRINT NOOVP COMPRESS=YES NOFMTERR;
libname in       "data";
libname in2      "data\adulthatfiles";
libname out      "data";
LIBNAME LIBRARY "..\..\..\..\DATA\AFINAL\FMTLIB";

%LET WGT = FWRWT;

%MACRO COMPOSIT (TYPE=,COMPOS=,VAR1=,VAR2=,VAR3=,VAR4=,QCOUNT=);

  DATA _NULL_;
   %IF "&TYPE" = "R" %THEN %DO;
       CALL SYMPUT ('BYVAR','XSERVREG');
   %END; %ELSE
   %IF "&TYPE" = "C" %THEN %DO;
       CALL SYMPUT ('BYVAR','CACSMPL');
   %END;

 **************************************;
 *   Create a Composite Score         ;
 **************************************;
 DATA _NULL_;
     FILE 'FILES.INC';
```

```
      PUT @6 'SET';
      IF "&VAR1" NE '' THEN PUT @8 "IN.&TYPE._&VAR1";
      IF "&VAR2" NE '' THEN PUT @8 "IN.&TYPE._&VAR2";
      IF "&VAR3" NE '' THEN PUT @8 "IN.&TYPE._&VAR3";
      IF "&VAR4" NE '' THEN PUT @8 "IN.&TYPE._&VAR4";
      PUT @8 ';';
RUN;


DATA COMPOS&COMPOS;
      LENGTH DEPENDNT $ 8;
      %INCLUDE 'FILES.INC';
      DEPENDNT = "&TYPE.COMPOS&COMPOS";
RUN;

PROC SORT DATA=COMPOS&COMPOS;
      BY &BYVAR;
RUN;

PROC PRINT DATA=COMPOS&COMPOS(OBS=60);
      TITLE "Print of COMPOS&COMPOS after sort";
RUN;

DATA COMPOS&COMPOS;
      SET COMPOS&COMPOS;
      BY &BYVAR;
  %IF "&TYPE" = "R" %THEN %DO;
      ARRAY N(*) REGCNT1 - REGCNT8;
      ARRAY W(*) REGWGT1 - REGWGT8;
      ARRAY TN(*) TOTCNT1 - TOTCNT8;
      ARRAY TW(*) TOTWGT1 - TOTWGT8;
  %END; %ELSE
  %IF "&TYPE" = "C" %THEN %DO;
      ARRAY N(*) CATCNT1 - CATCNT8;
      ARRAY W(*) CATWGT1 - CATWGT8;
      ARRAY TN(*) TOTCNT1 - TOTCNT8;
      ARRAY TW(*) TOTWGT1 - TOTWGT8;
  %END;
      ARRAY ADJ(*)    ADJ1 - ADJ8;
      ARRAY TOTADJ(*) TOTADJ1 - TOTADJ8;
      ARRAY AVGADJ(*) AVJADJ1 - AVJADJ8;
      RETAIN TOTADJ TN TW;
      RETAIN AVGADJ;

      IF FIRST.&BYVAR THEN DO;
         DO I = 1 TO DIM(TOTADJ);
            TOTADJ(I) = 0; TN(I)=0; TW(I)=0;
         END;
      END; DROP I;

      PUT ' ';
      PUT ' --- STARTING LOOP1: ' &BYVAR=;
      DO I = 1 TO DIM(TOTADJ);
         PUT I= ADJ(I)=;
         IF ADJ(I) NE . THEN DO;
            TOTADJ(I) = TOTADJ(I) + ADJ(I);
            TN(I)=TN(I)+N(I);
            TW(I)=TW(I)+W(I);
         END;
         PUT I= ADJ(I)= TOTADJ(I)=;
      END;


      PUT ' ';
      PUT ' --- STARTING LOOP2: ' &BYVAR=;
      IF LAST.&BYVAR THEN DO;
         DO I = 1 TO DIM(TOTADJ);
            PUT I= ADJ(I)= TOTADJ(I)= AVGADJ(I)=;
            AVGADJ(I) = TOTADJ(I)/&QCOUNT;
            adj(i)=avgadj(i);
            N(I)=TN(I)/&QCOUNT;
            W(I)=TW(I)/&QCOUNT;
         END;
```

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```
      OUTPUT;
    END;

 RUN;

%do i=1 %to 8;
/* Collect Standard Errors and residuals from variables in composite */
%if &type=R|(&i=1|&i=2|&i>4) %then %do;
%if &var1~= %then %do;
%let n=r_&var1;
%let m=s_&var1;

data s_&var1(rename=(semean&i=s_&var1));
set in.&type._&var1(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var1;
set in2.h&i.&var1(rename=(resid&i=r_&var1));
proc sort data=r_&var1; by mprid;
%end;
%if &var2~= %then %do;
%let n=%str(&n r_&var2);
%let m=%str(&m s_&var2);
data s_&var2(rename=(semean&i=s_&var2));
set in.&type._&var2(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var2;
set in2.h&i.&var2(rename=(resid&i=r_&var2));
proc sort data=r_&var2; by mprid;
%end;
%if &var3~= %then %do;
%let n=%str(&n r_&var3);
data s_&var3(rename=(semean&i=s_&var3));
set in.&type._&var3(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var3;
set in2.h&i.&var3(rename=(resid&i=r_&var3));
proc sort data=r_&var3; by mprid;
%let m=%str(&m s_&var3); %end;

%if &var4~= %then %do;
%let n=%str(&n r_&var4);
data s_&var4(rename=(semean&i=s_&var4));
set in.&type._&var4(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var4;
set in2.h&i.&var4(rename=(resid&i=r_&var4));
%let m=%str(&m s_&var4);
proc sort data=r_&var4; by mprid;
%end;
/* Merge residual files and estimate correlations */
data infile;
merge &n; by mprid;
proc sort; by &byvar;
proc corr  outp=outf noprint;
by &byvar;
var &n;
weight &WGT.;
data outf;
set outf; by &byvar;
where _type_='CORR';
/*  sum standard error of a row variable times correlation times standard error of each column
variable, then sum sums and take square root, divide by number of variables */
data final;
merge &m outf; by &byvar;
data final;
set final; by &byvar;
array r_val &n;
array s_val &m;
sde=0;
do i=1 to dim(s_val);
%do j=1 %to &qcount;
if upcase(_name_)=upcase("R_&&var&j") then
sde=sum(sde,r_val(i)*s_&&var&j*s_val(i));
```

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```
%end;
end;
data sefin&compos._&i ERROR;
set final;
by &byvar;
if first.&byvar then tv=0;
 tv+sde;
if last.&byvar then do;
 if tv >= 0 then sde&i=(tv**.5)/&qcount; /* RSG 06/22/2004 change to only do the power
calculation if the tv value is nonnegative*/
 else if tv < 0 then do;   /* RSG 06/22/2004 those with negative trend is set aside to print
out*/
       output error;           /*                and determine whether it is from nonmissing
data of 30 or more*/
       sde&i=.;
 end;
 output sefin&compos._&i;
end;

run;
/* RSG 06/22/2004 - count how many nonmissing values are in the trend data
       to determine whether the negative trend in above datastep
       (tv < 0) is something to be concerned about */
proc means data=infile noprint;
by &byvar;
var &n;
output out=miss (drop=_type_ _freq_) n=;
data error2;
merge error(in=a drop=&n) miss(in=b);
by &byvar;
if a;
run;
proc print data=error2; /* RSG 06/22/2004  print out negative trend data and count of nonmissing
data*/
var &byvar tv &n;
title "ERROR - NEGAVTIVE TREND FOR &N IN GROUP=&I. AND COMPOSE=&COMPOS.";
run;
title ' '; /** RSG 06/22/2004 - BLANK OUT TITLE FOR NEXT LOOP **/

%if &i=1 %then %do;
data sefin&compos;
set sefin&compos._1(keep=&byvar sde&i); by &byvar;
rename sde&i=semean&i;
run;
%end;
%else %do;
data sefin&compos;
merge sefin&compos sefin&compos._&i(keep=&byvar sde&i); by &byvar;
rename sde&i=semean&i;
run;
%end;


%end;
%end;

data out.&type.compos&compos;
merge compos&compos sefin&compos; by &byvar;
run;
PROC PRINT DATA=OUT.&TYPE.COMPOS&COMPOS;
     TITLE1 COMPTITL;
 RUN;
%MEND COMPOSIT;

*-------------------------------------;
*-        set the parameters here    -;
*-------------------------------------;
**********************************;
* Call the macro for each composite ;
**********************************;
%COMPOSIT (type=R,compos=1,var1=R13029,var2=R13033,qcount=2);
%COMPOSIT (type=R,compos=2,var1=R13007,var2=R13010,qcount=2);
%COMPOSIT (type=R,compos=3,var1=R13021,var2=R13022,var3=R13023,var4=R13024,qcount=4);
```

```
%COMPOSIT (type=R,compos=4,var1=R13041,var2=R13042,qcount=2);
%COMPOSIT (type=R,compos=5,var1=R13046,var2=R13047,qcount=2);
```

I.1.K   Q3FY2013\PROGRAMS\PurchasedReportCards\CAHPS_AdultQ3FY2013\FILES.INC - Include file in composit.sas.

```
SET
  IN.R_R13046
  IN.R_R13047
  ;
```

I.2.A   Q3FY2013\PROGRAMS\PurchasedLOADWEB\CAHPS_AdultQ3FY2013\LOADCAHQ.SAS - Convert CAHPS Scores into WEB layout - Run Quarterly.

```
*******************************************************************************
*
* PROGRAM:  LOADCAHQ.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Convert the CAHPS Scores Database into the WEB layout
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.SAS.
*
* INPUTS:   1) CAHPS Individual and Composite data sets with adjusted scores
*
* OUTPUT:   1) LOADCAHQ.sas7bdat - Combined CAHPS Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1Q.SAS - Recode questions and generate group files
*    - STEP2Q.SAS - Calculate individual adjusted scores for group 1-7
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*
* 2) The output file (LOADCAHQ.sas7bdat) will be run through the
*    MAKEHTMQ.SAS program to generate the WEB pages.
*
* MODIFIED:
*
*  1) 04/10/2002 BY MIKE SCOTT, Updated variable names for 2002 survey.
*  2) 03/21/2003 BY MIKE SCOTT, Updated variable names for 2003 survey.
*  3) 06/25/2003 BY MIKE SCOTT, Updated for Q2 2003.
*  4) 07/03/2003 BY MIKE SCOTT, Added TIMEPD variable to be set to the period
*     or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*     setting to 'Composite'.
*  5) 10/21/2003 BY MIKE SCOTT, Updated for Q3 2003.
*  6) 01/07/2004 BY MIKE SCOTT, Updated for Q4 2003.
*  7) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*  8) 06/15/2004 BY REGINA GRAMSS, Updated for q2 2004.
*  9) 09/2004 BY REGINA GRAMSS, Updated for Q3 2004, changed all reference
*     to XREGION to XTNEXREG.
* 10) 01/2005 BY REGINA GRAMSS, Changed XTNEXREG to XSERVREG to include
*     service affiliation into regions.
* 11) 04/2005 BY REGINA GRAMSS, Updated 2004 field names for 2005.
* 12) 07/2005 BY REGINA GRAMSS, updated for Q2 2005.
* 13) 10/2005 BY REGINA GRAMSS, Updated for Q3 2005
* 14) 12/2005 BY REGINA GRAMSS, Updated for Q4 2005
* 15) 03/21/2006 BY KEITH RATHBUN, Updated variable names for 2006 survey.
* 16) 07/12/2006 by Justin Oh, updated for Q3 FY 2006
* 17) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3
*     Changed Libname IN for Q4FY2006.
* 18) 12/15/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q4
*     Changed Libname IN for Q1FY2007.
* 19) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1
*     Changed Libname IN for Q2FY2007.
* 20) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*     ReportCards OR PurchasedReportCards.
* 21) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3
*     Changed Libname IN for Q4FY2007.
* 22) 01/10/2008 BY KEITH RATHBUN, Updated variable names for 2008 survey.
* 23) 04/11/2008 by Justin Oh - Updated BENTYPE composite year to 2008 Q1
*     Changed Libname IN for Q2FY2008.
* 24) 06/13/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q2
*     Changed Libname IN for Q3FY2008.
* 25) 09/29/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q3
*     Changed Libname IN for Q4FY2008.
* 26) 04/11/2009 by Mike Rudacille - Changed variable names to reflect
*     modifications to beneficiary reports necessary for V4
* 27) 06/22/2009 by Keith Rathbun - Updated BENTYPE composite year to 2009 Q2
*     Changed Libname IN for Q3FY2009.
* 28) 09/30/2009 by Mike Rudacille - Updated BENTYPE composite year to 2009 Q3
```

```
*       Changed Libname IN for Q4FY2009.
* 29) 10/17/2009 by Emma Ernst- Updated variables for Q12010
*        Changed Libname IN for Q1FY2010.
* 30) 03/02/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q1
*       Changed Libname IN for Q2FY2010.
* 31) 06/19/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q2
*       Changed Libname IN for Q3FY2010.
* 32) 08/28/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q3
*       Changed Libname IN for Q4FY2010.
* 33) 12/01/2010 by Mike Rudacille - Updated variables for Q12011
*       Updated BENTYPE composite year to 2010 Q4
*       Changed Libname IN for Q1FY2011.
* 34) 02/24/2010 by Mike Rudacille - Updated BENTYPE composite year to 2011 Q1
*       Changed Libname IN for Q2FY2011.
* 35) 12/10/2011 by Mike Rudacille - Updated variables for Q12012
*       Updated BENTYPE composite year to 2011 Q4
*       Changed Libname IN for Q1FY2012
* 36) 3/5/2012 by Amanda Kudis - Changed libname IN and Year Marco Var for Q2.
* 37) 6/20/2012 by Amanda Kuis - Updated for Q3FY2012.
* 38) 8/23/2012 by Christine Cheu - Updated for Q4FY2012.
* 39) 12/27/2012 by Aimee Valenzuela - Updated for Q1FY2013.
* 40) 03/23/2013 by Mike Rudacille - Updated for Q2FY2013.
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;
/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards            ***/
%LET RCTYPE = PurchasedReportCards;

LIBNAME IN    "..\..\&RCTYPE\CAHPS_ADULTQ3FY2013\DATA";
LIBNAME OUT  "DATA";
LIBNAME LIBRARY   "..\..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*******************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*******************************************************************************;
%INCLUDE "..\LOADCAHQ.INC";

*******************************************************************************
*******************************************************************************
*
* Process Macro Input Parameters:
*
* 1) QUESTION = Variable Question Name (DSN).
*    - For individual Questions it is the variable name
*    - For composite Questions it is called xCOMPOSn
*      where n = a predefined composite # and
*            x = R (Region) or C (Catchment)
* 2) TYPE = Type of Score (COMPOSITE or INDIVIDUAL)
* 3) REGCAT = Region/Catchment Area
*
*******************************************************************************
*******************************************************************************;
%MACRO PROCESS(QUESTION=,TYPE=);
*******************************************************************************
* Assign value for BENTYPE composite year
*******************************************************************************;
%LET YEAR = "2013 Q2"; * Note that this is based on Calendar Year here;

*******************************************************************************
* Assign prefix for weighted/unweighted count variables.
* Unweighted counts is REGCNTn where n=group number.
* Weighted counts is REGWGTn where n=group number.
*******************************************************************************;
%LET PREFIX = REG;

*******************************************************************************
*
* Convert the CAHPS individual Scores Record into WEB layout.
* There are 8 logical records (adjusted scores) per physical record
*
```

```
***********************************************************************;
DATA &QUESTION;
   SET IN.&QUESTION;

   LENGTH MAJGRP  $30;
   LENGTH REGION  $30; **RSG 01/2005 - Changed format to be large enough to include service
affiliation;
   LENGTH REGCAT  $30; **MER 11/07/2012 - Changed REGION and REGCAT to be large enough for Joint
Services;
   LENGTH BENTYPE $50;
   LENGTH BENEFIT $34;
   LENGTH TIMEPD  $35; **MJS 07/03/03 Added line;

   **********************************************************************
   * Assign Region
   ********************************************************************;
   REGION  = PUT(XSERVREG,SERVREGF.);
   **********************************************************************
   * Assign benefit and benefit type
   ********************************************************************;
   IF "&TYPE" = "INDIVIDUAL" THEN DO;
      IF DEPENDNT IN("R13018","R13048","R13027","R13031") THEN
         BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
      ELSE
         BENTYPE = PUT(DEPENDNT,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
      TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added line;
   END;
   ELSE IF "&TYPE" = "COMPOSITE" THEN DO;
      BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
      TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added line;
   END;
   ELSE PUT "ERROR - Invalid TYPE = &TYPE";

   **********************************************************************
   * For now, Initialize Significance test to zero.
   ********************************************************************;
   SIG = 0;
   **********************************************************************
   * Assign Region
   ********************************************************************;
   REGCAT = PUT(XSERVREG,SERVREGF.);

   **********************************************************************
   * 1 = Prime Enrollees
   ********************************************************************;
   MAJGRP = PUT(1,MAJGRPF.);
   SCORE = ADJ1;
   SEMEAN = SEMEAN1;
   N_OBS = &PREFIX.CNT1;
   N_WGT = &PREFIX.WGT1;
   OUTPUT;

   **********************************************************************
   * 2 = Enrollees with Military PCM
   ********************************************************************;
   MAJGRP = PUT(2,MAJGRPF.);
   SCORE = ADJ2;
   SEMEAN = SEMEAN2;
   N_OBS = &PREFIX.CNT2;
   N_WGT = &PREFIX.WGT2;
   OUTPUT;

   **********************************************************************
   * 3 = Enrollees with Civilian PCM
   ********************************************************************;
   MAJGRP = PUT(3,MAJGRPF.);
   SCORE = ADJ3;
   SEMEAN = SEMEAN3;
   N_OBS = &PREFIX.CNT3;
   N_WGT = &PREFIX.WGT3;
   OUTPUT;
```

```
   ************************************************************************
   * 4 = Non-enrolled Beneficiaries
   ************************************************************************;
   MAJGRP = PUT(4,MAJGRPF.);
   SCORE = ADJ4;
   SEMEAN = SEMEAN4;
   N_OBS = &PREFIX.CNT4;
   N_WGT = &PREFIX.WGT4;
   OUTPUT;

   ************************************************************************
   * 5 = Active Duty
   ************************************************************************;
   MAJGRP = PUT(5,MAJGRPF.);
   SCORE = ADJ5;
   SEMEAN = SEMEAN5;
   N_OBS = &PREFIX.CNT5;
   N_WGT = &PREFIX.WGT5;
   OUTPUT;

   ************************************************************************
   * 6 = Active Duty Dependents
   ************************************************************************;
   MAJGRP = PUT(6,MAJGRPF.);
   SCORE = ADJ6;
   SEMEAN = SEMEAN6;
   N_OBS = &PREFIX.CNT6;
   N_WGT = &PREFIX.WGT6;
   OUTPUT;

   ************************************************************************
   * 7 = Retirees and Dependents
   ************************************************************************;
   MAJGRP = PUT(7,MAJGRPF.);
   SCORE = ADJ7;
   SEMEAN = SEMEAN7;
   N_OBS = &PREFIX.CNT7;
   N_WGT = &PREFIX.WGT7;
   OUTPUT;

   ************************************************************************
   * 8 = All Beneficiaries              ALL Beneficiaries
   ************************************************************************;
   MAJGRP = PUT(8,MAJGRPF.);
   SCORE  = ADJ8;
   SEMEAN = SEMEAN8;
   N_OBS = &PREFIX.CNT8;
   N_WGT = &PREFIX.WGT8;
   OUTPUT;

KEEP MAJGRP
     REGION
     REGCAT
     BENTYPE
     BENEFIT
     TIMEPD   /*MJS 07/03/03 Added*/
     SCORE
     SEMEAN
     N_OBS
     N_WGT
     SIG
   ;
RUN;

%MEND;

****************************************************************************
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
****************************************************************************;
%PROCESS(QUESTION=RCOMPOS1,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R13029,TYPE=INDIVIDUAL);
```

```
%PROCESS(QUESTION=R_R13033,TYPE=INDIVIDUAL);

*****************************************************************************
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
****************************************************************************;
%PROCESS(QUESTION=RCOMPOS2,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R13007,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13010,TYPE=INDIVIDUAL);

*****************************************************************************
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
****************************************************************************;
%PROCESS(QUESTION=RCOMPOS3,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R13021,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13022,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13023,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13024,TYPE=INDIVIDUAL);

*****************************************************************************
* COMPOSITE # 4.
* CUSTOMER SERVICE.
****************************************************************************;
%PROCESS(QUESTION=RCOMPOS4,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R13041,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13042,TYPE=INDIVIDUAL);

*****************************************************************************
* COMPOSITE # 5.
* CLAIMS PROCESSING.
****************************************************************************;
%PROCESS(QUESTION=RCOMPOS5,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R13046,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R13047,TYPE=INDIVIDUAL);

*****************************************************************************
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
****************************************************************************;
%PROCESS(QUESTION=R_R13018,TYPE=INDIVIDUAL);

*****************************************************************************
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
****************************************************************************;
%PROCESS(QUESTION=R_R13048,TYPE=INDIVIDUAL);

*****************************************************************************
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
****************************************************************************;
%PROCESS(QUESTION=R_R13027,TYPE=INDIVIDUAL);

*****************************************************************************
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
****************************************************************************;
%PROCESS(QUESTION=R_R13031,TYPE=INDIVIDUAL);

*****************************************************************************
*****************************************************************************
* STACK up all of the files into one final output dataset.
****************************************************************************
****************************************************************************;
DATA OUT.LOADCAHQ;
    SET R_R13029
        R_R13033
        R_R13007
        R_R13010
        R_R13021
        R_R13022
        R_R13023
```

```
        R_R13024
        R_R13041
        R_R13042
        R_R13046
        R_R13047
        R_R13018
        R_R13048
        R_R13027
        R_R13031
        RCOMPOS1
        RCOMPOS2
        RCOMPOS3
        RCOMPOS4
        RCOMPOS5
    ;
    IF SCORE = . THEN DELETE;
RUN;


TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6663-410)";
TITLE2 "Program Name: LOADCAHQ.SAS By Keith Rathbun";
TITLE3 "Program Inputs: CAHPS Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: LOADCAHQ.SAS7BDAT - Combined CAHPS Scores Database in WEB layout";

PROC FREQ;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
        REGION*REGCAT
       /MISSING LIST;
RUN;
```

I.2.B   Q3FY2013\PROGRAMS\PurchasedLOADWEB\LOADCAHQ.INC - Format definitions for converting the Scores Database into the WEB layout - Run Quarterly.

```
****************************************************************************
*
* PROGRAM:  LOADCAHQ.INC
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Format definitions for converting the CAHPS Scores Database
*           into the WEB layout.
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.INC.
*
* MODIFIED: 1) 08/13/2001 BY KEITH RATHBUN, Added XSERVAFF format to
*              accommodate the short reports.
*           2) 01/24/2002 BY KEITH RATHBUN, Added BENTYPF = 1998,1999,2000
*              added catchment composites.
*           3) 04/10/2002 BY KEITH RATHBUN, Added parameters for 2002 survey.
*           4) 04/03/2003 BY MIKE SCOTT, Added parameters for 2003 survey.
*           5) 07/08/2003 BY MIKE SCOTT, Added formats GETNCARE, GETCAREQ,
*              CRTSHELP, HOWWELL, CUSTSERV, CLMSPROC, and PREVCARE.
*           6) 03/22/2004 BY KEITH RATHBUN, Added parameters for 2004 survey.
*              Changed R04031 to be "Wait Less than 15 Minutes For Appointment".
*           7) 05/06/2004 BY MIKE SCOTT, Changed R04031 back to 2003 version of
*              the label ("Wait More than 15 Minutes Past Appointment") so that
*              the Q1 2004 version of the question is consistent with past
*              versions.  The label will be changed to the new version ("Waiting
*              in the Doctor's Office") in Makehtmq.sas.
*           8) 02/2006 BY REGINA GRAMSS, Changed date format to fielding dates.
*           9) 03/21/2006 BY KEITH RATHBUN, Added parameters for 2006 survey.
*           10) 08/22/2006 BY JUSTIN OH, Changed SERVREGF format for Overseas.
*           11) 12/15/2006 BY JUSTIN OH, Added parameters for 2007 survey.
*           12) 02/02/2007 BY JUSTIN OH, Added "s" in Healthy Behaviors in VALUE BEN.
*           13) 01/10/2008 BY KEITH RATHBUN, Added parameters for 2008 survey.
*           14) 01/09/2009 BY MIKE RUDACILLE, Added parameters for 2009 survey.
*           14) 01/16/2009 BY MIKE RUDACILLE, Changed CONUS to USA.
*           15) 04/11/2009 by Mike Rudacille - Changed formats to reflect
*              modifications to beneficiary reports necessary for V4
*           16) 12/17/09 by Emma Ernst, Added parameters for 2010 survey.
*           17) 12/02/10 by Mike Rudacille, Added parameters for 2011 survey.
*              Also removed 2000 parameters for space considerations.
*           18) 12/10/11 by Mike Rudacille, Added parameters for 2012 survey.
*              Also removed 2002 parameters for space considerations.
*           19) 11/03/12 by Mike Rudacille, Updated for handling of
*              Joint Service facilities
*           20) 12/27/12 by Aimee Valenzuela, Added parameters for 2013 survey.
*
*
* INPUTS:   No direct input
*
* OUTPUT:   No direct output
*
* NOTES:    1) Under the new contract (8860), the survey year was changed
*              to be based on the year the survey is administered (2002)
*              as opposed to the questioning reference frame (2001).  This
*              include file contains variable names for both the 2001
*              survey administration year and the the 2002 administration
*              year surveys.
*
****************************************************************************
;
****************************************************************************
* FORMAT Definitions
****************************************************************************;
PROC FORMAT;
   VALUE MAJGRPF
       1 = "Prime Enrollees          "
       2 = "Enrollees with Military PCM"
       3 = "Enrollees with Civilian PCM"
       4 = "Non-enrolled Beneficiaries "
       5 = "Active Duty              "
       6 = "Active Duty Dependents    "
       7 = "Retirees and Dependents   "
```

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```
        8 = "All Beneficiaries           "
     ;
   VALUE XSERVAFF
        1 = "ARMY"
        2 = "AIR FORCE"
        3 = "NAVY"
        4 = "OTHER"
        5 = "JOINT SERVICE"
     ;
   VALUE REGIONF
        0 = "USA MHS "
        1 = "North"
        2 = "South"
        3 = "West"
        4 = "Overseas"
     ;

/*JSO 08/24/2006, Changed Overseas to Service for Europe,Pacific,Latin*/
   VALUE SERVREGF
        1 = "North Army"
        2 = "North Air Force"
        3 = "North Navy"
        4 = "North Other"
        5 = "North Joint Service"
        6 = "South Army"
        7 = "South Air Force"
        8 = "South Navy"
        9 = "South Other"
       10 = "South Joint Service"
       11 = "West Army"
       12 = "West Air Force"
       13 = "West Navy"
       14 = "West Other"
       15 = "West Joint Service"
       16 = "Europe Army"
       17 = "Europe Air Force"
       18 = "Europe Navy"
       19 = "Europe Other"
       20 = "Europe Joint Service"
       21 = "Pacific Army"
       22 = "Pacific Air Force"
       23 = "Pacific Navy"
       24 = "Pacific Other"
       25 = "Pacific Joint Service"
       26 = "Latin America Army"
       27 = "Latin America Air Force"
       28 = "Latin America Navy"
       29 = "Latin America Other"
       30 = "Latin America Joint Service"
       31 = "USA ARMY"
       32 = "USA AIR FORCE"
       33 = "USA NAVY"
       34 = "USA OTHER";

/*JSO 08/24/2006, Changed Overseas to Europe,Pacific,Latin*/
   VALUE SERVREGO
        1 = "North Army"
        2 = "North Air Force"
        3 = "North Navy"
        4 = "North Other"
        5 = "North Joint Service"
        6 = "South Army"
        7 = "South Air Force"
        8 = "South Navy"
        9 = "South Other"
       10 = "South Joint Service"
       11 = "West Army"
       12 = "West Air Force"
       13 = "West Navy"
       14 = "West Other"
       15 = "West Joint Service"
       16 = "Overseas Europe"
       17 = "Overseas Pacific"
```

```
    18 = "Overseas Latin America";

  VALUE $BENTYPF
   "2004 Q2 " = "April, 2003 to March, 2004                    "
   "2004 Q3 " = "Quarter 3, CY 2004                            "
   "2004 Q4 " = "Quarter 4, CY 2004                            "
   "2005 Q1 " = "January, 2005                                 "
   "2005 Q2 " = "April, 2005                                   "
   "2005 Q3 " = "July, 2005                                    "
   "2005 Q4 " = "October, 2005                                 "
   "2006 Q1 " = "January, 2006                                 "
   "2006 Q2 " = "April, 2006                                   "
   "2006 Q3 " = "July, 2006                                    "
   "2006 Q4 " = "October, 2006                                 "
   "2007 Q1 " = "January, 2007                                 "
   "2007 Q2 " = "April, 2007                                   "
   "2007 Q3 " = "July, 2007                                    "
   "2007 Q4 " = "October, 2007                                 "
   "2008 Q1 " = "January, 2008                                 "
   "2008 Q2 " = "April, 2008                                   "
   "2008 Q3 " = "July, 2008                                    "
   "2008 Q4 " = "October, 2008                                 "
   "2009 Q1 " = "January, 2009                                 "
   "2009 Q2 " = "April, 2009                                   "
   "2009 Q3 " = "July, 2009                                    "
   "2009 Q4 " = "October, 2009                                 "
   "2010 Q1 " = "January, 2010                                 "
   "2010 Q2 " = "April, 2010                                   "
   "2010 Q3 " = "July, 2010                                    "
   "2010 Q4 " = "October, 2010                                 "
   "2011 Q1 " = "January, 2011                                 "
   "2011 Q2 " = "April, 2011                                   "
   "2011 Q3 " = "July, 2011                                    "
   "2011 Q4 " = "October, 2011                                 "
   "2012 Q1 " = "January, 2012                                 "
   "2012 Q2 " = "April, 2012                                   "
   "2012 Q3 " = "July, 2012                                    "
   "2012 Q4 " = "October, 2012                                 "
   "2013 Q1 " = "January, 2013                                 "
   "2013 Q2 " = "April, 2013                                   "
   "2013 Q3 " = "July, 2013                                    "
   "2013 Q4 " = "October, 2013                                 "

/************************************************************************************************
********/
   /* Admin. Year Defn.
*/
   /* 2004       2005       2006       2007       2008       2009       2010       2011       2012
2013        */

/************************************************************************************************
*********/
    "R04013", "R05013", "R06013", "R07013", "R08013", "R09029", "R10029", "R11029", "R12029",
"R13029" = "Getting to See a Specialist         "
    "R04028", "R05027", "R06027", "R07027", "R08027", "R09033", "R10033", "R11033", "R12033",
"R13033" = "Getting Treatment                   "
    "R04020", "R05019", "R06019", "R07019", "R08019", "R09007", "R10007", "R11007", "R12007",
"R13007" = "Wait for Urgent Care                "
    "R04023", "R05022", "R06022", "R07022", "R08022", "R09010", "R10010", "R11010", "R12010",
"R13010" = "Wait for Routine Visit              "
    "R04034", "R05033", "R06033", "R07033", "R08033", "R09021", "R10021", "R11021", "R12021",
"R13021" = "Listens Carefully                   "
    "R04035", "R05034", "R06034", "R07034", "R08034", "R09022", "R10022", "R11022", "R12022",
"R13022" = "Explains so You Can Understand       "
    "R04036", "R05035", "R06035", "R07035", "R08035", "R09023", "R10023", "R11023", "R12023",
"R13023" = "Shows Respect                       "
    "R04037", "R05036", "R06036", "R07036", "R08036", "R09024", "R10024", "R11024", "R12024",
"R13024" = "Spends Time with You                "
    "R04045", "R05043", "R06043", "R07043", "R08043", "R09040", "R10040", "R11041", "R12041",
"R13041" = "Getting Information                 "
    "R04047", "R05045", "R06045", "R07045", "R08045", "R09041", "R10041", "R11042", "R12042",
"R13042" = "Courteous Customer Service          "
```

```
     "R04041", "R05040", "R06040", "R07040", "R08040", "R09045", "R10045", "R11046", "R12046",
"R13046" = "Claims Handled in a Reasonable Time"
     "R04042", "R05041", "R06041", "R07041", "R08041", "R09046", "R10046", "R11047", "R12047",
"R13047" = "Claims Handled Correctly            "
     "R04038", "R05037", "R06037", "R07037", "R08037", "R09018", "R10018", "R11018", "R12018",
"R13018" = "Health Care                         "
     "R04054", "R05048", "R06048", "R07048", "R08048", "R09047", "R10047", "R11048", "R12048",
"R13048" = "Health Plan                         "
     "R04009", "R05009", "R06009", "R07009", "R08009", "R09027", "R10027", "R11027", "R12027",
"R13027" = "Primary Care Manager                "
     "R04015", "R05015", "R06015", "R07015", "R08015", "R09031", "R10031", "R11031", "R12031",
"R13031" = "Specialty Care                      "
                               "PHYSIC  " = "Physical                              "
                               "MENTAL  " = "Mental                                "
    ;
    VALUE $BENEF
    "RCOMPOS1","CCOMPOS1","R04013","R04028",
                        "R05013","R05027",
                        "R06013","R06027",
                        "R07013","R07027",
                        "R08013","R08027",
                        "R09029","R09033",
                        "R10029","R10033",
                        "R11029","R11033",
                        "R12029","R12033",
                        "R13029","R13033"
     = "Getting Needed Care  "

    "RCOMPOS2","CCOMPOS2","R04020","R04023",
                        "R05019","R05022",
                        "R06019","R06022",
                        "R07019","R07022",
                        "R08019","R08022",
                        "R09007","R09010",
                        "R10007","R10010",
                        "R11007","R11010",
                        "R12007","R12010",
                        "R13007","R13010"
     = "Getting Care Quickly "

    "RCOMPOS3","CCOMPOS3","R04034","R04035","R04036","R04037",
                        "R05033","R05034","R05035","R05036",
                        "R06033","R06034","R06035","R06036",
                        "R07033","R07034","R07035","R07036",
                        "R08033","R08034","R08035","R08036",
                        "R09021","R09022","R09023","R09024",
                        "R10021","R10022","R10023","R10024",
                        "R11021","R11022","R11023","R11024",
                        "R12021","R12022","R12023","R12024",
                        "R13021","R13022","R13023","R13024"
     = "How Well Doctors Communicate "

    "RCOMPOS4","CCOMPOS4","R04045","R04047",
                        "R05043","R05045",
                        "R06043","R06045",
                        "R07043","R07045",
                        "R08043","R08045",
                        "R09040","R09041",
                        "R10040","R10041",
                        "R11041","R11042",
                        "R12041","R12042",
                        "R13041","R13042"
     = "Customer Service        "

    "RCOMPOS5","CCOMPOS5","R04041","R04042",
                        "R05040","R05041",
                        "R06040","R06041",
                        "R07040","R07041",
                        "R08040","R08041",
                        "R09045","R09046",
                        "R10045","R10046",
                        "R11046","R11047",
                        "R12046","R12047",
```

```
                               "R13046","R13047"
    = "Claims Processing
              "
    "RCOMPOS11","COMPOS11","MENTAL","PHYS"
    = "Health Status                       "

/************************************************************************************************
***/
    /* Admin. Year Defn.
*/
    /* 2004        2005        2006        2007        2008        2009        2010        2011        2012
2013  */

/************************************************************************************************
***/
    "R04038", "R05037", "R06037", "R07037", "R08037", "R09018", "R10018", "R11018", "R12018",
"R13018" = "Health Care                                "
    "R04054", "R05048", "R06048", "R07048", "R08048", "R09047", "R10047", "R11048", "R12048",
"R13048" = "Health Plan                                "
    "R04009", "R05009", "R06009", "R07009", "R08009", "R09027", "R10027", "R11027", "R12027",
"R13027" = "Primary Care Manager                       "
    "R04015", "R05015", "R06015", "R07015", "R08015", "R09031", "R10031", "R11031", "R12031",
"R13031" = "Specialty Care                             "
    ;
VALUE BEN
/*  0 = 'Total'  deleted no longer calculating total 04/2005 RSG ***/
  1 = 'Getting Needed Care'
  2 = 'Getting Care Quickly'
  3 = 'How Well Doctors Communicate'
  4 = 'Customer Service'
  5 = 'Claims Processing'
  6 = 'Health Plan'
  7 = 'Health Care'
  8 = 'Primary Care Manager'
  9 = 'Specialty Care'
 10 = 'Preventive Care'
 11 = 'Healthy Behaviors';

  VALUE MAJOR
  1 = "Prime Enrollees           "
  2 = "Enrollees with Military PCM"
  3 = "Enrollees with Civilian PCM"
  4 = "Non-enrolled Beneficiaries "
  5 = "Active Duty               "
  6 = "Active Duty Dependents    "
  7 = "Retirees and Dependents   "
  8 = "All Beneficiaries         ";

  VALUE GETNCARE
  1 = "Getting to See a Specialist"
  2 = "Getting Treatment"
  3 = "Composite";

  VALUE GETCAREQ
  1 = "Wait for Routine Visit"
  2 = "Wait for Urgent Care"
  3 = "Composite";

  VALUE HOWWELL
  1 = "Listens Carefully"
  2 = "Explains so You Can Understand"
  3 = "Shows Respect"
  4 = "Spends Time with You"
  5 = "Composite";

  VALUE CUSTSERV
  1 = "Getting Information"
  2 = "Courteous Customer Service"
  3 = "Composite";

  VALUE CLMSPROC
  1 = "Claims Handled in a Reasonable Time"
  2 = "Claims Handled Correctly"
```

```
       3 = "Composite";

    VALUE PREVCARE
    1 = "Mammography"
    2 = "Pap Smear"
    3 = "Hypertension"
    4 = "Prenatal Care"
    5 = "Composite";

    VALUE SMOKEF
    1 = "Non-Smoking Rate"
    2 = "Counselled To Quit"
    3 = "Percent Not Obese"
    4 = "Composite";
RUN;
```

I.3.A   Q1FY2013\PROGRAMS\BENCHMARK\BENCHA01.SAS - Extract Adult CAHPS Questions from NCBD - Run Quarterly.

```
****************************************************************************
*
* PROGRAM:  BENCHA01.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Extract Adult CAHPS Questions
*
* WRITTEN:  06/02/2000 BY KEITH RATHBUN
*
* INPUTS:   1) AC2009DB.sas7bdat - 2009 Adult CAHPS Questions
*
* OUTPUT:   1) BENCHA01.sas7bdat - 2009 Adult CAHPS Questions Renamed to be
*              consistent with the 2009 MPR DOD Survey.
*
* MODIFIED: 1) 12/19/2000 BY KEITH RATHBUN for Q1 2000 Survey.
*           2) 04/11/2002 BY MIKE SCOTT, Updated variable names for 2002
*              Survey.
*           3) 07/30/2002 BY MIKE SCOTT, Updated to use 2001 NCBD.
*           4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*           5) 05/06/2003 BY MIKE SCOTT, Updated for 2002 benchmarks.
*           6) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*           7) 04/16/2004 BY KEITH RATHBUN, Updated to use 2003 NCBD.
*           8) 05/17/2005 BY REGINA GRAMSS, Updated for Q1 2005.
*           9) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*              Changed variable names to match the 2006 HCSDB survey.
*              Changed CAHPS variable names to match those in 2005 NCBD.
*          10) 02/21/2007 BY JUSTIN OH, Updated for Q1 FY 2007.
*              Changed variable names to match the 2006 HCSDB survey.
*              Changed CAHPS variable names to match those in 2006 NCBD.
*              Changed SREDHIGH varible AC60_05 to AC58_06
*          11) 01/10/2008 BY KEITH RATHBUN, Updated for Q1 FY 2008.
*              Changed variable names to match the 2008 HCSDB survey.
*          12) 01/05/2009 BY MIKE RUDACILLE, Updated for Q1 FY 2009.
*              Changed variable names to match the 2009 HCSDB survey.
*          13) April 7, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          14) May 5, 2009 by Mike Rudacille, Updated for 2008 benchmarks.
*          15) December 21, 2009 by Emma Ernst for Q1FY2010
*          16) March 30, 2010 by Mike Rudacille, Updated for 2009 benchmarks
*          17) December 2, 2010 by Mike Rudacille, Updated for Q1 FY 2011.
*              Changed variable names to match the 2011 HCSDB survey.
*          18) March 31, 2011 by Mike Rudacille, Updated for 2010 benchmarks
*          19) December 10, 2011 by Mike Rudacille, Updated for Q1 FY 2012.
*              Changed variable names to match the 2012 HCSDB survey.
*          20) April 4, 2012 by Amanda Kudis, updated for 2011 benchmarks.
*          21) January 10, 2013 by Aimee Valenzuela, updated for 2013, commented out
*              lines 119-124, and removed model from keep statement.
*
* NOTES:
*
* 1) This program will generate the input for BENCHA02.SAS.
*
****************************************************************************
* Assign data libraries and options
****************************************************************************;
LIBNAME IN   "..\..\..\2011AdultNCBD";
LIBNAME OUT "data";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHA01;
   SET IN.AC2011DB (RENAME=(BIRTHYY=YOB));
   FORMAT _ALL_;
   H13019 = AC13_11;
   ****************************************
   * Getting Needed Care
   ****************************************;
   H13029  = AC23_11;
   H13033  = AC27_11;
   ****************************************
   * Getting Care Quickly
```

```
    *******************************************;
    H13007  = AC04_11;
    H13010  = AC06_11;
    *******************************************
    * How Well Doctors Communicate
    *******************************************;
    H13021  = AC16_11;
    H13022  = AC15_11;
    H13023  = AC17_11;
    H13024  = AC18_11;
    *******************************************
    * Customer Service
    *******************************************;
    H13035  = AC29_11;
    H13041  = AC35_11;
    H13042  = AC36_11;
    *******************************************
    * Claims Processing
    *******************************************;
    H13046  = AC40_11;
    H13047  = AC41_11;
    *******************************************
    * Health Care Rating
    *******************************************;
    H13018  = AC12_11;
    *******************************************
    * Health Plan Rating
    *******************************************;
    H13048  = AC42_11;
    *******************************************
    * Personal Doctor Rating
    *******************************************;
    H13027  = AC21_11;
    *******************************************
    * Specialist Rating
    *******************************************;
    H13031  = AC25_11;
    *******************************************
    * Health Status
    *******************************************;
    H13065   = AC43_11;
    AGEGROUP = AGE;    *NEED TO USE USE THIS DIRECTLY (already grouped);
    XSEXA    = GENDER;
    SREDHIGH = AC60_11; /* MER 03/31/11 changed AC55_09 to AC60_10 */
    SRRACEA=AC62A_11;   /* MER 03/31/11 changed AC57A_09 thru AC57E_09 to AC62A_10 thru AC62E_10
*/
    SRRACEB=AC62B_11;
    SRRACEC=AC62E_11;
    SRRACED=AC62C_11;
    SRRACEE=AC62D_11;
    H13073=AC61_11;     /* MER 03/31/11 chaned AC56_09 to AC61_10 */
    *if product in (7,9) then model=4;             /*MJS 05/06/03 product now numeric*/
    *if product=3 then model=2;                    /*coded according to AC FORMATS.SAS*/
    *if product=1 then model=1;
    *if product=4 then model=6;
    *if product=8 then model=5;
    *if product=2 then model=3;
    nproduct=planid+0;                             /*MJS 05/06/03 was plnid now planid*/

  LABEL  H13029     = "AC23_11 - Got appointment with a specialist"
         H13033     = "AC27_11 - Got necessary care"
         H13007     = "AC04_11 - Got urgent care quickly"
         H13010     = "AC06_11 - Got routine care quickly"
         H13021     = "AC16_11 - Doctors/providers listened carefully"
         H13022     = "AC15_11 - Doctors/providers explained things"
         H13023     = "AC17_11 - Doctors/providers showed respect"
         H13024     = "AC18_11 - Doctors/providers spent enough time"
         H13041     = "AC35_11 - Customer service provided needed info"
         H13042     = "AC36_11 - Customer services was courteous"
         H13046     = "AC40_11 - Claims handled quickly"
         H13047     = "AC41_11 - Claims handled correctly"
         H13018     = "AC12_11 - Rating of health care"
         H13048     = "AC42_11 - Rating of health plan"
```

```
            H13027    = "AC21_11 - Rating of personal doctor or nurse"
            H13031    = "AC25_11 - Rating of specialist seen most often"
            H13065    = "AC43_11 - Rating of overall health"
            AGEGROUP  = "AGE - Imputed adult age"
            XSEXA     = "GENDER - Gender (equal to AC59_10 or SEX)"
            SREDHIGH  = "AC60_11 - Highest grade finished"   /*JSO 02/21/06 chged AC60_05 to AC58_06
*/
            ;
 KEEP    H13029
         H13033
         H13007
         H13010
         H13021
         H13022
         H13023
         H13024
         H13041
         H13042
         H13046
         H13047
         H13018
         H13048
         H13027
         H13031
         H13065
         H13035
         AGEGROUP
         XSEXA
         SREDHIGH
         NPRODUCT
         DISP
         YOB
         SRRACEA--SRRACEE
         H13073
         H13019
       ;
RUN;

TITLE1 "Extract Adult CAHPS Questions (DoD)";
TITLE2 "Program Name: BENCHA01.SAS By Keith Rathbun";
TITLE3 "Program Input: AC2011DB.sas7bdat";
TITLE4 "Program Output: BENCHA01.sas7bdat";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES _ALL_ /MISSING LIST;
RUN;
```

I.3.B   Q1FY2013\PROGRAMS\BENCHMARK\BENCHA02.SAS - Recode Adult CAHPS Questions from NCBD to be consistent with the HCSDB - Run Quarterly.

```
*****************************************************************************
*
* PROGRAM:  BENCHA02.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Recode Adult CAHPS Questions
*
* WRITTEN:  06/02/2000 BY KEITH RATHBUN
*
* INPUT:    1) BENCHA01.sas7bdat - Adult CAHPS Questions Renamed to be
*              consistent with the MPR DOD Survey.
*
* OUTPUT:   1) BENCHA02.sas7bdat - Recoded Adult CAHPS Questions Renamed
*              to be consistent with the MPR DOD Survey.
*
* MODIFIED: 1) 12/19/2000 BY KEITH RATHBUN for Q1 2000 Survey.
*           2) 04/11/2002 BY MIKE SCOTT, Updated variable names for 2002
*              Survey.
*           3) 07/30/2002 BY MIKE SCOTT, Updated to use 2001 NCBD.
*           4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*           5) 05/06/2003 BY MIKE SCOTT, Changed labels from _01 to _02.
*           6) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*           7) April 2004 By Keith Rathbun, Removed reverse coding for
*              H04031.  2004 survey question wording is 'Within 15 minutes'
*              instead of "More than 15 Minutes".  Updated CAHPS variable
*              labels to be consistent with 2003 NCBD.
*           8) 06/2005 By Regina Gramss, Updated codes with 2005 variable
*              names/labels.
*           9) 03/24/2006 BY KEITH RATHBUN, Updated for 2006 survey.
*              Changed CAHPS variable names to match those in 2005 NCBD.
*           10) 01/10/2008 BY KEITH RATHBUN, Updated for 2008 survey.
*           11) 01/05/2009 BY MIKE RUDACILLE, Updated for 2009 survey.
*           12) April 10, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*           13) December 21, 2009 by Emma Ernst, updated for Q1FY2010
*           14) March 30, 2010 by Mike Rudacille, updated for Q2FY2010
*              using 2009 NCBD benchmark data.
*           15) December 2, 2010 by Mike Rudacille, Updated for 2011 survey.
*           16) March 31, 2011 by Mike Rudacille, updated for Q2FY2011
*              using 2010 NCBD benchmark data.
*           17) December 10, 2011 by Mike Rudacille, Updated for 2011 survey.
*           18) April 4, 2011 by Amanda Kudis, update for Q2FY2012 using 2011
*              NCBD benchmark data.
*           19) January 10, 2013 by Aimee Valenzuela, update for Q1FY2013
*
* NOTES:
*
* 1) Run this program after BENCHA01.SAS.
* 2) This program will generate the input for BENCHA03.SAS.
*
*****************************************************************************
* Assign data libraries and options
*****************************************************************************;
LIBNAME IN      "data";
LIBNAME OUT     "data";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHA02(rename=(nproduct=product));
   SET IN.BENCHA01;

   *************************************************************************
   * Recode variables with Never, Sometimes, Usually and Always.
   * Recode Never & Sometimes (1 & 2) to 1.
   * Recode Usually (3) to 2.
   * Recode Always (4) to 3.
   *************************************************************************;

   IF H13007 = 1      THEN R13007 = 1;
   ELSE IF H13007 = 2 THEN R13007 = 1;
   ELSE IF H13007 = 3 THEN R13007 = 2;
```

```
ELSE IF H13007 = 4 THEN R13007 = 3;
ELSE IF H13007 < 0 THEN R13007 = .;

IF H13010 = 1      THEN R13010 = 1;
ELSE IF H13010 = 2 THEN R13010 = 1;
ELSE IF H13010 = 3 THEN R13010 = 2;
ELSE IF H13010 = 4 THEN R13010 = 3;
ELSE IF H13010 < 0 THEN R13010 = .;

IF H13021 = 1      THEN R13021 = 1;
ELSE IF H13021 = 2 THEN R13021 = 1;
ELSE IF H13021 = 3 THEN R13021 = 2;
ELSE IF H13021 = 4 THEN R13021 = 3;
ELSE IF H13021 < 0 THEN R13021 = .;

IF H13022 = 1      THEN R13022 = 1;
ELSE IF H13022 = 2 THEN R13022 = 1;
ELSE IF H13022 = 3 THEN R13022 = 2;
ELSE IF H13022 = 4 THEN R13022 = 3;
ELSE IF H13022 < 0 THEN R13022 = .;

IF H13023 = 1      THEN R13023 = 1;
ELSE IF H13023 = 2 THEN R13023 = 1;
ELSE IF H13023 = 3 THEN R13023 = 2;
ELSE IF H13023 = 4 THEN R13023 = 3;
ELSE IF H13023 < 0 THEN R13023 = .;

IF H13024 = 1      THEN R13024 = 1;
ELSE IF H13024 = 2 THEN R13024 = 1;
ELSE IF H13024 = 3 THEN R13024 = 2;
ELSE IF H13024 = 4 THEN R13024 = 3;
ELSE IF H13024 < 0 THEN R13024 = .;

IF H13029 = 1      THEN R13029 = 1;
ELSE IF H13029 = 2 THEN R13029 = 1;
ELSE IF H13029 = 3 THEN R13029 = 2;
ELSE IF H13029 = 4 THEN R13029 = 3;
ELSE IF H13029 < 0 THEN R13029 = .;

IF H13033 = 1      THEN R13033 = 1;
ELSE IF H13033 = 2 THEN R13033 = 1;
ELSE IF H13033 = 3 THEN R13033 = 2;
ELSE IF H13033 = 4 THEN R13033 = 3;
ELSE IF H13033 < 0 THEN R13033 = .;

IF H13035 = 1      THEN R13035 = 1;
ELSE IF H13035 = 2 THEN R13035 = 1;
ELSE IF H13035 = 3 THEN R13035 = 2;
ELSE IF H13035 = 4 THEN R13035 = 3;
ELSE IF H13035 < 0 THEN R13035 = .;

IF H13041 = 1      THEN R13041 = 1;
ELSE IF H13041 = 2 THEN R13041 = 1;
ELSE IF H13041 = 3 THEN R13041 = 2;
ELSE IF H13041 = 4 THEN R13041 = 3;
ELSE IF H13041 < 0 THEN R13041 = .;

IF H13042 = 1      THEN R13042 = 1;
ELSE IF H13042 = 2 THEN R13042 = 1;
ELSE IF H13042 = 3 THEN R13042 = 2;
ELSE IF H13042 = 4 THEN R13042 = 3;
ELSE IF H13042 < 0 THEN R13042 = .;

IF H13046 = 1      THEN R13046 = 1;
ELSE IF H13046 = 2 THEN R13046 = 1;
ELSE IF H13046 = 3 THEN R13046 = 2;
ELSE IF H13046 = 4 THEN R13046 = 3;
ELSE IF H13046 < 0 THEN R13046 = .;

IF H13047 = 1      THEN R13047 = 1;
ELSE IF H13047 = 2 THEN R13047 = 1;
ELSE IF H13047 = 3 THEN R13047 = 2;
ELSE IF H13047 = 4 THEN R13047 = 3;
```

```
   ELSE IF H13047 < 0 THEN R13047 = .;

   IF H13065 = 1         THEN R13065 = 5;
   ELSE IF H13065 = 2    THEN R13065 = 4;
   ELSE IF H13065 = 3    THEN R13065 = 3;
   ELSE IF H13065 = 4    THEN R13065 = 2;
   ELSE IF H13065 = 5    THEN R13065 = 1;
   ELSE IF H13065>5|H13065<1 THEN R13065 = .;

   ***************************************************************************
   * Recode variables to one missing condition "."
   * This also makes all the "H000xx" to "R000xx".
   ***************************************************************************;
   R13027 = H13027;  IF R13027 < 0|R13027>10 THEN R13027 = .;
   R13031 = H13031;  IF R13031 < 0|R13031>10 THEN R13031 = .;
   R13018 = H13018;  IF R13018 < 0|R13018>10 THEN R13018 = .;
   R13048 = H13048;  IF R13048 < 0|R13048>10 THEN R13048 = .;
   R13073 = H13073;  IF R13073<0 THEN R13073 = .;

   LABEL R13007   = "AC04_11 - Got urgent care quickly"
         R13010   = "AC06_11 - Got routine care quickly"
         R13021   = "AC16_11 - Doctors/providers listened carefully"
         R13022   = "AC15_11 - Doctors/providers explained things"
         R13023   = "AC17_11 - Doctors/providers showed respect"
         R13024   = "AC18_11 - Doctors/providers spent enough time"
         R13029   = "AC23_11 - Got appointment with a specialist"
         R13033   = "AC27_11 - Got necessary care"
         R13041   = "AC35_11 - Customer service provided needed info"
         R13042   = "AC36_11 - Customer services was courteous"
         R13046   = "AC40_11 - Claims handled quickly"
         R13047   = "AC41_11 - Claims handled correctly"
         R13018   = "AC12_11 - Rating of health care"
         R13027   = "AC21_11 - Rating of personal doctor or nurse"
         R13031   = "AC25_11 - Rating of specialist seen most often"
         R13048   = "AC42_11 - Rating of health plan"
         R13065   = "AC43_11 - Rating of overall health"

         nPRODUCT  = "Product ID - Unique plan ID";
      ;
      drop product;
RUN;

TITLE1 "Recode Adult CAHPS Questions (6244-410)";
TITLE2 "Program Name: BENCHA02.SAS By Keith Rathbun";
TITLE3 "Program Input: BENCHA01.SAS7BDAT";
TITLE4 "Program Output: BENCHA02.SAS7BDAT";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES   AGEGROUP
         XSEXA
         SREDHIGH
         R13007 * H13007
         R13010 * H13010
         R13021 * H13021
         R13022 * H13022
         R13023 * H13023
         R13024 * H13024
         R13029 * H13029
         R13033 * H13033
         R13041 * H13041
         R13042 * H13042
         R13046 * H13046
         R13047 * H13047
         R13018 * H13018
         R13027 * H13027
         R13031 * H13031
         R13048 * H13048
         R13065 * H13065
   /MISSING LIST;
RUN;
```

I.3.C   Q3FY2013\PROGRAMS\PurchasedBENCHMARK\BENCHA03.SAS - Calculate CAHPS Benchmark data for HCSDB - Run Quarterly.

```
****************************************************************************
*
* PROGRAM:  BENCHA03.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Adjust Adult CAHPS Benchmarks
*
* WRITTEN:  June 2000 BY ERIC SCHONE
*
* INPUTS:   1) BENCHA02.sas7bdat - 2010 Adult CAHPS Questions Renamed to be
*              consistent with the 2011 MPR DOD Survey.
*           2) GROUP8.sas7bdat - CAHPS Group8 (all beneficiaries) Dataset
*
* OUTPUTS:  1) Benchmark Composite Scores Data Sets
*
* MODIFIED: 1) Nov 2000 BY ERIC SCHONE - Output permanent datasets with
*              scores and standard errors and process the rest of the
*              composites and ratings.
*           2) Dec 2000 BY KEITH RATHBUN - Update variable names for
*              Q1 2000 Survey.
*           3) Jan 2002 BY KEITH RATHBUN - Updated to run under SAS
*              version 8 (changed INTERCEP to INTERCEPT).
*           4) Apr 2002 BY MIKE SCOTT - Updated variable names for Q1
*              2002 Survey.
*           5) Jul 2002 BY MIKE SCOTT - Changed R00077 to R04075, since
*              H02077 (health status) is back and was renamed to R04075
*              in HSC022_1.sd2.
*           6) Mar 2003 BY MIKE SCOTT - Updated for 2003 survey.
*           7) May 2003 BY MIKE SCOTT - Changed ac03_01 to ac03_02.
*           8) Jun 2003 BY MIKE SCOTT - Updated for Q2 2003.
*           9) Oct 2003 BY MIKE SCOTT - Updated for Q3 2003.
*          10) Mar 2004 BY MIKE SCOTT - Updated for Q1 2004.
*          11) April 2004 BY KEITH RATHBUN - Updated to use the CAHPS 2003
*              variable ac03_03.
*          12) June 2004 BY REGINA GRAMSS - Updated to use for Q2 2004
*          13) Sept 2004 BY REGINA GRAMSS - Update for Q3 2004
*          14) May 2005 BY REGINA GRAMSS - Updated for Q1 2005
*          15) Jul 2005 BY REGINA GRAMSS - Updated for Q2 2005
*          16) Oct 2005 BY REGINA GRAMSS - Updated for Q3 2005
*          17) Dec 2005 BY REGINA GRAMSS - Updated for Q4 2005
*          18) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*              Changed variable names to match the 2006 HCSDB survey.
*          19) 07/12/2006 by Justin Oh - Updated for Q3 FY 2006.
*          20) 10/03/2006 by Justin Oh - Changed libname in2 for Q4FY2006.
*              Change the INCLUDE path to CONVERT.sas file.
*          21) 12/18/2006 by Justin Oh - Changed libname in2 for Q1FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          22) 04/05/2007 by Justin Oh - Changed libname in2 for Q2FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          23) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*              ReportCards OR PurchasedReportCards.
*          24) 04/05/2007 by Keith Rathbun - Changed libname in2 for Q3FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          25) 09/04/2007 by Justin Oh - Changed libname in2 for Q4FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          26) 01/10/2008 BY KEITH RATHBUN, Updated for Q1 FY 2008.
*              Changed variable names to match the 2008 HCSDB survey.
*          27) 04/11/2008 by Justin Oh - Changed libname in2 for Q2FY2008.
*              Change the INCLUDE path to CONVERT.sas file.
*          28) 06/13/2008 by Keith Rathbun - Changed libname in2 for Q3FY2008.
*              Change the INCLUDE path to CONVERT.sas file.
*          29) April 10, 2009 by Mike Rudacille, changed variable names to reflect
*              modifications to beneficiary reports necessary for V4
*          30) Sept 30, 2009 by Mike Rudacille - Changed libname in2 for Q4FY2009.
*              Change the INCLUDE path to CONVERT.sas file.
*          31) December 17, 2009 by Emma Ernst- Changed libname in2 for Q1FY2010 and
*              changed variable names.
*          32) March 2, 2010 by Mike Rudacille - Changed libname in2 for Q2FY2010.
*              Change the INCLUDE path to CONVERT.sas file.
*          33) March 30, 2010 by Mike Rudacille - Changed libname in to get
```

```
*              benchmark data from Q2FY2010 (2009 NCBD benchmark data).
*        34) June 19, 2010 by Mike Rudacille - Changed libname in2 for Q3FY2010.
*        35) August 28, 2010 by Mike Rudacille - Changed libname in2 for Q4FY2010.
*        36) December 2, 2010 by Mike Rudacille- Changed libname in2 for Q1FY2011 and
*              changed variable names.
*        37) February 24, 2011 by Mike Rudacille - Changed libname in2 for Q2FY2011.
*        38) December 10, 2011 by Mike Rudacille - Changed libname in2 for Q1FY2012.
*        39) March 5, 2012 by Amanda Kudis - Changed libname in2 and include Convert.sas for
Q2FY2012.
*        40) June 20, 2012 by Amanda Kudis - Updated for Q3FY2012.
*        41) August 23, 2012 by Christine Cheu - Updated for Q4FY2012.
*        42) December 27,2012 by Aimee Valenzuela - Changed libname in in2 for Q1FY2013
*              and changed variable names.
*        43) March 23, 2013 by Mike Rudacille - Changed libname in2 and include Convert.sas for
Q2FY2013.
*
* NOTES:
*
* 1) Run this program after BENCHA01.SAS and BENCHA02.SAS.
* 2) This program will generate the input for BENCHA04.SAS.
*
****************************************************************************
* Assign data libraries and options
****************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards            ***/
%LET RCTYPE = PurchasedReportCards;

libname in       "..\..\..\Q1FY2013\Programs\Benchmark\Data"; /*Use BENCHA02.sas7bdat from
Q1fy2013*/
libname in2      "..\&RCTYPE\CAHPS_AdultQ3FY2013\Data";
libname out      "Data";
LIBNAME LIBRARY "..\..\DATA\AFINAL\FMTLIB";

%let wgt=FWRWT;

OPTIONS MLOGIC MPRINT NOCENTER MERGENOBY=WARN LS=132 PS=79;


%macro comb(f,t,q,l);

proc summary data=&f;
 var &t;
 where &q~=.;
 weight &wgt;
 output out=temp mean=&t;
run;

data temp;
 set temp;
 array old &t;
 call symput('z',left(dim(old)));
run;

data temp(drop=_type_ &t);
 set temp;
 array old &t;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;

data &q._&l;
 merge temp c_&q;
 array coeffs &t;
 array means var1-var&z;
  DO I = 1 TO DIM(COEFFS);
   IF COEFFS(I) = . THEN COEFFS(I) = 0;
   IF MEANS(I) = . THEN MEANS(I) = 0;
   ADJUST + ( COEFFS(I) * MEANS(I) );
  END;
```

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```
 ADJUST = ADJUST + intercept;
 &q._&l=adjust;

run;

%mend comb;

%macro adjust(x,y);



proc summary data=setup;
where &x>.;
 class product;

 output out=count;
run;

data count count2(rename=(_freq_=denom));
 set count;
 if _type_=0 then output count2;
 else output count;
run;

data count(keep=pweight product);
 if _n_=1 then set count2;
 set count;
 pweight=denom/_freq_;
run;

data temp;
 merge count  setup; by product;

run;
proc summary data=temp;
where &x>.;
weight pweight;
var &y;
output out=temp2 mean=&y;
data temp2;
 set temp2;
 array old &y;
 call symput('z',left(dim(old)));
run;
data temp2(keep=var1-var&z);
 set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;
data temp;
set temp;
if _n_=1 then set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
  if old(i)=. then
   old(i)=new(i);
  end;
run;
proc reg data=temp outest=c_&x noprint;
 model &x=&y;
 weight pweight;
 output out=r_&x r=r_&x;
run;

proc sort data=r_&x; by product;
run;

PROC DESCRIPT DATA=r_&x DESIGN=STRWR NOPRINT;
 WEIGHT pweight;
```

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```
 SETENV DECWIDTH=4;
 NEST product / missunit;
 VAR R_&x;
 OUTPUT  SEMEAN / TABLECELL=DEFAULT
 FILENAME=s_&x;
RUN;

data s_&x(rename=(semean=s_&x));
 set s_&x(keep=semean);
 %do i=1 %to 8;
  %if &i=8 %then %do;

    data group8;
     set in2.group5 in2.group6 in2.group7;
    run;
    %comb(group8,&y,&x,8);
  %end;
  %else %do;
   %comb(in2.group&i,&y,&x,&i);
  %end;
 %end;


%mend adjust;

/* adjust all the variables */

%macro comp(compno,a,b,c,d);
 %if &a~= %then %do;
  %let n=r_&a;
  %let m=s_&a;
  %do i=1 %to 8;
   %let p&i=&a._&i;
  %end;
  %let grpnum=1;
   proc sort data=r_&a;
    by mpid;
   run;
 %end;
 %if &b~= %then %do;
  %let n=%str(&n r_&b);
  %let m=%str(&m s_&b);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &b._&i);
  %end;
  %let grpnum=2;
   proc sort data=r_&b;
    by mpid;
   run;
 %end;
 %if &c~= %then %do;
  proc sort data=r_&c;
   by mpid;
  run;
  %let grpnum=3;
  %let n=%str(&n r_&c);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &c._&i);
  %end;
  %let m=%str(&m s_&c); %end;

  %if &d~= %then %do;
   proc sort data=r_&d;
    by mpid;
   run;
   %let grpnum=4;
   %let n=%str(&n r_&d);
    %do i=1 %to 8;
     %let p&i=%str(&&p&i &d._&i);
    %end;

    %let m=%str(&m s_&d);
  %end;
```

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```
data infile;
 merge &n;
 by mpid;
run;

proc corr outp=outf noprint;
 var &n;
 weight pweight;
run;

data final;
 if _n_=1 then do;
  %if &a~= %then %do;
   set s_&a;
  %end;
  %if &b~= %then %do;
   set s_&b;
  %end;
  %if &c~= %then %do;
   set s_&c;
  %end;
  %if &d~= %then %do;
   set s_&d;
  %end;
 end;
 set  outf;
 call symput('s'||compress(_n_),substr(_name_,3));
 where _type_='CORR';
run;

data final;
 set final;
 array r_val &n;
 array s_val &m;
 sde=0;
 do i=1 to dim(s_val);
  %do i=1 %to &grpnum;
   if _name_="r_&&s&i" then
   sde=sde+r_val(i)*s_&&s&i*s_val(i);
  %end;
 end;
run;

data sefin&compno;
 set final end=last;
 tv+sde;
 if last then do;
 sde=(tv**.5)/&grpnum;
 output;
end;

%do i=1 %to 8;
 data temp(keep=&&p&i);
  merge &&p&i;
 run;

data output;
 set &&p&i;
 totadj+adjust;
run;

data output(keep=totadj);
 set output end=last;
 if last then do;
  totadj=totadj/&grpnum;
  output;
 end;
run;

data out&compno._&i;
 merge output temp;
run;
```

```
data out.comp&compno._&i;
   merge out&compno._&i
         sefin&compno;
run;

%end;

%mend comp;

/* create composites */
proc sort data=in.bencha02 out=setup;
 by product;
run;
data setup;
set setup;
/*if ^(model in (2,4)); */ **AMK 4/06/12 removed;
if disp in ('M10','I10')  ;   ***KRR 04/19/04 Changed _02 to _03;
data setup;
 set setup; by product;
 mpid=_n_;
 if agegroup ne . then do;
 age1824=0; age2534=0; age3544=0; age4554=0; age5564=0; age6574=0;

      if agegroup=1 then age1824=1;
 else if agegroup=2 then age2534=1;
 else if agegroup=3 then age3544=1;
 else if agegroup=4 then age4554=1;
 else if agegroup=5 then age5564=1;
 else if agegroup=6 then age6574=1;
 end;
 if agegroup<6;
run;
%INCLUDE "..\PurchasedReportCards\CAHPS_AdultQ3FY2013\CONVERT.SAS";

%CONT2(DSN=SETUP, NUM=4,  Y=R13018 R13048 R13027 R13031);
%CONT3(DSN=SETUP, NUM=12, Y=R13007 R13010 R13029 R13033
                           R13021 R13022 R13023 R13024
                           R13041 R13042 R13046 R13047);
/* GETTING NEEDED CARE */
%adjust(R13029,age1824 age2534 age3544 age4554  R13065);
%adjust(R13033,age1824 age2534 age3544 age4554  R13065);
%comp(1,R13029,R13033);

/* GETTING NEEDED CARE QUICKLY */
%adjust(R13007,age1824 age2534 age3544 age4554  R13065);
%adjust(R13010,age1824 age2534 age3544 age4554  R13065);
%comp(2,R13007,R13010);

/* HOW WELL DOCTORS COMMUNICATE */
%adjust(R13021,age1824 age2534 age3544 age4554  R13065);
%adjust(R13022,age1824 age2534 age3544 age4554  R13065);
%adjust(R13023,age1824 age2534 age3544 age4554  R13065);
%adjust(R13024,age1824 age2534 age3544 age4554  R13065);
%comp(3,R13021,R13022,R13023,R13024);

/* CUSTOMER SERVICE */
%adjust(R13041,age1824 age2534 age3544 age4554  R13065);
%adjust(R13042,age1824 age2534 age3544 age4554  R13065);
%comp(4,R13041,R13042);

/* CLAIMS PROCESSING */
%adjust(R13046,age1824 age2534 age3544 age4554  R13065);
%adjust(R13047,age1824 age2534 age3544 age4554  R13065);
%comp(5,R13046,R13047);

/* RATING ALL HEALTH CARE: 0 - 10 */
%adjust(R13018,age1824 age2534 age3544 age4554  R13065);
%comp(6,R13018);

/* RATING OF HEALTH PLAN: 0 - 10 */
%adjust(R13048,age1824 age2534 age3544 age4554  R13065);
%comp(7,R13048);
```

```
/* RATING OF PERSONAL DR: 0 - 10 */
%adjust(R13027,age1824 age2534 age3544 age4554  R13065);
%comp(8,R13027);

/* SPECIALTY CARE */
%adjust(R13031,age1824 age2534 age3544 age4554  R13065);
%comp(9,R13031);
```

**I.3.D   Q3FY2013\PROGRAMS\PurchasedBENCHMARK\BENCHA04.SAS - Convert the Benchmark
          Scores Database into the WEB layout - Run Quarterly.**


```
****************************************************************************
*
* PROGRAM:   BENCHA04.SAS
* TASK:      Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6401-904)
* PURPOSE:   Convert the Benchmark Scores Database into the WEB layout
*
* WRITTEN:   06/01/2000 BY KEITH RATHBUN
*
* INPUTS:    1) Benchmark data sets with adjusted scores
*               (COMPn_i.sas7bdat where n = composite number and i = group number)
*
* OUTPUT:    1) BENCHA04.sas7bdat - Combined Benchmark Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*               and composite data sets
*
* MODIFIED: 1) Dec 2000 bY Keith Rathbun: Updated variable names for
*               Q1 2000 Survey.  For the quarterly survey group 8 (all benes)
*               is being used as the benchmark for all groups (1-8).  Thus,
*               this group is copied and output to each of the other 7 groups.
*            2) 01/23/2002 by Mike Scott: Updated variable names to be consistent
*               with 2000 survey.
*            4) 04/15/2002 by Mike Scott - Updated variable names for
*               Q1 2002 Survey.
*            5) 03/21/2003 by Mike Scott - Updated for 2003 survey.
*            6) 06/26/2003 by Mike Scott - Updated for Q2 2003.
*            7) 07/03/2003 by Mike Scott - Added TIMEPD variable to be set to the period
*               or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*               setting to 'Composite'.
*            8) 07/18/2003 by Mike Scott - Added TIMEPD to FREQ.
*            9) 10/21/2003 by Mike Scott - Updated for Q3 2003.
*           10) 03/23/2004 by Mike Scott - Updated for Q1 2004.
*           11) 06/15/2004 by Regina Gramss - Updated for Q2 2004.
*           12) 09/2004    by Regina Gramss - Updated for Q3 2004.
*           13) 05/2005    by Regina Gramss - Updated for Q1 2005.
*           14) 10/2005    by Regina Gramss - Updated for Q3 2005.
*           15) 03/24/2006 by Keith Rathbun - Updated for Q2 FY 2006.
*               Added MACRO loop to process the 8 groups.
*           16) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3.
*           17) 12/18/2007 by Justin Oh - Updated BENTYPE composite year to 2006 Q4.
*           18) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1.
*           19) 04/05/2007 by Justin Oh - Updated LIBNAME IN2 to be used for purchase RC programs.
*           20) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3.
*           21) 01/10/2008 by Keith Rathbun - Updated for Q1 FY 2008.
*           22) 04/11/2008 by Justin Oh - Updated BENTYPE composite year to 2008 Q1.
*           23) 06/13/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q2.
*           24) 09/29/2008 by Keith Rathbun - Updated BENTYPE composite year to 2008 Q3.
*           25) 04/10/2009 by Mike Rudacille - Changed variable names to reflect
*               modifications to beneficiary reports necessary for V4
*           26) 09/30/2009 by Mike Rudacille - Updated BENTYPE composite year to 2009 Q3.
*           27) 12/17/2009 by Emma Ernst - Updated for Q1 2010
*           28) 03/02/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q1.
*           29) 06/19/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q2.
*           30) 08/28/2010 by Mike Rudacille - Updated BENTYPE composite year to 2010 Q3.
*           31) 12/02/2010 by Mike Rudacille - Updated for Q1 FY 2011.
*           32) 02/24/2011 by Mike Rudacille - Updated BENTYPE composite year to 2011 Q1.
*           33) 12/10/2011 by Mike Rudacille - Updated for Q1 FY 2012.
*           34) 3/5/2012 by Amanda Kudis - Updated for Q2 FY 2012.
*           35) 6/20/2012 by Amanda Kudis - Updated for Q3 FY 2012.
*           36) 8/23/2012 by Christine Cheu- Updated for Q4 FY 2012.
*           37) 12/28/2012 by Aimee Valenzuela - Updated for Q1 FY 2013.
*           38) 03/23/2013 by Mike Rudacille - Updated for Q2 FY 2013.
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - BENCHA01.SAS - Extract Benchmark variables
*    - BENCHA02.SAS - Recode Benchmark variables
*    - BENCHA03.SAS - Construct Scores and SEMEAN datasets
```

```
*
* 2) The output file (BENCHA04.SAS7BDAT) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;
LIBNAME IN  "DATA";
LIBNAME IN2 "qpredtest";
LIBNAME OUT "DATA";
LIBNAME LIBRARY  "..\..\DATA\AFINAL\FMTLIB";


OPTIONS PS=79 LS=132 COMPRESS=NO NOCENTER;

*******************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*******************************************************************************;
%INCLUDE "..\PURCHASEDLOADWEB\LOADCAHQ.INC";


*******************************************************************************
*******************************************************************************
*
* Process Macro Input Parameters:
*
* 1) CNUM = Composite or rating variable number (1-10)
* 2) GNUM = Group number (1-8)
* 3) NVAR = Number of variables in the composite
* 4) VARS = List of individual variables for composite
* 5) SE   = List of individual standard error variables
*******************************************************************************;
%MACRO PROCESS(CNUM=, GNUM=, NVAR=, VARS=, SE=);
*******************************************************************************
* Assign value for BENTYPE composite year
*******************************************************************************;
%LET YEAR = "2013 Q2"; * Note that this is based on Calendar Year here;

*******************************************************************************
* Convert benchmark scores datasets into WEB layout.
*******************************************************************************;
%IF &CNUM<6 %THEN %DO;

  DATA INP;
    SET IN2.COMP&CNUM;
     WHERE X=&GNUM;



   DATA INP;
    SET INP  IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;
%ELSE %DO;

   DATA INP;
    SET IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;


   DATA COMP&CNUM._&Gnum;
     SET INP;
     IF _N_=1 THEN
     SET IN.COMP&CNUM._&GNUM;
      LENGTH MAJGRP  $30;
      LENGTH REGION  $25;
      LENGTH REGCAT  $26;
      LENGTH BENTYPE $50;
      LENGTH BENEFIT $34;
      LENGTH TIMEPD  $35;   ***MJS 07/03/03 Added line;
```

```
       ***********************************************************************
       * For now, assign SIG = 0
       ***********************************************************************;
       SIG = 0;

       ***********************************************************************
       * Assign major group
       ***********************************************************************;
       MAJGRP  = PUT(&Gnum,MAJGRPF.);

       ***********************************************************************
       * Assign Region and Regcat
       ***********************************************************************;
       REGION  = "Benchmark";
       REGCAT  = "Benchmark";

       ***********************************************************************
       * Assign benefit and benefit type
       ***********************************************************************;
       IF       &CNUM = 1  THEN BENEFIT = "Getting Needed Care";
       ELSE IF &CNUM = 2  THEN BENEFIT = "Getting Care Quickly";
       ELSE IF &CNUM = 3  THEN BENEFIT = "How Well Doctors Communicate";
       ELSE IF &CNUM = 4  THEN BENEFIT = "Customer Service";
       ELSE IF &CNUM = 5  THEN BENEFIT = "Claims Processing";
       ELSE IF &CNUM = 6  THEN BENEFIT = "Health Care";
       ELSE IF &CNUM = 7  THEN BENEFIT = "Health Plan";
       ELSE IF &CNUM = 8  THEN BENEFIT = "Primary Care Manager";
       ELSE IF &CNUM = 9  THEN BENEFIT = "Specialty Care";

       BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
       TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
        IF &CNUM<6 THEN DO;
           IF X=&GNUM THEN DO;
       ***********************************************************************
       * Assign composite score and SEMEAN
       ***********************************************************************;
              SCORE = TOTADJ;
              SEMEAN = SQRT(SDE**2+SESX**2);

       ***********************************************************************
       * Output composite score record for each REGION
       ***********************************************************************;
              OUTPUT;
           END;
        END;
       ***********************************************************************
       * Now, output the individual score records
       ***********************************************************************;
       IF &NVAR GT 1|&CNUM>5 THEN DO;
         ARRAY ITEMS &VARS;
         ARRAY SE    &SE;
         LENGTH NAME $8;
         DO I = 1 TO DIM(ITEMS); DROP I;
            CALL VNAME(ITEMS(I),NAME);
            NAME = SUBSTR(NAME,1,6);
            SCORE  = ITEMS(I);
            SEMEAN = SQRT(SE(I)**2+SESX**2);
            IF &NVAR GT 1 THEN
            BENTYPE = PUT(NAME,$BENTYPF.);
            TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
           IF COMPRESS(UPCASE(NAME))=COMPRESS(UPCASE(VAR)) THEN OUTPUT;
         END;
       END;

       KEEP MAJGRP
            REGION
            REGCAT
            BENTYPE
            BENEFIT
            TIMEPD  /*MJS 07/03/03 Added*/
            SEMEAN
            SCORE
```

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```
        SIG
      ;
    RUN;

%MEND;

*******************************************************************************
*******************************************************************************
* Process each of the 8 Groups.
*******************************************************************************
*******************************************************************************;
%MACRO DOIT;
%DO I = 1 %TO 8;
    *******************************************************************************
    * COMPOSITE # 1.
    * GETTING NEEDED CARE VARIABLES.
    *******************************************************************************;
    %PROCESS(CNUM=1, GNUM=&I, NVAR=2, VARS=R13029_&I R13033_&I,
         SE=S_R13029 S_R13033);


    *******************************************************************************
    * COMPOSITE # 2.
    * GETTING CARE QUICKLY VARIABLES.
    *******************************************************************************;
    %PROCESS(CNUM=2, GNUM=&I, NVAR=2, VARS=R13007_&I R13010_&I,
         SE=S_R13007 S_R13010);


    *******************************************************************************
    * COMPOSITE # 3.
    * HOW WELL DOCTORS COMMUNICATE.
    *******************************************************************************;
    %PROCESS(CNUM=3, GNUM=&I, NVAR=4, VARS=R13021_&I R13022_&I R13023_&I R13024_&I,
         SE=S_R13021 S_R13022 S_R13023 S_R13024);


    *******************************************************************************
    * COMPOSITE # 4.
    * CUSTOMER SERVICE.
    *******************************************************************************;
    %PROCESS(CNUM=4, GNUM=&I, NVAR=2, VARS=R13041_&I R13042_&I,
         SE=S_R13041 S_R13042);


    *******************************************************************************
    * COMPOSITE # 5.
    * CLAIMS PROCESSING.
    *******************************************************************************;
    %PROCESS(CNUM=5, GNUM=&I, NVAR=2, VARS=R13046_&I R13047_&I,
         SE=S_R13046 S_R13047);

    *******************************************************************************
    * INDIVIDUAL # 1.
    * RATING OF ALL HEALTH CARE: 0 - 10.
    *******************************************************************************;
    %PROCESS(CNUM=6, GNUM=&I, NVAR=1, VARS=R13018_&I, SE=S_R13018);


    *******************************************************************************
    * INDIVIDUAL # 2.
    * RATING OF HEALTH PLAN: 0 - 10.
    *******************************************************************************;
    %PROCESS(CNUM=7, GNUM=&I, NVAR=1, VARS=R13048_&I, SE=S_R13048);


    *******************************************************************************
    * INDIVIDUAL # 3.
    * RATING OF PERSONAL DOCTOR: 0 - 10.
    *******************************************************************************;
    %PROCESS(CNUM=8, GNUM=&I, NVAR=1, VARS=R13027_&I, SE=S_R13027);


    *******************************************************************************
    * INDIVIDUAL # 4.
    * SPECIALTY CARE: 0 - 10.
    *******************************************************************************;
    %PROCESS(CNUM=9, GNUM=&I, NVAR=1, VARS=R13031_&I, SE=S_R13031);
%END;
%MEND DOIT;
```

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```
%DOIT;

*****************************************************************************
*****************************************************************************
* STACK up all of the files into one final output dataset.
*****************************************************************************
*****************************************************************************;
DATA OUT.BENCHA04;
    SET COMP1_1  COMP1_2  COMP1_3  COMP1_4  COMP1_5  COMP1_6  COMP1_7  COMP1_8
        COMP2_1  COMP2_2  COMP2_3  COMP2_4  COMP2_5  COMP2_6  COMP2_7  COMP2_8
        COMP3_1  COMP3_2  COMP3_3  COMP3_4  COMP3_5  COMP3_6  COMP3_7  COMP3_8
        COMP4_1  COMP4_2  COMP4_3  COMP4_4  COMP4_5  COMP4_6  COMP4_7  COMP4_8
        COMP5_1  COMP5_2  COMP5_3  COMP5_4  COMP5_5  COMP5_6  COMP5_7  COMP5_8
        COMP6_1  COMP6_2  COMP6_3  COMP6_4  COMP6_5  COMP6_6  COMP6_7  COMP6_8
        COMP7_1  COMP7_2  COMP7_3  COMP7_4  COMP7_5  COMP7_6  COMP7_7  COMP7_8
        COMP8_1  COMP8_2  COMP8_3  COMP8_4  COMP8_5  COMP8_6  COMP8_7  COMP8_8
        COMP9_1  COMP9_2  COMP9_3  COMP9_4  COMP9_5  COMP9_6  COMP9_7  COMP9_8
    ;
    IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6663-410)";
TITLE2 "Program Name: BENCHA04.SAS By Keith Rathbun";
TITLE3 "Program Inputs: Benchmark Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: BENCHA04.SAS7BDAT - Combined Benchmark Scores Database in WEB layout";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES TIMEPD BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
       /MISSING LIST;
RUN;
```

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**I.4.A   Q3FY2013\PROGRAMS\PurchasedReportCards\MPR_AdultQ3FY2013\PRVCOMPQ.sas -
          Calculate Preventive Care Composite Scores - Run Quarterly.**

```
********************************************************************
*  Project:    DoD Reporting and Analysis 6077-410
*  Program:    PRVCOMPQ.SAS
*  Author:     Chris Rankin
*  Date:       12/22/2000
*  Modified:   4/19/2001 By Keith Rathbun: Restrict population to
*              xins_cov in(1,2,3,6).  Use POSTSTR instead of
*              adj_cell.
*  Modified:   10/25/01 By Daniele Beahm: Because no poststratification
*              was done for q3 2000, changed POSTSTR back to ADJ_CELL
*              04/09/02 modified macros the first three macros to create
*              temporary datasets (instead of writing permanent datasets)
*              07/15/02 By Mike Scott: Changed HCS021 to HCS022 for Q2 2002.
*              01/12/03 By Mike Scott: Changed ADJ_CELL to COM_SAMP.
*              03/21/03 By Mike Scott: Changed HCS024 to HCS031 for Q2 2002.
*              04/01/03 By Mike Scott: Replaced HP_FLU with HP_CHOL.
*              04/30/03 By Mike Scott: Changed COM_SAMP to ADJ_CELL.  Changed
*              CMPNUM1 from 4 to 5 and CMPNUM2 from 4 to 3.
*              06/13/03 By Eric Schone.  Changed composite mean & std err calculations
*              to use weights from 2000 input data.
*              07/23/03 By Mike Scott: Removed ..\PROGRAMS\ from INCLUDE.
*              10/21/03 By Mike Scott: Updated for Q3 2003.
*              01/07/04 By Mike Scott: Updated for Q4 2003.
*              02/02/04 By Mike Scott: Set PRVVAR6, PRVVAR7, and PRVVAR8 in DATA NORMDATA
*              to H04023, H04020, and H04031.
*              03/24/04 By Mike Scott: Updated for Q1 2004.
*              04/09/04 By Keith Rathbun: Added Service Affiliation variables to
*              accomodate the consumer watch.
*              06/22/04 By Regina Gramss: Updated for Q2 2004.
*              09/2004  By Regina Gramss: Updated for Q3 2004, to use XTNEXREG
*                                 vs. XREGION
*              01/2005 By Regina Gramss: Updated to create "Last conus_q" for
*                      Q4 2004, replace XTNEXREG with XSERVREG
*              04/2005 By Regina Gramss: Updated for Q1 2005 (update 2004 field names)
*              07/2005 By Regina Gramss: updated for Q2 2005
*              10/2005 By Regina Gramss: Updated for Q3 2005
*              12/2005 By Regina Gramss: Updated for Q4 2005
*              03/24/2006 By Keith Rathbun: Updated for Q2 FY 2006.  Changed reference
*              to ADJ_CELL in 2006 data to be STRATUM.
*              07/2006 By Justin Oh: updated for Q2 FY 2006
*              08/22/2006 By Justin Oh
*                      Changed XSERVREG for Overseas
*                      Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                              IF XINS_COV IN (3)     THEN GROUP4 = 1
*                              Since only XINS_COV IN (1,2,3,6) is kept.
*                      Create XOCONUS for 2005 data.
*                      Added XREGION in the keep statement for NORMDATA.
*              10/04/2006 By Justin Oh Updated %LET INDATA and YRDATA.
*              11/15/2006 By Justin Oh Added FIELDAGE in 4 keep statements
*              12/22/2006 By Justin Oh Updated %LET INDATA and YRDATA HCS071_1.
*              04/05/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS072_1.
*              04/05/2007 By Justin Oh Added conditions for RC types
*                      ReportCards OR PurchasedReportCards.
*              05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*                      both Norm and Quarter datasets.
*              05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*                      Groups 1,3, and 4 for new reservists logic.
*              07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*                      Groups All, 4, 5, and 6.
*              09/04/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS074_1.
*              01/10/2008 By Keith Rathbun, Updated %LET INDATA and YRDATA HCS081_1.
*                      Also changed H07 variable names to be H08 to match 2008 survey
*              04/11/2008 By Justin Oh Updated %LET INDATA and YRDATA HCS082_1.
*              06/13/2008 By Keith Rathbun Updated %LET INDATA and YRDATA HCS083_1.
*              04/20/2009 By Mike Rudacille Changed RCTYPE and certain variable names for
*                      transition to V4 questionnaire.
*              06/22/2009 By Keith Rathbun Updated %LET INDATA and YRDATA HCS093_1.
*              09/30/2009 By Mike Rudacille Updated %LET INDATA and YRDATA HCS094_1.
*              12/17/2009 By Emma Ernst Updated %LET INDATA and YRDATA HCS101_1.
```

```
*                        Also changed H09 variables names to be H10 to match 2010 survey
*                03/02/2010 By Mike Rudacille Updated %LET INDATA and YRDATA HCS102_1.
*                03/25/2010 By Mike Rudacille Changed HCS102_1 to HCS102_2.
*                        Changed because HCS102_1 no longer contains FIELDAGE.
*                06/19/2010 By Mike Rudacille Updated %LET INDATA and YRDATA HCS103_2.
*                08/28/2010 By Mike Rudacille Updated %LET INDATA and YRDATA HCS104_2.
*                12/02/2010 By Mike Rudacille Updated %LET INDATA and YRDATA HCS111_2.
*                        Also changed variable names for 2011 survey.
*                02/24/2011 By Mike Rudacille Updated %LET INDATA and YRDATA HCS112_2.
*                03/31/2011 By Mike Rudacille Updated benchmarks for HP 2020.
*                12/10/2011 By Mike Rudacille Updated %LET INDATA and YRDATA HCS121_2.
*                        Also changed variable names for 2012 survey.
*                12/21/2011 By Mike Rudacille Updated norm data from 2005 to 2011.
*                03/05/2012 By Amanda Kudis Updated %LET INDATA and YRDATA HCS122_2.
*                06/20/2012 By Amanda Kudis Updated for Q3FY2012.
*                08/23/2012 By Christine Cheu Updated for Q4FY2012.
*                11/03/2012 By Mike Rudacille Updated for handling of
*                        Joint Service facilities
*                12/28/2012 By Aimee Valenzuela Updated for Q1FY2013
*                03/23/2013 By Mike Rudacille Updated %LET INDATA and YRDATA HCS132_2.
*                05/17/2013 By Mike Rudacille Modified coded to address SUDAAN V11 handling
*                        of PROC DESCRIPT without LEVELS. Now invoking PROC DESCRIPT
*                        for TABLEVAR=USA (i.e. CONUS cases) similarly to the other cases,
*                        except using LEVELS 1.
*
*  Purpose:   Calculate MPR Preventive Care Composites
*  Input:     HCSyyq_2.sas7bdat
*  Output:    RFINAL.sas7bdat
*             CFINAL.sas7bdat
*             MFINAL.sas7bdat
*             SFINAL.sas7bdat
*
*  Include
*   Files:    LOADCAHPQ.INC
*   Notes:    Next program is Loadmprq.sas
*
*             ***CHECK PARAMETER ASSIGNMENTS***
****************************************************************;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 MLOGIC MPRINT
        NOFMTERR COMPRESS=YES;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards         ***/
%LET RCTYPE = PurchasedReportCards;

LIBNAME IN              "..\..\..\DATA\AFINAL";
LIBNAME INNORM          "..\..\..\..\2011\DATA";
LIBNAME OUT             ".";
LIBNAME LIBRARY         "..\..\..\DATA\AFINAL\FMTLIB";

%LET WGT=FWRWT;
%LET NORMWGT = CFWT;
%LET NORMDAT = HCS11A_2;

%LET DEBUG=Y;       /** Set to Y for Debug print of datasets **/
%LET INDATA=HCS133_2;

%LET YRDATA=HCS133_2;

/***** The following parameters are used in the Variance ****/
/***** calcuation macro for region and catchment area    ****/

%LET GRPNUM=8;      /** number of groups        **/
%LET COMPNUM=6;     /** number of variables     **/  /* RSG - 04/2005 changed from 8 to 7
(eliminate cholesterol)*/
                                                     /* MER - 12/21/11 changed from 7 to 6
(eliminate 15 min access var)*/
%LET REGNUM=18;     /** number of regions       **/  /* RSG - 01/2005 CHANGED TO FIT THE 16
CATEGORIES OF XSERVREG */
                                                     /* JSO 08/24/2006 (16 TO 15) Changed
Overseas Regions*/
                                                     /* MER 11/03/2012 (15 TO 18) Joint Service
*/
```

```
%LET CATCHNUM=9999; /** number of catchment areas **/

%LET CMPNUM1=4;    /** number of variables in first composite  **/   /*RSG 04/2005 Changed
CMPNUM1 from 5 to 4*/
%LET CMPNUM2=2;    /** number of variables in second composite **/   /*MJS 04/30/03 Changed
CMPNUM2 from 4 to 3*/
                                                                /*MER 12/27/11 Changed
CMPNUM2 from 3 to 2*/

%LET COMPCNT=2;    /** number of composites                   **/

**** set up benchmarks for preventive services ;
**** note -- these are the hp 2000 goals        ;
**** MER 3/31/11 - updated to hp 2020 goals    ;

%LET GOALVAR1= .78;   /** HP Goal for prenatal care        **/
%LET GOALVAR2= .81;   /** HP Goal for Mammography          **/
%LET GOALVAR3= .93;   /** HP Goal for Papsmear             **/
%LET GOALVAR4= .95;   /** HP Goal for Blood Pressure check **/
%LET GOALVAR5= .90;   /** access goals                     **/ /*04/2005 - RSG: DELETED
CHOLESTEROLE GOAL*/
%LET GOALVAR6= .90;

%INCLUDE "..\..\PURCHASEDLOADWEB\LOADCAHQ.INC";

/**** note -- output all data to a single dataset for macro */
/**** call                                                 */
/**** MACROS are no longer called for catchment areas      */

/* 08/24/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\..\2011\Data\fmtlib';

DATA NORMDATA(KEEP=XTNEXREG XSERVREG &WGT PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
               DENV1-DENV&COMPNUM XSERVAFF FIELDAGE);
               /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

  set INNORM.&NORMDAT(KEEP=MPRID XINS_COV HP_BP HP_MAMOG HP_PAP HP_PRNTL XTNEXREG
                       XENR_PCM XBNFGRP ENBGSMPL &NORMWGT DBENCAT
                       H11010 H11007 H11003 SERVAFF XREGION FIELDAGE XCATCH);
                  /* 08/24/2006 JSO Added XREGION in the keep statement to get XOCONUS */
                  /* 11/15/2006 JSO Added FIELDAGE in the keep statement */
                  /* 05/10/2007 JSO Added H05006, DBENCAT in the keep statement */
                  /* 12/21/2011 MER For switch to 2011 norm data mapped the following vars:
*/
                  /* H05006 -> H11003                                                 */
                  /* H05007 -> H11004 (subsequently taken out due to not being necessary */
                  /* H05019 -> H11007                                                 */
                  /* H05022 -> H11010                                                 */
                  /* H05030 and ADJ_CELL were dropped                                 */

*****************************************************************************
* For quarterly reports, catchment level reporting is not done
* so the value of cellp is set to 1.
* For annual reporting purposes, cellp will need to be assigned
* to geocell
*****************************************************************************;

/*RSG 02/2005 Added codes to define XTNEXREG & XSERVAFF*/

  IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
  ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
  ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
  ELSE XSERVAFF = 4;                         *Other/unknown;

  IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

  IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

  IF XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11
added 10, 11*/
```

```
   NXNS_COV = XINS_COV;                 /*JSO 04/26/2007 added for reservists logic*/
                                        /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
   IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
   IF DBENCAT IN('GRD','IGR') AND H11003 = 3 THEN DO;
      NXNS_COV = 3;
      XENR_PCM = .;
   END;

   PRVVAR1=HP_PRNTL;          /** prenatal care  **/
   PRVVAR2=HP_MAMOG;          /** mammography    **/
   PRVVAR3=HP_PAP;            /** papsmear       **/
   PRVVAR4=HP_BP;             /** blood pressure **/
   PRVVAR5=H11010;            /** access var 1   **/
   PRVVAR6=H11007;            /** access var 2   **/

/**** set up numerator and denominator for proportions ****/

   ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
   ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
   ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

   DO I = 1 TO &COMPNUM;
      IF I LE  &CMPNUM1 THEN DO;
         IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
         ELSE NUMER(I)=0;
         IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
      END;
      ELSE IF I GT &CMPNUM1 THEN DO;
         IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
         ELSE NUMER(I)=0;
         IF PRVVAR(I) > 0 THEN DENOM(I)=1;
      END;
   END;
   DROP I;
   DENV4=1;

 /* 08/22/2006, JSO Create XOCONUS for 2005 data */
    IF      XREGION=13 THEN XOCONUS=1;
    ELSE IF XREGION=14 THEN XOCONUS=2;
    ELSE IF XREGION=15 THEN XOCONUS=3;

 /*RSG 02/2005 Added codes to define XSERVREG CACSMPL*/

    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
       ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
       ELSE XSERVREG = 5;
    END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 6;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
       ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
       ELSE XSERVREG = 10;
    END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 11;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
       ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
       ELSE XSERVREG = 15;
    END;

    IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
       IF      XOCONUS = 1 THEN XSERVREG = 16;
       ELSE IF XOCONUS = 2 THEN XSERVREG = 17;
       ELSE IF XOCONUS = 3 THEN XSERVREG = 18;
    END;
```

```
    RENAME &NORMWGT = &WGT;
run;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY  "..\..\..\Data\Afinal\fmtlib";

DATA &YRDATA(KEEP=BGROUP MHS USA XSERVAFF CACSMPL &WGT TMP_CELL
                    PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
                    DENV1-DENV&COMPNUM XTNEXREG XSERVREG FIELDAGE);
                    /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

   SET IN.&INDATA(KEEP=XINS_COV HP_BP XTNEXREG HP_MAMOG HP_PAP HP_PRNTL   /*RSG 04/2005 DELETE
HP_CHOL*/
                       XREGION SERVAFF XENR_PCM XBNFGRP ENBGSMPL &WGT CACSMPL XCATCH
                       STRATUM H13010 H13007 H13004 H13003 D_HEALTH FIELDAGE DBENCAT);
                       /* 11/15/2006 JSO Added FIELDAGE in the keep statement */
                       /* 05/10/2007 JSO Added H07006, DBENCAT in the keep statement */

****************************************************************************
* For quarterly reports, catchment level reporting is not done
* so the value of cellp is set to 1.
* For annual reporting purposes, cellp will need to be assigned
* to geocell
****************************************************************************;
  IF SERVAFF = 'A' THEN XSERVAFF = 1;         *Army;
  ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;  *Air Force;
  ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
  ELSE XSERVAFF = 4;                          *Other/unknown;

  IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

  CELLP = 1;
  LENGTH TMP_CELL 8;
  TMP_CELL = STRATUM;    /* Make STRATUM a numeric variable */

  IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

  IF XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11
Added 10,11 */

  NXNS_COV = XINS_COV;   /*JSO 05/14/2007 added for reservists logic*/
                         /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
  IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
  IF DBENCAT IN('GRD','IGR') AND H13003 = 3 THEN DO;
     NXNS_COV = 3;
     XENR_PCM = .;
  END;

  PRVVAR1=HP_PRNTL;          /** prenatal care  **/
  PRVVAR2=HP_MAMOG;          /** mammography    **/
  PRVVAR3=HP_PAP;            /** papsmear       **/
  PRVVAR4=HP_BP;             /** blood pressure **/
  /*RSG 04/2005 - delete cholesterol, renumber PRVVAR below*/
  PRVVAR5=H13010;            /** access var 1   **/
  PRVVAR6=H13007;            /** access var 2   **/


/**** set up numerator and denominator for proportions ****/

  ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
  ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
  ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

  DO I = 1 TO &COMPNUM;
     IF I LE  &CMPNUM1 THEN DO;
        IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
     END;
     ELSE IF I GT &CMPNUM1 THEN DO;
        IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
```

```
         ELSE NUMER(I)=0;
         IF PRVVAR(I) > 0 THEN DENOM(I)=1;
      END;
   END;
   DROP I;
   DENV4=1;

   MHS= 1;    /* set up dummy for MHS-- include all observations */

  /* 08/22/2006, JSO Create XOCONUS for 2005 data */
   IF      XREGION=13 THEN XOCONUS=1;
   ELSE IF XREGION=14 THEN XOCONUS=2;
   ELSE IF XREGION=15 THEN XOCONUS=3;

   IF XTNEXREG = 1 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 1;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
      ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
      ELSE XSERVREG = 5;
   END;

   IF XTNEXREG = 2 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 6;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
      ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
      ELSE XSERVREG = 10;
   END;

   IF XTNEXREG = 3 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 11;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
      ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
      ELSE XSERVREG = 15;
   END;

   IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
      IF      XOCONUS = 1 THEN XSERVREG = 16;
      ELSE IF XOCONUS = 2 THEN XSERVREG = 17;
      ELSE IF XOCONUS = 3 THEN XSERVREG = 18;
   END;

 *****************************************************************************
 * Assign indicator of CONUS based on XTNEXREG.  CONUS stands for
 * Contential United States it but includes both Alaska and Hawaii.
 * 1/16/09 Changed CONUS to USA.
 *****************************************************************************;
   IF XTNEXREG IN (1,2,3) THEN USA=1;                              /*RSG 01/2005 OVERALL CONUS*/

   ELSE IF XTNEXREG = 4 THEN USA=2;

 * Prime enrollees      *;

   IF (NXNS_COV IN (1,2,6) AND H13004>=2) THEN DO;
      BGROUP=1;
      OUTPUT;
   END;

 * Enrollees with military PCMs *; /*JSO 04/05/2007, added conditions for RC type*/
 IF "&RCTYPE" = 'ReportCards' AND
      (XENR_PCM IN (1,2,6) AND H13004>=2) THEN DO;
      BGROUP=2;
      OUTPUT;
   END;
 ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
      (XENR_PCM IN (1,2) AND H13004>=2) THEN DO;
      BGROUP=2;
      OUTPUT;
   END;

 * Enrollees with civilian PCMs *; /*JSO 04/05/2007, added conditions for RC type*/
```

```
IF "&RCTYPE" = 'ReportCards' AND
    (XENR_PCM IN (3,7) AND H13004>=2) THEN DO;
    BGROUP=3;
    OUTPUT;
  END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
    ((XENR_PCM IN (3) AND H13004>=2) OR NXNS_COV IN (3,9,10)) THEN DO;  /*JSO 07/30/2007, Added
9*/
    BGROUP=3;                                                          /*MER 07/12/11 Added
10*/
    OUTPUT;
  END;

* Nonenrollees *;

  IF NXNS_COV IN (3,9,10) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
    BGROUP=4;                         /*JSO 07/30/2007, Added 9*/  /*MER 07/12/11 Added 10*/
    OUTPUT;
  END;

* Active duty      *;

  IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
    BGROUP=5;           /*JSO 07/30/2007, added DBENCAT conditions*/
    OUTPUT;
  END;

* Active duty dependents  *;

  IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
    BGROUP=6;           /*JSO 07/30/2007, added DBENCAT conditions*/
    OUTPUT;
  END;

* Retirees  *;

  IF XBNFGRP IN (3,4) THEN DO;
    BGROUP=7;
    OUTPUT;
  END;

* All beneficiaries *;

  BGROUP=8;
  OUTPUT;
RUN;


DATA HCSDB;
SET &YRDATA;
RUN;

*******************************************************
*** First, calculate standard errors and create    ***
*** a file for each analytical unit                 ***
*******************************************************;

PROC SORT DATA=HCSDB; BY TMP_CELL;
RUN;

*******************************************************
***** Sudaan macro to calculate standard errors  *****
***** there are three output datasets created     *****
***** (XTNEXREG, XSERVREG, MHS, XSERVAFF)                *****
***** Note:  7/10/2000 use CONUS for MHS          *****
***** Note:   there are 8 variables and 8 groups  *****
***** Note: 1/16/09 Changed CONUS to USA          *****
*******************************************************;

%MACRO A_SUDAAN(TABLEVAR);

*** set the number of levels in the proc descript ***;
*** for region or catchment                       ***;
```

```
    %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
        %LET ENDNUM=4;
        %LET PREF=S;              /** dataset prefix for service affiliation data    **/
    %END;
    %IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
        %LET ENDNUM=&REGNUM;
        %LET PREF=R;              /** dataset prefix for region data     **/
    %END;
    %ELSE %IF %UPCASE(&TABLEVAR)=USA %THEN %DO;
        %LET ENDNUM=1;
        %LET PREF=C;              /** dataset prefix for CONUS data **/
    %END;
    %ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
        %LET ENDNUM=5;        /** MER 11/03/2012 Change from 4 to 5 for Joint Service **/
        %LET PREF=M;
    %END;

    %DO I=1 %TO &GRPNUM;      /** 8 groups     **/

        %DO J=1 %TO &COMPNUM;   /** 6 variables **/

            DATA INDATA&I.&J(KEEP=&WGT MHS USA XSERVAFF XTNEXREG XSERVREG CACSMPL
                               XSERVAFF NUMV&J DENV&J TMP_CELL);
                SET HCSDB;
                WHERE XSERVREG > 0 AND BGROUP=&I AND DENV&J > 0;
                %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
                    IF XSERVAFF > 5 OR XSERVAFF = . THEN DELETE;  /*MER 11/03/2012 Changed from 4 to 5
for Joint Service */
                %END;
                    %IF %UPCASE(&TABLEVAR)=USA %THEN %DO;
                        IF USA NE 1 THEN DELETE;
                    %END;
                    %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
                        IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
                    %END;
            RUN;

*** Calculate values for regions, catchment areas ****;

            PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
                WEIGHT &WGT;
                SETENV DECWIDTH=4;
                NEST TMP_CELL / MISSUNIT;
                VAR NUMV&J;
                TABLES &TABLEVAR;
                SUBGROUP &TABLEVAR;
                LEVELS &ENDNUM;
                OUTPUT SEMEAN/ TABLECELL=DEFAULT
                FILENAME=&PREF.GRP&I.V&J;
            RUN;


***** first, put all variables into one dataset for each group *****;

            DATA &PREF.GRP&I.V&J;
                SET &PREF.GRP&I.V&J;
                IF SEMEAN NE .;
                MHS=1;
            RUN;

            %IF &J=1 %THEN %DO;
                DATA &PREF.SEGRP&I;
                    SET &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
                    GROUP=&I;
                    IF SEMEAN NE .;
                    RENAME SEMEAN = SERRV&J;
                RUN;
            %END;
            %ELSE %DO;
                DATA &PREF.SEGRP&I;
                    MERGE &PREF.SEGRP&I &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
                    BY &TABLEVAR;
```

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```
                GROUP=&I;
                RENAME SEMEAN = SERRV&J;
            RUN;
        %END;
    %END;

***** Put all data into one dataset  *****
***** Note:  changed output dataset  *****
***** to include group              *****;

    %IF &I=1 %THEN %DO;

        DATA &PREF.SERR;
            SET &PREF.SEGRP&I;
            KEEP GROUP &TABLEVAR SERRV1-SERRV&COMPNUM;
        RUN;
    %END;
    %ELSE %DO;

        DATA &PREF.SERR;
            SET &PREF.SERR
            &PREF.SEGRP&I;
        RUN;
    %END;

******** DEBUG PRINT   *******;

    %IF &DEBUG=Y %THEN %DO;
        %IF &I=&GRPNUM AND &PREF=R %THEN %DO;
            PROC PRINT DATA=&PREF.SERR;
                VAR &TABLEVAR GROUP SERRV1-SERRV&COMPNUM;
            RUN;
        %END;
    %END;

 %END;

%MEND A_SUDAAN;

%A_SUDAAN (USA);
%A_SUDAAN (XSERVAFF);
%A_SUDAAN (XSERVREG);
%A_SUDAAN (XTNEXREG);

**********************************************************
*** Next, calculate correlation coefficients       ***
*** and create a file for each analytical unit      ***
**********************************************************;

%MACRO GETCORR(BYVAR);

 %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=USA %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;

 PROC SORT DATA=HCSDB; BY &BYVAR;
 RUN;

 %DO I = 1 %TO &GRPNUM;

    PROC CORR NOPRINT DATA=HCSDB OUTP=&PREF.CORRC&I;
        %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %DO;
            WHERE BGROUP=&I AND 1 <= XSERVAFF <= 5;    /** MER 11/03/2012 Changed 4 to 5 for Joint
Service **/
        %END;
        %IF %UPCASE(&BYVAR)=USA %THEN %DO;
            WHERE BGROUP=&I AND USA = 1;
        %END;
        %ELSE %DO;
            WHERE BGROUP=&I;
        %END;
        BY &BYVAR;
```

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```
            VAR PRVVAR1-PRVVAR&COMPNUM;
            WITH PRVVAR1-PRVVAR&COMPNUM;
            WEIGHT &WGT;
         RUN;

         DATA &PREF.CORRC&I;
            SET &PREF.CORRC&I;
            WHERE _TYPE_="CORR";
            GROUP=&I;
            ARRAY OLD PRVVAR1-PRVVAR&COMPNUM;
            ARRAY NEW CORV1-CORV&COMPNUM;
            DO J = 1 TO &COMPNUM;
                NEW(J)=OLD(J);
            END;
            DROP J PRVVAR1-PRVVAR&COMPNUM;
         RUN;

         %IF &I=1 %THEN %DO;

            DATA &PREF.CORRC;
               SET &PREF.CORRC&I;
            RUN;

         %END;
         %ELSE %DO;

            DATA &PREF.CORRC;
               SET &PREF.CORRC
               &PREF.CORRC&I;
            RUN;

         %END;
         %IF &DEBUG=Y %THEN %DO;
            %IF &I=&COMPNUM AND &PREF=R %THEN %DO;
               PROC PRINT DATA=&PREF.CORRC;
                  WHERE GROUP=1;
               RUN;
            %END;
         %END;
      %END;
   %END;

*** Flatten dataset(for each region, condense matrix to one row) ***;

   %DO K=1 %TO &COMPNUM;

      DATA &PREF.CORR&K;
         SET &PREF.CORRC;
         WHERE _NAME_ = "PRVVAR&K";
         ARRAY CORR   (&COMPNUM) CORV1-CORV&COMPNUM;
         ARRAY CORR&K (&COMPNUM) CORV&K.1-CORV&K.&COMPNUM;
         DO L=1 TO &COMPNUM;
            CORR&K(L)=CORR(L);
         END;
         KEEP GROUP &BYVAR CORV&K.1-CORV&K.&COMPNUM;
      RUN;
      %IF &K=1 %THEN %DO;
         DATA &PREF.CORR;
            SET &PREF.CORR&K;
         RUN;
      %END;
      %ELSE %DO;
         DATA &PREF.CORR;
            MERGE &PREF.CORR(IN=IN_1) &PREF.CORR&K(IN=IN_2);
             BY GROUP &BYVAR;
         RUN;
      %END;
      %IF &DEBUG=Y %THEN %DO;
         %IF &PREF=R %THEN %DO;
            PROC PRINT DATA=&PREF.CORR;
               WHERE GROUP=1;
            RUN;
         %END;
      %END;
```

```
 %END;

%MEND GETCORR;

%GETCORR(USA);
%GETCORR(XSERVAFF);
%GETCORR(XSERVREG);
%GETCORR(XTNEXREG);

********************************************************
***   Macro to derive composites for each      *******
***   beneficiary group, level                 *******
***   output one dataset for each group        *******
********************************************************;

%MACRO GETPROP(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);

 %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=USA %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;


 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR NUMV1-NUMV&COMPNUM
        DENV1-DENV&COMPNUM;
    WEIGHT &WGT;
    OUTPUT OUT= &PREF.CMPSUM(DROP = _TYPE_)
    SUM =  ;
 RUN;
 PROC MEANS NWAY NOPRINT DATA=normdata;
 *   CLASS &BYVAR;
    VAR
        DENV1-DENV&COMPNUM;
    WEIGHT &wgt.;
    OUTPUT OUT= &PREF.norms(DROP = _TYPE_)
    SUM =  nrmv1-nrmv&compnum;
 RUN;

 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR DENV1-DENV&COMPNUM;
    OUTPUT OUT=&PREF.DGFR(DROP=_TYPE_ _FREQ_)
    SUM= NOBSV1-NOBSV&COMPNUM;
 RUN;

data &pref.cmpsum;

if _n_=1 then set &pref.norms;
set &pref.cmpsum;
proc sort data=&pref.cmpsum; by bgroup &byvar;
 DATA &PREF.CMPSUM;
    MERGE &PREF.CMPSUM(RENAME=(_FREQ_=N_OBS))
          &PREF.DGFR;
    BY BGROUP &BYVAR;
    %IF &PREF=M %THEN %DO;  /** added 7/10/2000 **/
        WHERE 1 <= XSERVAFF <= 5;  /** MER 11/03/2012 Changed 4 to 5 for Joint Service **/
    %END;
    %ELSE %IF &PREF=C %THEN %DO;
        WHERE USA = 1;
    %END;

    **** set up group variable  **;

    RENAME BGROUP=GROUP;;

    **** set up proportions, and composites **;

    ARRAY PROPORT PROPV1-PROPV&COMPNUM;
    ARRAY NUMER   NUMV1-NUMV&COMPNUM;
```

```
   ARRAY DENOM    DENV1-DENV&COMPNUM;
   array norm     nrmv1-nrmv&compnum;

   DO J=1 TO DIM(PROPORT);
      PROPORT(J) = NUMER(J)/DENOM(J);
   END;
   DROP J;

  **** composites **;


** added goalvars to datastep, 5/30/2000                      ;
** taken out of temporary array for variance calculations;
** and used, kept as variables                               ;

  GOALVAR1=&GOALVAR1;
  GOALVAR2=&GOALVAR2;
  GOALVAR3=&GOALVAR3;
  GOALVAR4=&GOALVAR4;
  GOALVAR5=&GOALVAR5;
  GOALVAR6=&GOALVAR6;
/*RSG 04/2005 - delete goal8 since chol eliminated*/

** the weight for preventive service is defined as the        ;
** proportion of the denominator for that service to the      ;
;
** composite denominator                                      ;
** healthy people 2000 goals -- used as benchmarks            ;

  ARRAY    SVCWGT(&COMPNUM) WGTV1-WGTV&COMPNUM;
  ARRAY     BMARK(&COMPNUM) GOALVAR1-GOALVAR&COMPNUM;
  ARRAY WGTBMARK(&COMPNUM) WTDV1-WTDV&COMPNUM;
  array comp(&compnum) cmpv1-cmpv&compnum;
cpden1=sum(of nrmv1-nrmv&cmpnum1);
cpden2=sum(of nrmv&start-nrmv&compnum);
  DO K = 1 TO &COMPNUM;
      IF K < &START THEN SVCWGT(K)= norm(K)/CPDEN1;
      ELSE SVCWGT(K) = norm(K)/CPDEN2;
      WGTBMARK(K) = SVCWGT(K)*BMARK(K);
      comp(k)=svcwgt(k)*proport(k);
  END;
  DROP K;
  CPBMK1=SUM(OF WTDV1-WTDV&CMPNUM1);
  CPBMK2=SUM(OF WTDV&START-WTDV&COMPNUM);
  comp1=sum(of cmpv1-cmpv&cmpnum1);
comp2=sum(of cmpv&start-cmpv&compnum);
 DROP WGTV1-WGTV&COMPNUM WTDV1-WTDV&COMPNUM
      NUMV1-NUMV&COMPNUM;
 RUN;

 %IF &DEBUG=Y AND &PREF=R %THEN %DO;
     PROC PRINT DATA=&PREF.CMPSUM;  /* print out final dataset */
     RUN;                           /* for region to check     */
 %END;

%MEND GETPROP;

%GETPROP(USA);
%GETPROP(XSERVAFF);
%GETprop(XSERVREG);
%GETPROP(XTNEXREG);

********************************************************
** since MHS benchmarks will be displayed        ****
** set up adjustment factor to apply to          ****
** each analytical unit's composite benchmarks   ****
********************************************************;


********************************************************
***  Macro to merge 3 datasets for each        *******
***  called by analytical unit                 *******
***  output final dataset for                  *******
```

```
*** XSERVAFF, XSERVREG, XTNEXREG, MHS (USA)    *******
*********************************************************;

PROC FORMAT;  /*RSG 02/2005 - hardcoded in prog to have caps vs format in loadcahq.inc*/
   VALUE REGIONF
      0 = "USA MHS "
      1 = "NORTH"
      2 = "SOUTH"
      3 = "WEST"
      4 = "OVERSEAS"
    ;
%MACRO GETSIG(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);
 %LET NEXT  = %EVAL(&CMPNUM1+2);


 %IF &BYVAR=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF &BYVAR=USA %THEN %LET PREF=C;
 %ELSE %IF &BYVAR=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF &BYVAR=XTNEXREG %THEN %LET PREF=S;


 DATA OUT.&PREF.FINAL(KEEP= MAJGRP REGION REGCAT GOALVAR1-GOALVAR&COMPNUM
                SIGV1-SIGV&COMPNUM SCORV1-SCORV&COMPNUM
                CPSIG1-CPSIG&COMPCNT CP1SE CP2SE
                CSCOR1-CSCOR&COMPCNT CPBMK1-CPBMK&COMPCNT
                SERRV1-SERRV&COMPNUM CP1SE CP2SE
                COMP1 COMP2 PROPV1-PROPV&COMPNUM
                DFSCR1-DFSCR&COMPNUM DF_CP1 DF_CP2
                NOBSV1-NOBSV&COMPNUM CPOBS1-CPOBS&COMPCNT
                DENV1-DENV&COMPNUM CPDEN1-CPDEN&COMPCNT);

    FORMAT MAJGRP $30. REGION $30. REGCAT $30.; /* MER 11/11/12 - Updated REGION/REGCAT for Joint
Service facilities */
        MERGE &PREF.CMPSUM(IN=IN_PROP) &PREF.CORR
        &PREF.SERR;
        BY GROUP &BYVAR;
        IF IN_PROP;
 %DO Z=1 %TO &COMPCNT;

            CSCOR&Z=COMP&Z.*100;

    %END;
  ** MAJGRP -- text field for group   **;
    IF      GROUP=1 THEN MAJGRP="Prime Enrollees             ";
    ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
    ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
    ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
    ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
    ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
    ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
    ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";

  **** REGION AND REGCAT SETUP          **;
    %IF &PREF=S %THEN %DO;
        REGCAT=PUT(XTNEXREG,REGIONF.);
        REGION=PUT(XTNEXREG,REGIONF.);
    %END;
    %else %IF &PREF=C %THEN %DO;
        REGION="USA MHS";
        REGCAT="USA MHS";
    %END;
    %ELSE %IF &PREF=R %THEN %DO;
        REGION=PUT(XSERVREG, SERVREGO.);
        REGCAT=PUT(XSERVREG, SERVREGO.);
    %END;
    %ELSE %IF &PREF=M %THEN %DO;                    /** RSG 1/2005 Add codes for service
grouping **/
        REGION=PUT(XSERVAFF,XSERVAFF.);
        REGCAT=PUT(XSERVAFF,XSERVAFF.);
    %END;

   **** setup t statistics, degreees of freedom    **;
```

```
   ARRAY    TSTAT{&COMPNUM} T_V1-T_V&COMPNUM;
   ARRAY    BMARK{&COMPNUM} GOALVAR1-GOALVAR&COMPNUM;
   ARRAY  STNDERR{&COMPNUM} SERRV1-SERRV&COMPNUM;
   ARRAY  SERRSQR{&COMPNUM} SESQV1-SESQV&COMPNUM;
   ARRAY     DEGF{&COMPNUM} DFSCR1-DFSCR&COMPNUM;
   ARRAY    DENOM{&COMPNUM} DENV1-DENV&COMPNUM;
   ARRAY  PROPORT{&COMPNUM} PROPV1-PROPV&COMPNUM;
   ARRAY    SCORE{&COMPNUM} SCORV1-SCORV&COMPNUM;
   ARRAY   PVALUE{&COMPNUM} PVALV1-PVALV&COMPNUM;
   ARRAY      SIG{&COMPNUM} SIGV1-SIGV&COMPNUM;
   ARRAY     NOBS{&COMPNUM} NOBSV1-NOBSV&COMPNUM;
   array     norm{&compnum} nrmv1-nrmv&compnum;

 ** get the item variance, t-statistics, df, p-values **;
 ** and whether significant                         **;
  DO I=1 TO &COMPNUM;
       SERRSQR{I}=STNDERR{I}**2;  /* Item variance */
       SCORE{I}=PROPORT{I}*100;   /* Score (prop. * 100) */
       IF STNDERR{I} > 0 THEN TSTAT{I}=(PROPORT{I}-BMARK{I})/STNDERR{I};
       ELSE TSTAT{I}=.;
       DEGF{I}=NOBS{I}-1;
       PVALUE{I}=(1-PROBT(ABS(TSTAT{I}),DEGF{I}))*2;
       IF PVALUE{I} GE .05 THEN SIG{I}=0;
       ELSE IF PVALUE{I} < .05 THEN DO;
            IF PROPORT{I} > BMARK{I} THEN SIG{I}=1;
            IF PROPORT{I} < BMARK{I} THEN SIG{I}=-1;
       END;
  END;
  DROP I;

 ** multiply each item pair std. errors and correlation coefficients **;
 ** preventive care composite                                        **;
ARRAY SEwC1{&CMPNUM1} SEwV1-SEwV&CMPNUM1;

  ARRAY SERRC1{&CMPNUM1} SERRV1-SERRV&CMPNUM1;
  %DO J = 1 %TO &CMPNUM1;
       ARRAY  SMEAN&J{&CMPNUM1} SEMV&J.1-SEMV&J.&CMPNUM1;
       ARRAY CORVAR&J{&CMPNUM1} CORV&J.1-CORV&J.&CMPNUM1;
       DO K=1 TO &CMPNUM1;
            SMEAN&J{K}=SERRV&J*SERRC1{K}*CORVAR&J{K}*norm{K}*nrmV&J;
       END;
       SEMV&J.&J=0;
         sewv&j= (nrmV&j**2)*SESQV&j;/** don't count in final standard error calculation **/
  %END;
  DROP K;
 ** multiply each item pair std. errors and correlation coefficients **;
 ** access to care composite                                         **;

  ARRAY SERRC2{&CMPNUM2} SERRV&START-SERRV&COMPNUM;
  %DO L = &START %TO &COMPNUM;
       ARRAY  SMEAN&L{&CMPNUM2} SEMV&L.&START-SEMV&L.&COMPNUM;
       ARRAY CORVAR&L{&CMPNUM2} CORV&L.&START-CORV&L.&COMPNUM;
       DO M=1 TO &CMPNUM2;
            SMEAN&L{M}=SERRV&L*SERRC2{M}*CORVAR&L{M};
       END;
       SEMV&L.&L=0;  /** don't coun't in final standard error calculation **/
  %END;
  DROP M;
 ** calculate composite t-statistic, pvalue, and whether significant **;
 ** for composites                                                   **;
%DO P=1 %TO &COMPCNT;
     %IF &P=1 %THEN %DO;
     ** composite standard error comprised of two parts **;
          CP&P.SE1=SUM(OF SEwV1-SEwV&CMPNUM1);
          CP&P.SE2=SUM(OF SEMV11-SEMV&CMPNUM1.&CMPNUM1.);
          cpobs&p=sum(of nobsv1-nobsv&cmpnum1);
     %END;
     %ELSE %DO;
          CP&P.SE1=SUM(OF SESQV&START-SESQV&COMPNUM);
          CP&P.SE2=SUM(OF SEMV&START.&START.-SEMV&COMPNUM.&COMPNUM.);
          cpobs&p=sum(of nobsv&start-nobsv&compnum);
     %END;
 ** add the two parts of the composite standard error  **;
```

```
   ** calculate the composite t statistics and p-values  **;
   ** determine whether differences are sigificant       **;

       CP&P.SE=SQRT(CP&P.SE2+CP&P.SE1)/CPden&P;
       IF CP&P.SE > 0 THEN CP_T&P.=(COMP&P.-CPBMK&P.)/CP&P.SE;
       ELSE CP_T&P.= .;
       DF_CP&P.=CPOBS&P. - 1;
       CP_P&P.=(1-PROBT(ABS(CP_T&P.),DF_CP&P.))*2;
       IF CP_P&P GE .05 THEN CPSIG&P=0;
       ELSE IF CP_P&P < .05 THEN DO;
           IF COMP&P. > CPBMK&P THEN CPSIG&P= 1;
           ELSE IF COMP&P. < CPBMK&P THEN CPSIG&P=-1;
       END;
   %END;

   OUTPUT OUT.&PREF.FINAL;
 RUN;

%MEND GETSIG;

%GETSIG(USA);
%GETSIG(XTNEXREG);
%GETSIG(XSERVREG);
%GETSIG(XSERVAFF);
```

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```
*****************************************************************************
*
*  Project:    DoD Reporting and Analysis 6077-410
*  Program:    SMOKING_BMI.SAS
*  Purpose:    Calculate Smoking Rate and Smoking Cessation
*              for each region-service affiliation and
*              conus-service affiliation groups.
*
*  Date:       1/31/2005
*  Author:     Regina Gramss
*
*  Modified:   1) 04/2005 By Regina Gramss, Updated for Q1 2005.
*              2) 12/2005 By Regina Gramss, Updated for Q4 2005.
*              3) 01/2006 By Regina Gramss - Updated for 2005 annual data.  Normalize
*                 with 2005 data and not 2000.  Standardize using age/sex and MPCSMPL
*                 (military personnel category).  Update smoking cessation
*                 calculation with new formula to correspond more to HEDIS.  Use new
*                 weight (CFWT) and use STRATUM as TMP_CELL.
*              4) 03/24/2006 By Keith Rathbun, Updated for Q2 FY 2006.
*              5) 07/12/2006 By Justin Oh, Updated for Q3 FY 2006.
*              6) 08/24/2006 By Justin Oh, REGNUM changed from 16 to 24.
*                 Changed XSERVREG for Overseas
*                 Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                         IF XINS_COV IN (3)     THEN GROUP4 = 1
*                 Since only XINS_COV IN (1,2,3,6) is kept.
*                 Create XOCONUS for 2005 data.
*                 Added/Moved LIBRARY Libname to use both Quarter/Annual Formats.
*              7) 10/04/2006 By Justin Oh, Updated %LET DSN and CURRENT.
*              8) 12/22/2006 By Justin Oh, Updated %LET DSN HCS071_1 and CURRENT October, 2006.
*              9) 02/02/2007 By Justin Oh, Added "s" to Healthy Behaviors
*             10) 04/05/2007 By Justin Oh, Updated %LET DSN HCS072_1 and CURRENT January, 2007.
*             11) 04/05/2007 By Justin Oh, Added conditions for RC types
*                         ReportCards OR PurchasedReportCards.
*             12) 05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*                         both Norm and Quarter datasets.
*             13) 05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*                         Groups 1,3, and 4 for new reservists logic.
*             14) 07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*                         Groups All, 4, 5, and 6.
*             15) 09/04/2007 By Justin Oh, Updated %LET DSN HCS074_1 and CURRENT July, 2007.
*             16) 01/10/2008 By Keith Rathbun, Updated %LET DSN HCS081_1 and CURRENT October,
2007.
*                         Also changed H07 variable names to be H08 to match 2008 survey.
*             17) 04/11/2008 By Justin Oh, Updated %LET DSN HCS082_1 and CURRENT January, 2008.
*             18) 06/13/2008 By Keith Rathbun, Updated %LET DSN HCS083_1 and CURRENT April, 2008.
*             19) 03/11/2009 By Keith Rathbun, Updated %LET DSN HCS092_1 and CURRENT January,
2009.
*             20) 04/20/2009 By Mike Rudacille, Switched from 2005 to 2007 benchmark data for
transition to
*                         V4 questionnaire.
*             21) 05/05/2009 By Mike Rudacille, Updated for 2008 benchmark data.
*             22) 06/22/2009 By Keith Rathbun, Updated %LET DSN HCS093_1 and CURRENT April, 2009.
*                         Changed weight variable from FWRWT_V4 back to FWRWT.
*             23) 09/30/2009 By Mike Rudacille, Updated %LET DSN HCS094_1 and CURRENT July, 2009.
*             24) 12/17/2009 by Emma Ernst, Updated %LET DSN HCS101_1 and CURRENT October, 2009.
*                         Also changed H09 variables names to be H10 to match 2010 survey.
*             25) 03/02/2010 By Mike Rudacille, Updated %LET DSN HCS102_1 and CURRENT January,
2010.
*             26) 03/25/2010 By Mike Rudacille, Changed HCS102_1 to HCS102_2.
*                         Changed because HCS102_1 no longer contains FIELDAGE.
*             27) 03/30/2010 By Mike Rudaiclle, Updated for 2009 benchmark data.
*             28) 06/19/2010 By Mike Rudacille, Updated %LET DSN HCS103_2 and CURRENT April, 2010.
*             29) 08/28/2010 By Mike Rudacille, Updated %LET DSN HCS104_2 and CURRENT July, 2010.
*             30) 12/02/2010 By Mike Rudacille, Updated %LET DSN HCS111_2 and CURRENT October,
2010.
*                         Also updated Hyy variable names to match 2011 survey.
*             31) 02/24/2011 By Mike Rudacille, Updated %LET DSN HCS112_2 and Current January,
2011.
*             32) 03/31/2011 By Mike Rudacille, Updated for 2010 benchmarks and to include new
```

```
*                          definition of smoker, HP_SMKH3. Also utilizes HP_CESH3 rather than
*                          re-creating work already done in convarq.
*          33) 12/10/2011 By Mike Rudacille, Updated %LET DSN HCS121_2 and CURRENT October,
2011.
*                          Also updated Hyy variable names to match 2012 survey.
*          34) 12/21/2011 By Mike Rudacille Updated norm data from 2005 to 2011.
*          35) 03/05/2012 By Amanda Kudis, Updated %LET DSN HCS122_2 and CURRENT January, 2012.
*          36) 06/20/2012 By Amanda Kudis, Updated for Q3FY2012.
*          37) 08/23/2012 By Christine Cheu, Updated for Q4FY2012.
*          38) 11/03/2012 By Mike Rudacille Updated for handling of Joint Service facilities
*          39) 12/28/2012 By Aimee Valenzuela Updated for Q1FY2013
*          40) 03/23/2013 By Mike Rudacille, Updated %LET DSN HCS132_2 and CURRENT January,
2013.
*
*   Inputs:   1) HCS11A_2.sas7bdat - Annual 2011 Survey data
*             2) HCS132_2.sas7bdat - Q2 fy 2013 Survey data
*             3) AC2011DB.sas7bdat - 2011 CAHPS Benchmark Data
*
*   Output:   1) SMOKE.sas7bdat
*
*
****************************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards          ***/
%LET RCTYPE = PurchasedReportCards;

LIBNAME BENCH        "..\..\..\..\2011AdultNCBD";
LIBNAME INDAT        "..\..\..\Data\afinal";
LIBNAME INNORM       "..\..\..\..\2011\Data";
LIBNAME OUT          ".";

%LET DSN=HCS133_2;
%LET DSN_NORM=HCS11A_2;                   /*JSO 08/24/2006, Changed Regions, 16 to 15*/ /* MER
11/03/12 15 to 18 */
%LET REGNUM = 18;                         /*RSG 01/2005 Number of Regions (with serv affiliation)*/
%LET CONNUM = 4;                          /*RSG 01/2005 Number of Conus level (with serv
affiliation)*/
%LET SRVNUM = 5;                          /*MER 11/03/2012 Number of service affiliations,
including Joint Service */
%LET CURRENT = April, 2013;
%LET WGT = FWRWT;
%LET NORMWGT = CFWT;
%LET CATCHNUM=9999;                       /*RSG 02/2005 number of catchment areas **/

DATA BENCHA01;
   SET BENCH.AC2011DB (RENAME=(BIRTHYY=YOB));
   if product in (7,9) then model=4;
   if product=3 then model=2;                     /*coded according to AC FORMATS.SAS*/
   if product=1 then model=1;
   if product=4 then model=6;
   if product=8 then model=5;
   if product=2 then model=3;
   product=planid;
/*if ^(model in (2,4)); */ **AMK 5/02/12 removed;
if disp in ('M10','I10')  ;
if ac45_11 in (1,2) & ac46_11>=1 & ac46_11<=4;  /*02/2006 RSG - REMOVED REQUIREMENT FOR
ADDITIONAL VISIT (ACC22 FIELD)*/
cessbnch=0;
if ac46_11>1 then cessbnch=1;


proc summary nway; class product;
var cessbnch;
output out=tbench mean=;
proc print;
proc summary;
var cessbnch;
output out=tbench mean=;
proc print;
data _null_;
set tbench;
```

```
call symput('CNSLGOAL',cessbnch);
run;

%LET NSMKGOAL = 0.88;

%LET BMIGOAL  = 0.69;

%INCLUDE "..\..\PURCHASEDLOADWEB\LOADCAHQ.INC";

PROC FORMAT;
VALUE AGEF
LOW - 34 = 1
 35 - 49 = 2
 50 - 64 = 3
 65 - HIGH = 4;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\..\2011\Data\fmtlib';

DATA NORMDATA (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF
                    SM_RATE SM_CESS SM_RTDN SM_CSDN  BMI_DN BMI
                    TOTCON GROUP XSEXA &WGT. age_n MPCSMPL NXNS_COV);
                    /* 05/10/2007 JSO Added NXNS_COV in the keep statement */
SET INNORM.&DSN_NORM.(DROP=&WGT.); /* 4/4/2006, KRR added drop so CFWT can renamed/used */
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

IF     XREGION=13 THEN XOCONUS=1; /* 08/24/2006, JSO Create XOCONUS for 2005 data */
ELSE IF XREGION=14 THEN XOCONUS=2;
ELSE IF XREGION=15 THEN XOCONUS=3;

TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);
IF AGE_GRP < 4;

IF SERVAFF = 'A' THEN XSERVAFF = 1;         *Army;
ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;    *Air Force;
ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;    *Navy;
ELSE XSERVAFF = 4;                          *Other/unknown;

IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

IF XTNEXREG = 1 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 1;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
   ELSE XSERVREG = 5;
END;

IF XTNEXREG = 2 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 6;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
   ELSE XSERVREG = 10;
END;

IF XTNEXREG = 3 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 11;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
   ELSE XSERVREG = 15;
END;

IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
   IF     XOCONUS = 1 THEN XSERVREG = 16;
   ELSE IF XOCONUS = 2 THEN XSERVREG = 17;
   ELSE IF XOCONUS = 3 THEN XSERVREG = 18;
END;
```

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```
IF HP_SMKH3 IN (1,2) THEN DO;
   SM_RATE = 0;
   IF HP_SMKH3 = 2 THEN SM_RATE=1;
   SM_RTDN=1;
END;

/* MER 3/31/11 Start using HP_CESH3 instead of re-creating work already done in convarq */
IF HP_CESH3 IN (1,2) THEN DO;
   SM_CESS = 0;
   IF HP_CESH3 = 1 THEN SM_CESS=1;
   SM_CSDN=1;
END;

IF xbmicat > 0  THEN DO;
    BMI = 0;
    BMI_DN=1;
   IF xbmicat <=3 THEN BMI=1;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG = 4 THEN TOTCON=2;

IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

RENAME &NORMWGT = &WGT;

IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

IF XTNEXREG = .    THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11
Added 10,11*/

NXNS_COV = XINS_COV;                 /*JSO 04/26/2007 added for reservists logic*/
                                     /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
IF DBENCAT IN('GRD','IGR') AND H11003 = 3 THEN DO;
   NXNS_COV = 3;
   XENR_PCM = .;
END;

* prime enrollees;
IF NXNS_COV IN (1,2,6) AND H11004>=2 THEN DO;
   GROUP=1;
   OUTPUT;
END;

* enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM IN (1,2,6) AND H11004>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   XENR_PCM IN (1,2) AND H11004>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;

* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM = 3 AND H11004>=2 THEN DO;
   GROUP=3;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   ((XENR_PCM = 3 AND H11004>=2) OR NXNS_COV IN (3,9,10)) THEN DO; /*JSO 07/30/2007, Added 9*/
   GROUP=3;                                                        /*MER 07/12/11, Added 10*/
   OUTPUT;
END;
```

```
* nonenrollees;
IF NXNS_COV IN (3,9,10) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
   GROUP=4;                        /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11, Added 10*/
   OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
   GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR')THEN DO;
   GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
   GROUP=7;
   OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\Data\afinal\fmtlib';

DATA SMOKE (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF TOTCON GROUP
                 SM_RATE SM_CESS SM_RTDN SM_CSDN XSEXA &WGT BMI_DN BMI
                 MPCSMPL NXNS_COV);/* 05/10/2007 JSO Added NXNS_COV in the keep statement */
SET INDAT.&DSN.;
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

/* MER 4/20/09 - Restrict dataset to just non-zero V4 weights */
IF &WGT <= 0 THEN DELETE;

TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);

IF AGE_GRP < 4;
IF SERVAFF='A' THEN XSERVAFF=1;              *Army;
   ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
   ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
   ELSE XSERVAFF=4;

IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

IF XTNEXREG = 1 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 1;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
   ELSE XSERVREG = 5;
END;

IF XTNEXREG = 2 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 6;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
   ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
   ELSE XSERVREG = 10;
END;

IF XTNEXREG = 3 THEN DO;
```

```
    IF XSERVAFF = 1 THEN XSERVREG = 11;
    ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
    ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
    ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
    ELSE XSERVREG = 15;
END;

IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
    IF      XOCONUS = 1 THEN XSERVREG = 16;
    ELSE IF XOCONUS = 2 THEN XSERVREG = 17;
    ELSE IF XOCONUS = 3 THEN XSERVREG = 18;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG=4 THEN TOTCON=2;

IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

IF XTNEXREG = . THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6,9,10,11) THEN DELETE;  /*JSO 07/30/2007, Added 9*/ /*MER 07/12/11,
Added 10*/

NXNS_COV = XINS_COV;                    /*JSO 04/26/2007 added for reservists logic*/
                                        /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
IF DBENCAT IN('GRD','IGR') AND H13003 = 3 THEN DO;
    NXNS_COV = 3;
    XENR_PCM = .;
END;

IF HP_SMKH3 IN (1,2) THEN DO;
    SM_RATE = 0;
    IF HP_SMKH3 = 2 THEN SM_RATE=1;
    SM_RTDN=1;
END;

/* MER 3/31/11 Start using HP_CESH3 instead of re-creating work already done in convarq */
IF HP_CESH3 IN (1,2) THEN DO;
    SM_CESS = 0;
    IF HP_CESH3 = 1 THEN SM_CESS=1;
    SM_CSDN=1;
END;

IF xbmicat > 0  THEN DO;
     BMI = 0;
     BMI_DN=1;
    IF xbmicat <=3 THEN BMI=1;
END;

* prime enrollees;
IF NXNS_COV IN (1,2,6) AND H13004>=2 THEN DO;
    GROUP=1;
    OUTPUT;
END;

* enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
    XENR_PCM IN (1,2,6) AND H13004>=2 THEN DO;
    GROUP=2;
    OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
    XENR_PCM IN (1,2) AND H13004>=2 THEN DO;
    GROUP=2;
    OUTPUT;
END;

* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
```

```
    XENR_PCM = 3 AND H13004>=2 THEN DO;
    GROUP=3;
    OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
    ((XENR_PCM = 3 AND H13004>=2) OR NXNS_COV IN (3,9,10)) THEN DO; /*JSO 07/30/2007, Added 9*/
    GROUP=3;                                                        /*MER 07/12/11, Added 10*/
    OUTPUT;
END;

* nonenrollees;
IF NXNS_COV IN (3,9,10) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
    GROUP=4;                     /*JSO 07/30/2007, Added 9*/  /*MER 07/12/11, Added 10*/
    OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
    GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
    OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
    GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
    OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
    GROUP=7;
    OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;

PROC SORT DATA=SMOKE;
BY TMP_CELL;
PROC SORT DATA=NORMDATA;
BY TMP_CELL;
RUN;

%MACRO A_SUDAAN(TABLEVAR,SMOKE,SMOKEVAR,DEN);

%IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
    %LET ENDNUM=&REGNUM;
        %LET PREF=R;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
    %LET ENDNUM=&SRVNUM;
        %LET PREF=M;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
    %LET ENDNUM=&CONNUM;
        %LET PREF=S;
%END;

%ELSE %IF %UPCASE(&TABLEVAR)=TOTCON %THEN %LET PREF=C;

%DO I = 1 %TO 8;

    DATA INDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA MPCSMPL
                       &SMOKEVAR. &DEN. TMP_CELL XTNEXREG);
        SET SMOKE;
    WHERE XSERVREG > 0 AND GROUP=&I. AND &DEN. >= 0;
        %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
            IF XSERVAFF > 5 OR XSERVAFF = . THEN DELETE; /* MER 11/3/12 - Changed 4 to 5 */
        %END;
            %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
```

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```
          IF TOTCON NE 1 THEN DELETE;
      %END;
      %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
          IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
      %END;
  RUN;


      DATA NORMDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA &SMOKEVAR. &DEN.
                          TMP_CELL XTNEXREG MPCSMPL);
          SET NORMDATA;
          WHERE XSERVREG > 0 AND GROUP=&I.;

          %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
              IF XSERVAFF > 5 OR XSERVAFF = . THEN DELETE; /* MER 11/3/12 - Changed 4 to 5
*/
          %END;
          %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
              IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
          %END;

      RUN;

          %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
              PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
              WEIGHT &WGT;
              SETENV DECWIDTH=4;
              NEST TMP_CELL / missunit;
              VAR &SMOKEVAR;
              TABLES AGE_GRP*XSEXA*MPCSMPL*&TABLEVAR.;
              SUBGROUP AGE_GRP XSEXA MPCSMPL &TABLEVAR.;
              LEVELS 8 2 2 &ENDNUM.;
              OUTPUT  SEMEAN MEAN wsum nsum
                      / TABLECELL=DEFAULT REPLACE
                        FILENAME=&PREF.GRP&I.&SMOKE.;
              RUN;
          %END;
          %ELSE %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
              PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
              WEIGHT &WGT;
              SETENV DECWIDTH=4;
              NEST TMP_CELL / missunit;
              VAR &SMOKEVAR;
              TABLES AGE_GRP*XSEXA*MPCSMPL;
              SUBGROUP AGE_GRP XSEXA MPCSMPL;
              LEVELS 3 2 2;
              OUTPUT  SEMEAN MEAN wsum nsum
                      / TABLECELL=DEFAULT REPLACE
                        FILENAME=&PREF.GRP&I.&SMOKE.;
              RUN;
          %END;

      %IF %UPCASE(&SMOKE) NE CS %THEN %DO;

              DATA &PREF.SER_&I.&SMOKE.;
              SET &PREF.GRP&I.&SMOKE.;
              GROUP=&I.;
              IF SEMEAN NE .;
              %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                  KEEP &TABLEVAR. GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
              %END;
              %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                  TOTCON=1;
                  KEEP TOTCON GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
              %END;
          RUN;

          /* CREATE WEIGHTS FROM 2005 DATA*/
          proc summary data=normdat&i. nway;
           var &WGT;
           where &den>0;
           class age_grp xsexa MPCSMPL;
           output out=norm_&i. sum=normwt;
```

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```
proc sort data=&pref.ser_&i.&smoke.;
by age_grp xsexa mpcsmpl;

data &pref.ser_&i.&smoke.;
merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
by age_grp xsexa mpcsmpl;
if gin;
wsum=wsum/normwt;
nsum=nsum/normwt;
sesq=normwt*semean**2;
run;

proc summary data=&pref.ser_&i.&smoke. nway;
var mean semean sesq wsum nsum;
class &tablevar.;
weight normwt;
output out=&pref.sert&i.&smoke. mean(mean sesq)= sum(wsum nsum)= sumwgt(semean)=;
run;

data &pref.sert&i.&smoke;
   set &pref.sert&i.&smoke;
   group=&i.;
    semean=sqrt(sesq/semean);
   drop _type_ _freq_;
run;

%IF &I. = 1 %THEN %DO;

    DATA &PREF._&SMOKE.;
    SET &PREF.SERT&I.&SMOKE.;
    RUN;
%END;
%ELSE %DO;

    DATA &PREF._&SMOKE.;
     SET &PREF._&SMOKE. &PREF.SERT&I.&SMOKE.;
    RUN;

    PROC SORT DATA=&PREF._&SMOKE.;
    BY GROUP;
    RUN;

%END;

%END;
    %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
        PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
        WEIGHT &WGT;
        SETENV DECWIDTH=4;
        NEST TMP_CELL / missunit;
        VAR &SMOKEVAR;
        TABLES AGE_GRP*XSEXA*&TABLEVAR.;
        SUBGROUP AGE_GRP XSEXA &TABLEVAR.;
        LEVELS 3 2 &ENDNUM.;
        OUTPUT  SEMEAN MEAN wsum nsum
                / TABLECELL=DEFAULT REPLACE
                  FILENAME=&PREF.GRP&I.&SMOKE.;
        RUN;
    %END;
    %ELSE %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
        PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
        WEIGHT &WGT;
        SETENV DECWIDTH=4;
        NEST TMP_CELL / missunit;
        VAR &SMOKEVAR;
        TABLES AGE_GRP*XSEXA;
        SUBGROUP AGE_GRP XSEXA;
        LEVELS 3 2 ;
        OUTPUT  SEMEAN MEAN wsum nsum
                / TABLECELL=DEFAULT REPLACE
                  FILENAME=&PREF.GRP&I.&SMOKE.;
        RUN;
```

```
        %END;

%IF %UPCASE(&SMOKE) = CS %THEN %DO;

        DATA &PREF.SER_&I.&SMOKE.;
        SET &PREF.GRP&I.&SMOKE.;
        GROUP=&I.;
        IF SEMEAN NE .;
        %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
            KEEP &TABLEVAR. GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
        %END;
        %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
            TOTCON=1;
            KEEP TOTCON GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
        %END;
      RUN;

      /* CREATE WEIGHTS FROM 2005 DATA*/
      proc summary data=normdat&i. nway;
       var &WGT;
       where &den>0;
       class age_grp xsexa;
       output out=norm_&i. sum=normwt;

       proc sort data=&pref.ser_&i.&smoke.;
       by age_grp xsexa;

       data &pref.ser_&i.&smoke.;
       merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
       by age_grp xsexa;
       if gin;
       wsum=wsum/normwt;
       nsum=nsum/normwt;
       sesq=normwt*semean**2;
       run;

       proc summary data=&pref.ser_&i.&smoke. nway;
       var mean semean sesq wsum nsum;
       class &tablevar.;
       weight normwt;
       output out=&pref.sert&i.&smoke. mean(mean sesq)= sum(wsum nsum)= sumwgt(semean)=;
       run;

      data &pref.sert&i.&smoke;
         set &pref.sert&i.&smoke;
         group=&i.;
          semean=sqrt(sesq/semean);
         drop _type_ _freq_;
      run;




      %IF &I. = 1 %THEN %DO;

      DATA &PREF._CESS;
      SET &PREF.SERT&I.&SMOKE.;
      RUN;
      %END;
      %ELSE %DO;

      DATA &PREF._CESS;
         SET &PREF._CESS &PREF.SERT&I.&SMOKE.;
       RUN;

      PROC SORT DATA=&PREF._CESS;
      BY GROUP;
      RUN;

      %END;
```

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```
        %END;
    %END;

    %MEND;

    %A_SUDAAN(XSERVAFF,RT,SM_RATE,SM_RTDN);
    %A_SUDAAN(XSERVAFF,CS,SM_CESS,SM_CSDN);
    %A_SUDAAN(XSERVAFF,BM,BMI,BMI_DN);
    %A_SUDAAN(XSERVREG,RT,SM_RATE,SM_RTDN);
    %A_SUDAAN(XSERVREG,CS,SM_CESS,SM_CSDN);
    %A_SUDAAN(XSERVREG,BM,BMI,BMI_DN);
    %A_SUDAAN(XTNEXREG,RT,SM_RATE,SM_RTDN);
    %A_SUDAAN(XTNEXREG,CS,SM_CESS,SM_CSDN);
    %A_SUDAAN(XTNEXREG,BM,BMI,BMI_DN);
    %A_SUDAAN(TOTCON,RT,SM_RATE,SM_RTDN);
    %A_SUDAAN(TOTCON,CS,SM_CESS,SM_CSDN);
    %A_SUDAAN(TOTCON,BM,BMI,BMI_DN);

    %MACRO ADDIT(PREF, TYPE);

    DATA &PREF._&TYPE;
    SET &PREF._&TYPE;
    LENGTH BENEFIT $34. BENTYPE $50.;

    BENEFIT="Healthy Behaviors";
        %IF &TYPE=RT %THEN %DO;
            BENTYPE="Non-Smoking Rate";
        %END;
        %IF &TYPE=CESS %THEN %DO;
            BENTYPE="Counselled To Quit";
        %END;
        %IF &TYPE = BM %THEN %DO;
            BENTYPE = "Percent Not Obese";
        %END;
    RUN;

    %MEND;

    %ADDIT(C,RT);
    %ADDIT(C,CESS);
    %ADDIT(C,BM);
    %ADDIT(M,RT);
    %ADDIT(M,CESS);
    %ADDIT(M,BM);
    %ADDIT(R,RT);
    %ADDIT(R,CESS);
    %ADDIT(R,BM);
    %ADDIT(S,RT);
    %ADDIT(S,CESS);
    %ADDIT(S,BM);


    %MACRO MAKEDATA(PREF, TABLEVAR);
      DATA &PREF._SMOKE;
       SET &PREF._RT
           &PREF._CESS
           &PREF._BM
    ;

       LENGTH MAJGRP $30. REGION REGCAT $30.; /* MER 11/11/12 - Updated REGION/REGCAT for Joint
    Service facilities */

        IF     GROUP=1 THEN MAJGRP="Prime Enrollees              ";
        ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
        ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
        ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
        ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
        ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
        ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
        ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";

            %IF &TABLEVAR = XSERVAFF %THEN %DO;
```

```
              IF XSERVAFF = 1 THEN REGION = 'ARMY';
              IF XSERVAFF = 2 THEN REGION = 'AIR FORCE';
              IF XSERVAFF = 3 THEN REGION = 'NAVY';
              IF XSERVAFF = 4 THEN REGION = 'OTHER';
               IF XSERVAFF = 5 THEN REGION = 'JOINT SERVICE'; /* MER 11/3/12 - Added for Joint
Service facilities */
        %END;

        %IF &TABLEVAR = XSERVREG %THEN %DO;
                REGION = PUT(XSERVREG,SERVREGO.); /*JSO 08/24/2006, Create new format for
Overseas*/
        %END;

        %IF &TABLEVAR = XTNEXREG %THEN %DO;
         IF XTNEXREG=1 THEN REGION="NORTH";
              ELSE IF XTNEXREG=2 THEN REGION="SOUTH";
              ELSE IF XTNEXREG=3 THEN REGION="WEST";
              ELSE IF XTNEXREG=4 THEN REGION="OVERSEAS";
        %END;

        %IF &TABLEVAR = TOTCON %THEN %DO;
         REGION = "USA MHS";
        %END;


         REGCAT=REGION;
         DROP GROUP &TABLEVAR;

         IF &TABLEVAR NE 0;

    RUN;


%MEND MAKEDATA;

%MAKEDATA(M,XSERVAFF);
%MAKEDATA(C,TOTCON);
%MAKEDATA(R,XSERVREG);
%MAKEDATA(S,XTNEXREG);


DATA SMOKE;
SET M_SMOKE R_SMOKE S_SMOKE C_SMOKE;
SESQ = SEMEAN**2;
RENAME MEAN=SCORE wsum=n_wgt nsum=n_obs;
RUN;

/* CALCULATE COMPOSITE SCORE - AVERAGE RATE AND CESSATION*/

PROC SORT DATA=SMOKE;
BY MAJGRP REGION REGCAT;
RUN;

PROC SUMMARY DATA=SMOKE SUM;
BY MAJGRP REGION REGCAT;
VAR SCORE SESQ N_WGT N_OBS;
OUTPUT SUM= OUT=PRECOMP;
RUN;

DATA COMP(RENAME=(S_MEAN=SCORE S_SE=SEMEAN));
SET PRECOMP;
IF _FREQ_ = 3 THEN DO;
   S_MEAN=SCORE/3;
   S_SE=SQRT(SESQ)/3;
   N_OBS=round(N_OBS/3);
END;
ELSE DO;
   S_MEAN=.;
   S_SE=.;
END;
BENTYPE="Composite";
BENEFIT="Healthy Behaviors";
DROP _TYPE_ _FREQ_ SCORE SESQ;
```

```
       RUN;

       PROC SORT DATA=SMOKE;
       BY MAJGRP BENTYPE;
       RUN;

       DATA BENCH;
       SET SMOKE;
       BY MAJGRP BENTYPE;
       IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
          SCORE=&CNSLGOAL;
          SEMEAN=.;
          REGION="Benchmark";
          REGCAT="Benchmark";
          DROP N_WGT N_OBS;
          OUTPUT;
       END;
       ELSE IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
          SCORE=&NSMKGOAL;
          SEMEAN=.;
          REGION="Benchmark";
          REGCAT="Benchmark";
          DROP N_WGT N_OBS;
          OUTPUT;
       END;
       ELSE IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
          SCORE=&BMIGOAL;
          SEMEAN=.;
          REGION="Benchmark";
          REGCAT="Benchmark";
          DROP N_WGT N_OBS;
          OUTPUT;
          SCORE=(SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3;
          SEMEAN=.;
          REGION="Benchmark";
          REGCAT="Benchmark";
          BENTYPE="Composite";
          DROP N_WGT;
          OUTPUT;
       END;
       RUN;

       PROC SORT DATA=SMOKE;
       BY REGION BENTYPE;
       RUN;

       DATA BENCH2;
       SET SMOKE;
       BY REGION BENTYPE;
       IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
          SCORE=&CNSLGOAL;
          SEMEAN=.;
          MAJGRP="Benchmark";
          DROP N_WGT N_OBS;
          OUTPUT;
       END;
       IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
          SCORE=&NSMKGOAL;
          SEMEAN=.;
          MAJGRP="Benchmark";
          DROP N_WGT;
          OUTPUT;
       END;
       IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
          SCORE=&BMIGOAL;
          SEMEAN=.;
          MAJGRP="Benchmark";
          DROP N_WGT;
          OUTPUT;
          SCORE=(SUM(&CNSLGOAL, &NSMKGOAL, &BMIGOAL))/3;
          SEMEAN=.;
          MAJGRP="Benchmark";
          BENTYPE="Composite";
```

```
    DROP N_WGT N_OBS;
    OUTPUT;
END;
RUN;


DATA SIG1;
SET SMOKE COMP;
IF BENTYPE='Non-Smoking Rate' THEN DO;
    IF SEMEAN > 0 THEN TSTAT=(SCORE-&NSMKGOAL)/SEMEAN;
    ELSE TSTAT=.;
    IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
    ELSE PVAL=.;

    IF PVAL GE 0.05 THEN SIG=0;
    ELSE IF PVAL < 0.05 THEN DO;
        IF SCORE > &NSMKGOAL THEN SIG = 1;
            ELSE IF SCORE < &NSMKGOAL THEN SIG = -1;
    END;
END;
IF BENTYPE='Counselled To Quit' THEN DO;
    IF SEMEAN > 0 THEN TSTAT=(SCORE-&CNSLGOAL)/SEMEAN;
    ELSE TSTAT=.;
    IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
    ELSE PVAL=.;
    IF PVAL GE 0.05 THEN SIG=0;
    ELSE IF PVAL < 0.05 THEN DO;
        IF SCORE > &CNSLGOAL THEN SIG = 1;
            ELSE IF SCORE < &CNSLGOAL THEN SIG = -1;
    END;
END;
IF BENTYPE='Percent Not Obese' THEN DO;
    IF SEMEAN > 0 THEN TSTAT=(SCORE-&BMIGOAL)/SEMEAN;
    ELSE TSTAT=.;
    IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
    ELSE PVAL=.;
    IF PVAL GE 0.05 THEN SIG=0;
    ELSE IF PVAL < 0.05 THEN DO;
        IF SCORE > &BMIGOAL THEN SIG = 1;
            ELSE IF SCORE < &BMIGOAL THEN SIG = -1;
    END;
END;
IF BENTYPE='Composite' THEN DO;
    IF SEMEAN > 0 THEN TSTAT=(SCORE-((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3))/SEMEAN;
    ELSE TSTAT=.;
    IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
    ELSE PVAL=.;
    IF PVAL GE 0.05 THEN SIG=0;
    ELSE IF PVAL < 0.05 THEN DO;
        IF SCORE > ((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = 1;
            ELSE IF SCORE <((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = -1;
    END;
END;

DROP TSTAT PVAL;
RUN;

DATA SMOKE_ALL;
SET SIG1 BENCH BENCH2;
TIMEPD="&CURRENT.";
RUN;

PROC SORT DATA=SMOKE_ALL OUT=OUT.SMOKE;
BY MAJGRP REGION REGCAT BENTYPE;
RUN;
```

I.4.C Q3FY2013\PROGRAMS\PurchasedReportCards\MPR_AdultQ3FY2013\Loadmprq.sas - Convert the MPR Scores Database into the WEB layout - Run Quarterly.

```
****************************************************************************
*
*  Project:    DoD Reporting and Analysis 6077-410
*  Program:    LOADMPRQ.SAS
*  Purpose:    Calculate MPR Preventive Care Composites
*  Date:       4/07/2000
*  Author:     Chris Rankin
*
*  Modified:   1) 05-08-2001 By Keith Rathbun, Added SEMEAN to LOADMPRQ.SD2
*                 to accommodate the Short Reports.  Condensed some code.
*              2) 07-15-2002 By Mike Scott, Changed PERIOD to = "April, 2001
*                 to March, 2002".
*              3) 03-21-2003 By Mike Scott, Changed PERIOD to = "January, 2001
*                 to December, 2002".
*              4) 04-30-2003 By Mike Scott, Changed CMPNUM1 from 4 to 5, and
*                 changed the upper limits of both DO loops from 5 to 6 because
*                 of the addition of Cholesterol Testing.
*              5) 06-23-2003 By Mike Scott, Changed setting BENTYPE from &PERIOD
*                 to Composite.  Added TIMEPD variable.
*              6) 06-26-2003 By Mike Scott, Updated for Q2 2003.
*              7) 10-21-2003 By Mike Scott, Updated for Q3 2003.
*              8) 01-07-2004 By Mike Scott, Updated for Q4 2003.
*              9) 03-24-2004 By Mike Scott, Updated for Q1 2004.
*             10) 06-22-2004 By Regina Gramss, Updated for Q2 2004.
*             11) 09/2004    By Regina Gramss, Updated for Q3 2004.
*             12) 01/2005    By Regina Gramss, Replaced XTNEXREG with XSERVREG
*                 to produce "last conus_q" for Q4 2005
*             13) 12/2005    By Regina Gramss, Updated for Q4 2005.
*             14) 03/24/2006 By Keith Rathbun, Updated for Q2 FY 2006.
*                 %LET PERIOD = January, 2006 was the only change.
*             15) 07/12/2006 By Justin Oh, Updated for Q3 FY 2006.
*             16) 08/24/2006 By Justin Oh, change DO REG = 1 TO 15 from 1 TO 16.
*             17) 10/04/2006 By Justin Oh, Updated %LET PERIOD.
*             18) 12/20/2006 By Justin Oh, Updated %LET PERIOD October, 2006.
*             19) 04/05/2007 By Justin Oh, Updated %LET PERIOD January, 2007.
*             20) 06/22/2007 By Keith Rathbun, Updated %LET PERIOD April, 2007.
*             21) 09/04/2007 By Justin Oh, Updated %LET PERIOD July, 2007.
*             22) 01/10/2008 By Keith Rathbun, Updated %LET PERIOD October, 2007.
*             23) 04/11/2008 By Justin Oh, Updated %LET PERIOD January, 2008.
*             24) 06/13/2008 By Keith Rathbun, Updated %LET PERIOD April, 2008.
*             25) 01/06/2009 By Mike Rudacille, Updated %LET PERIOD October, 2008.
*             26) 01/16/2009 By Mike Rudacille, Changed CONUS variable to USA.
*             27) 03/11/2009 By Keith Rathbun, Updated %LET PERIOD January, 2009.
*             28) 06/22/2009 By Keith Rathbun, Updated %LET PERIOD April, 2009.
*             29) 09/30/2009 By Mike Rudacille, Updated %LET PERIOD July, 2009.
*             30) 12/17/2009 By Emma Ernst, Updated %LET Period October, 2009.
*             31) 03/02/2010 By Mike Rudacille, Updated %LET PERIOD January, 2010.
*             32) 06/19/2010 By Mike Rudacille, Updated %LET PERIOD April, 2010.
*             33) 08/28/2010 By Mike Rudacille, Updated %LET PERIOD July, 2010.
*             34) 12/02/2010 By Mike Rudacille, Updated %LET PERIOD October, 2010.
*             35) 02/24/2011 By Mike Rudacille, Updated %LET PERIOD January, 2011.
*             36) 12/10/2011 By Mike Rudacille, Updated %LET PERIOD October, 2011.
*             37) 03/05/2012 By Amanda Kudis, Updated %LET PERIOD January, 2012.
*             38) 06/20/2012 By Amanda Kudis, Updated for Q3FY2012.
*             39) 08/23/2012 By Christine Cheu, Updated for Q4FY2012.
*             40) 11/03/2012 By Mike Rudacille, Updated for handling of
*                 Joint Service facilities
*             41) 12/28/2012 By Aimee Valenzuea, Updated for Q1FY2013
*             42) 03/23/2013 By Mike Rudacille, Updated %LET PERIOD January, 2013.
*
*    Input:    1) RFINAL.sas7bdat
*              2) CFINAL.sas7bdat
*              3) MFINAL.sas7bdat
*              4) SFINAL.sas7bdat
*              5) SMOKE.sas7bdat
*
*    Output:   loadmprq.sas7bdat
*
*    Note:     ***CHECK COMPNUM AND CMPNUM1 ASSIGNMENTS AND UPPER LIMIT OF DO LOOPS***
```

```
*
***************************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2;

LIBNAME INLIB   ".";
LIBNAME OUT     ".";
LIBNAME LIBRARY "..\..\..\Data\Afinal\fmtlib";

%LET CMPNUM1=4; /*** number of questions in first composite ***/ /*RSG 04/2005 Changed 5 to 4*/

%LET PERIOD = April, 2013;
%INCLUDE "..\..\PURCHASEDLOADWEB\LOADCAHQ.INC";

**************************************************************;
*** Note -- take out access to care questions and composite ***;
**************************************************************;

data mfinal(keep=cpbmk1 compress=no);
  set inlib.mfinal(keep=majgrp cpbmk1) INLIB.CFINAL (KEEP=MAJGRP CPBMK1);
  where majgrp="All Beneficiaries";    /*RSG 02/2005 Include CONUS MHS data*/
run;

data mfinal;
  if _n_=1 then set mfinal;
  set inlib.mfinal(drop=cpbmk1) INLIB.CFINAL(DROP=CPBMK1) ;
run;

proc sort data=mfinal;        /*RSG 01/2005 - Added code to select only 1 record per majgrp */
by majgrp;                    /*using xservreg, there are now 4 conus areas which caused
duplicate benchmark calcs */
data mfinal;
set mfinal;
by majgrp;
if first.majgrp;
run;

************************;
***** Benchmarks      **;
************************;

DATA BENCHMKS(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SIG);
     FORMAT  MAJGRP  $30. REGION  $30. REGCAT $30.    /** RSG 01/2005 Increase region format to
accommodate service affiliation **/
             BENEFIT $34. BENTYPE $50. TIMEPD $35.;   ***MJS 06/23/03 Added TIMEPD; /* MER
11/08/12 Increase region/regcat formats */
  SET MFINAL;

  ARRAY BENCHMK{*} GOALVAR1-GOALVAR&CMPNUM1 CPBMK1;
  DO I = 1 TO 5;   ***RSG 04/2005 Changed 6 to 5;
     SCORE   = BENCHMK{I}*100;
     SIG     = .;
     REGION  = "Benchmark";
     REGCAT  = "Benchmark";
     BENEFIT = "Preventive Care";
     IF      I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
     ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
     ELSE IF I = 4 THEN BENTYPE = "Hypertension";
     /*RSG 04/2005 DELETED CHOLESTEROL*/
     ELSE IF I = 5 THEN BENTYPE = "Composite";   ***MJS 06/23/03 Changed &PERIOD to Composite;
     TIMEPD = "&PERIOD";   ***MJS 06/23/03 Added line;
     OUTPUT;
  END;
  DROP I;
RUN;

DATA BENCHMKS;
  SET BENCHMKS;
  OUTPUT;
  IF MAJGRP = "All Beneficiaries" THEN DO;
     DO REG = 1 TO 18; DROP REG; /*JSO 08/24/2006, Changed Regions, 16 to 15*/ /* MER 11/3/12 15
to 18 */
```

```
                     MAJGRP = "Benchmark";
                     REGION = PUT(REG,SERVREGO.);
                     REGCAT = PUT(REG,SERVREGO.);
                     OUTPUT;
         END;
         DO SERV = 1 TO 5; DROP SERV; /* MER 11/03/2012 Changed 4 to 5 for Joint Service facilities
*/
                MAJGRP = "Benchmark";
                REGION = PUT(SERV,XSERVAFF.);
                REGCAT = PUT(SERV,XSERVAFF.);
                OUTPUT;
         END;

                MAJGRP = "Benchmark";
                REGION = 'USA MHS';
                REGCAT = 'USA MHS';
                OUTPUT;
                MAJGRP = "Benchmark";
                REGION = 'NORTH';
                REGCAT = 'NORTH';
                OUTPUT;
                MAJGRP = "Benchmark";
                REGION = 'SOUTH';
                REGCAT = 'SOUTH';
                OUTPUT;
                MAJGRP = "Benchmark";
                REGION = 'WEST';
                REGCAT = 'WEST';
                OUTPUT;
                MAJGRP = "Benchmark";
                REGION = 'OVERSEAS';
                REGCAT = 'OVERSEAS';
                OUTPUT;
     END;
RUN;

PROC FREQ DATA=BENCHMKS;
   TABLES MAJGRP/MISSING LIST;
RUN;

************************;
*****  Scores        **;
************************;

DATA SCORES(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG N_OBS N_WGT);
     FORMAT MAJGRP $30. REGION  $30. REGCAT $30.    /** RSG 01/2005 Increase region format to
accommodate service affiliation **/
            BENEFIT $34. BENTYPE $50. TIMEPD $35.;   ***MJS 06/23/03 Added TIMEPD; /* MER
11/08/12 Increase region/regcat formats */
   SET INLIB.MFINAL INLIB.CFINAL
       INLIB.RFINAL INLIB.SFINAL;


   ARRAY SEMEANS{*} SERRV1-SERRV&CMPNUM1.  CP1SE ;
   ARRAY  SCORES{*} SCORV1-SCORV&CMPNUM1.  CSCOR1;
   ARRAY  SIGNIF{*} SIGV1-SIGV&CMPNUM1.    CPSIG1;
   ARRAY   NOBS {*} NOBSV1-NOBSV&CMPNUM1.  CPOBS1;
   ARRAY   NWGT {*} DENV1-DENV&CMPNUM1     CPDEN1;

   DO I = 1 TO 5;   ***RSG 04/2005 Changed 6 to 5;
      SCORE  = SCORES{I};
      SEMEAN  = SEMEANS{I};
      SIG    = SIGNIF{I};
      N_OBS  = NOBS{I};
      N_WGT  = NWGT{I};
      BENEFIT = "Preventive Care";
      IF      I = 1 THEN BENTYPE = "Prenatal Care";
      ELSE IF I = 2 THEN BENTYPE = "Mammography";
      ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
      ELSE IF I = 4 THEN BENTYPE = "Hypertension";
      /*RSG 04/2005 DELETED CHOLESTEROL*/
      ELSE IF I = 5 THEN BENTYPE = "Composite";   ***MJS 06/23/03 Changed &PERIOD to Composite;
      TIMEPD = "&PERIOD";   ***MJS 06/23/03 Added line;
```

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```
        OUTPUT;
    END;
RUN;

DATA LOADMPRQ (KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG
                     N_OBS N_WGT);
SET BENCHMKS SCORES INLIB.SMOKE;
RUN;

PROC SORT DATA=LOADMPRQ OUT=OUT.LOADMPRQ;
BY MAJGRP REGION;
RUN;
```

I.5.A **Q3FY2013\PROGRAMS\PurchasedLOADWEB\FAKEQ.SAS - Generate the WEB layout/template file - Run Quarterly.**

```
****************************************************************************
* PROJECT:  DOD Quarterly Survey, Consumer Reports (6077-410)
* PROGRAM:  FAKEQ.SAS
* PURPOSE:  Generate Fake Data for Report Cards
* AUTHOR:   Mark A. Brinkley
*
* MODIFIED: 1) July 2000 By Eric Schone to utilize CACRPT and CATREP
*              include files.
*           2) February 2001 By Keith Rathbun - More updates for
*              Quarterly report card format.  Made FAKE datastep into
*              a macro to handle multiple quarters.  Added QTR and
*              PERIOD parameters.
*           3) July 2001 By Mark Brinkley - Updated for
*              Quarterly 2 reports
*           4) April 2002 By Keith Rathbun - Updated DSN and %LET
*              statements for 2002 reports and added TREND records.
*              Removed Flu Shot.
*           5) July 2002 By Mike Scott - Updated DSN and %LET statements
*              for Q2 2002 reports.
*           6) March 2003 By Mike Scott - Updated for 2003 survey.
*           7) June 2003 By Mike Scott - Added TIMEPD variable to be set to the period
*              or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*              setting to 'Composite'.  Updated for Q2 2003.
*           8) July 2003 BY Mike Scott - Above for K=7 through 10 in loop DO K=0 TO 11.
*              Added LOADCAHQ.INC.
*           9) October 2003 By Mike Scott - Updated for Q3 2003.
*           10) January 2004 By Mike Scott - Updated for Q4 2003.
*           11) March 2004 By Mike Scott - Updated for Q1 2004.
*           12) June 2004 By Regina Gramss - Updated for Q2 2004.
*           13) September 2004 By Regina Gramss - Updated for Q3 2004, to use XTNEXREG vs XREGION
*           14) January 2005 By Regina Gramss - Prepare "Last Conus_q" for Q4 2005
*              replace XTNEXREG with XSERVREG
*           15) April 2005 By Regina Gramss - Update for Q1 2005, delete cholesterol
*              bentype and include Healthy Behaviors composite and BMI bentype.
*           16) July 2005 By Regina Gramss - Update for Q2 2005.
*           17) October 2005 By Regina Gramss - Updated for Q3 2005
*           18) December 2005 By Regina Gramss - Updated for Q4 2005
*           19) March 2006 By Keith Rathbun - Updated for Q2 FY 2006
*           20) July 2006 By Justin Oh - Updated for Q3 FY 2006
*           21) 08/22/2006 By Justin Oh - Changed XSERVREG for Overseas
*           22) 10/03/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS063_1 to HCS064_1 for Q4FY2006 reports.
*           23) 02/02/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS064_1 to HCS071_1 for Q4FY2006 reports.
*           24) 04/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS071_1 to HCS072_1 for Q4FY2006 reports.
*           25) 06/22/2007 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS072_1 to HCS073_1 for Q3FY2007 reports.
*           26) 09/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS073_1 to HCS074_1 for Q4FY2007 reports.
*           27) 01/10/2008 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS074_1 to HCS081_1 for Q1FY2008 reports.
*           28) 04/11/2008 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS081_1 to HCS082_1 for Q2FY2008 reports.
*           29) 06/13/2008 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS082_1 to HCS083_1 for Q3FY2008 reports.
*           30) 10/02/2008 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS083_1 to HCS084_1 for Q4FY2008 reports.
*           31) 01/06/2009 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS084_1 to HCS091_1 for Q1FY2009 reports.
*           32) 01/16/2009 By Mike Rudacille - Changed CONUS to USA.
*           33) 03/11/2009 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS091_1 to HCS092_1 for Q2FY2009 reports.
*           34) 04/11/2009 By Mike Rudacille - Updated composite definitions
*              to reflect modifications to beneficiary reports necessary for V4
*           35) 06/22/2009 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS092_1 to HCS093_1 for Q3FY2009 reports.
*           36) 09/30/2009 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS093_1 to HCS094_1 for Q4FY2009 reports.
```

```
*           37) 12/17/2009 By Emma Ernst - Changed %LET PERIOD1- Period4
*                Changed input data to HCS10_1 for Q1FY2010
*           38) 03/02/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS101_1 to HCS102_1 for Q2FY2010 reports.
*           39) 03/30/2010 By Mike Rudacille - Changed input data from
*               HCS102_1 to HCS102_2 (FIELDAGE no longer included in HCSyyq_1).
*           40) 06/19/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS102_2 to HCS103_2 for Q3FY2010 reports.
*           41) 08/28/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS103_2 to HCS104_2 for Q4FY2010 reports.
*           42) 12/02/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS104_2 to HCS111_2 for Q1FY2011 reports.
*           43) 02/24/2011 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS111_2 to HCS112_2 for Q2FY2011 reports.
*           44) 12/10/2011 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCD114_2 to HCS121_2 for Q1FY2012 reports.
*           45) 03/05/2012 By Amanda Kudis - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS121_2 to HCS122_2 for Q2FY2012 reports.
*           46) 06/20/2012 By Amanda Kudis - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS122_2 to HCS123_2 for Q3FY2012 reports.
*           47) 08/23/2012 By Christine Cheu - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS123_2 to HCS124_2 for Q4FY2012 reports.
*           48) 11/03/2012 By Mike Rudacille - Updated for handling of
*               Joint Service facilities
*           49) 12/28/2012 By Aimee Valenzuela - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS124_2 to HCS131_2 for Q1FY2013 reports
*           50) 03/23/2013 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed input data HCS131_2 to HCS132_2 for Q2FY2013 reports
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
**************************************************************************;
%LET NUMQTR = 5;   ***MJS 06/18/03 Changed 4 to 5;

%LET PERIOD1 = July, 2012;
%LET PERIOD2 = October, 2012;
%LET PERIOD3 = January, 2013;
%LET PERIOD4 = April, 2013;

%LET PERIOD5 = Trend;   ***MJS 06/18/03 Added line;

%INCLUDE "LOADCAHQ.INC";   ***MJS 07/07/03 Added;

LIBNAME OUT       ".";
LIBNAME IN        "..\..\Data\AFinal";
LIBNAME LIBRARY  "..\..\Data\AFinal\fmtlib";

OPTIONS COMPRESS=YES NOFMTERR;

**************************************************************************
* CREATE TEMPORARY DATASET FOR RECODING CACSMPL TO BE COLLAPSED FOR
* REPORT CARD PURPOSES
* FOR QUARTERLY REPORTS CATCHMENT LEVEL REPORTING IS NOT DONE
* AND THEREFORE THE VALUE OF CELLP IS SET TO 1
* FOR ANNUAL REPORTING PURPOSES
* CELLP WILL NEED TO BE ASSIGNED TO GEOCELL (KEEP GEOCELL ON INPUT)
**************************************************************************;

DATA TEMP;
  SET IN.HCS133_2;
   CELLP=1;
    **********************************************************************
    * CODE FOR XSERVREG FROM XTNEXREG
    **********************************************************************;
    IF SERVAFF='A' THEN XSERVAFF=1;               *Army;
       ELSE IF SERVAFF='F' THEN XSERVAFF=2;       *Air Force;
       ELSE IF SERVAFF='N' THEN XSERVAFF=3;       *Navy;
       ELSE XSERVAFF=4;

    IF PUT(XCATCH, JOINTSRV.)='1' THEN XSERVAFF=5; *Joint Service;

    IF XTNEXREG = 1 THEN DO;
```

```
            IF XSERVAFF = 1 THEN XSERVREG = 1;
            ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
            ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
            ELSE IF XSERVAFF = 4 THEN XSERVREG = 4;
            ELSE XSERVREG = 5;
        END;

        IF XTNEXREG = 2 THEN DO;
            IF XSERVAFF = 1 THEN XSERVREG = 6;
            ELSE IF XSERVAFF = 2 THEN XSERVREG = 7;
            ELSE IF XSERVAFF = 3 THEN XSERVREG = 8;
            ELSE IF XSERVAFF = 4 THEN XSERVREG = 9;
            ELSE XSERVREG = 10;
        END;

        IF XTNEXREG = 3 THEN DO;
            IF XSERVAFF = 1 THEN XSERVREG = 11;
            ELSE IF XSERVAFF = 2 THEN XSERVREG = 12;
            ELSE IF XSERVAFF = 3 THEN XSERVREG = 13;
            ELSE IF XSERVAFF = 4 THEN XSERVREG = 14;
            ELSE XSERVREG = 15;
        END;

        IF XTNEXREG = . THEN DELETE;

RUN;

proc freq;
table xservreg*cacsmpl/ noprint out=temp;
run;

data temp2;
length cafmt $30;
set temp end=last;
by xservreg;
  caf=0;
where cacsmpl ne 9999;
  if first.xservreg then do; /* took out condition for xregion= 8 since useing xservreg now */
    cafmt=put(xservreg,servregf.);
    output;
  end;
  cafmt=put(cacsmpl,catrep.);
  caf=1;
  if count>60 & cafmt ne 'INV' then output;
  if last then do;
    xservreg=0;
    caf=0;
    cafmt='Benchmark';
   output;
          /** RSG 01/2005 Add in codes for service affiliation categories **/


   caf=1;

   xservreg=16;
   cafmt='Overseas Europe';
   output;
  xservreg=17;
   cafmt='Overseas Pacific';
   output;
  xservreg=18;
   cafmt='Overseas Latin America';
   output;
xservreg=19;
  cafmt = 'ARMY';
        output;
        xservreg=20;
        cafmt = 'AIR FORCE';
        output;
        xservreg=21;
        cafmt = 'NAVY';
        output;
```

```
        xservreg=22;
        cafmt = 'OTHER';
         output;
         xservreg=23;
         cafmt = 'JOINT SERVICE';
         output;
        xservreg=24;
        cafmt = 'NORTH';
        output;
        xservreg=25;
        cafmt = 'SOUTH';
        output;
        xservreg=26;
        cafmt = 'WEST';
        output;
        xservreg=27;
        cafmt = 'OVERSEAS';
        output;
        xservreg=28;
        cafmt = 'USA MHS';
        output;
        xservreg=29;
        cafmt = 'Europe Army';
        output;
        xservreg=30;
        cafmt = 'Europe Air Force';
        output;
        xservreg=31;
        cafmt = 'Europe Navy';
         output;
        xservreg=32;
        cafmt = 'Europe Other';
        output;
         xservreg=33;
         cafmt = 'Europe Joint Service';
         output;
        xservreg=34;
        cafmt = 'Pacific Army';
        output;
        xservreg=35;
        cafmt = 'Pacific Air Force';
        output;
        xservreg=36;
        cafmt = 'Pacific Navy';
        output;
        xservreg=37;
        cafmt = 'Pacific Other';
        output;
         xservreg=38;
         cafmt = 'Pacific Joint Service';
         output;
        xservreg=39;
        cafmt = 'Latin America Army';
        output;
        xservreg=40;
        cafmt = 'Latin America Air Force';
        output;
        xservreg=41;
        cafmt = 'Latin America Navy';
        output;
        xservreg=42;
        cafmt = 'Latin America Other';
        output;
         xservreg=43;
         cafmt = 'Latin America Joint Service';
         output;
   end;
run;


/*RSG 04/2005 order region groups the way it should appear in reports*/
data temp3 (rename=(temp_r=xservreg));
   set temp2;
if      xservreg=0  then temp_r=1;
```

```
else if xservreg=28 then temp_r=2;
else if xservreg=19 then temp_r=3;
else if xservreg=21 then temp_r=4;
else if xservreg=20 then temp_r=5;
else if xservreg=22 then temp_r=6;
else if xservreg=23 then temp_r=7;
else if xservreg=24 then temp_r=8;
else if xservreg=1  then temp_r=9;
else if xservreg=3  then temp_r=10;
else if xservreg=2  then temp_r=11;
else if xservreg=4  then temp_r=12;
else if xservreg=5  then temp_r=13;
else if xservreg=25 then temp_r=14;
else if xservreg=6  then temp_r=15;
else if xservreg=8  then temp_r=16;
else if xservreg=7  then temp_r=17;
else if xservreg=9  then temp_r=18;
else if xservreg=10 then temp_r=19;
else if xservreg=26 then temp_r=20;
else if xservreg=11 then temp_r=21;
else if xservreg=13 then temp_r=22;
else if xservreg=12 then temp_r=23;
else if xservreg=14 then temp_r=24;
else if xservreg=15 then temp_r=25;
else if xservreg=27 then temp_r=26;
else if xservreg=16 then temp_r=27;
else if xservreg=17 then temp_r=28;
else if xservreg=18 then temp_r=29;
else if xservreg=29 then temp_r=30;
else if xservreg=31 then temp_r=31;
else if xservreg=30 then temp_r=32;
else if xservreg=32 then temp_r=33;
else if xservreg=33 then temp_r=34;
else if xservreg=34 then temp_r=35;
else if xservreg=36 then temp_r=36;
else if xservreg=35 then temp_r=37;
else if xservreg=37 then temp_r=38;
else if xservreg=38 then temp_r=39;
else if xservreg=39 then temp_r=40;
else if xservreg=41 then temp_r=41;
else if xservreg=40 then temp_r=42;
else if xservreg=42 then temp_r=43;
else if xservreg=43 then temp_r=44;
drop xservreg;
run;

proc sort;
by xservreg caf cafmt;
run;

data temp4;
set temp3 end=last;

start=_n_;
label=cafmt;
type='N';
fmtname='ROWMAT';
if last then call symput('x',_n_);

run;

proc format cntlin=temp4;

proc print data=temp4;
run;

%MACRO FAKE;
DATA FAKE;

  KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD I K;   ***MJS 06/18/03 Added TIMEPD;

  LENGTH MAJGRP  $ 30
         REGION  $ 30    /*RSG 01/2005 lengthen format to fit service affiliation*/
```

```
          REGCAT  $ 30     /*MER 11/08/2012 length format for region/regcat for Joint Service
facilities */
          BENTYPE $ 50
          TIMEPD  $ 35;   ***MJS 06/18/03 Added TIMEPD;



   DO I=1 TO 8;              ** 8 Major groups **;

      MAJGRP=PUT(I,MAJOR.);

      DO J=1 TO &x;         ** Region/catchment **;

      REGCAT=PUT(J,ROWMAT.);
      RETAIN REGION;

      **RSG 01/2005 Change code to fit XSERVREG values**;
      IF SUBSTR(REGCAT,1,8) IN ('Benchmar','Overseas','OVERSEAS') OR
            SUBSTR(REGCAT,1,5) IN ('Pacif','Europ','Latin','North','South','West
','NORTH','SOUTH','WEST') OR
            REGCAT IN ('ARMY','AIR FORCE','NAVY','OTHER','JOINT SERVICE','USA MHS') THEN
REGION=REGCAT;


         DO K=1 TO 11;     ** 11 Benefits **;  /*** 04-11-09 MER ***/

           BENEFIT=PUT(K,BEN.);

           IF K=1 THEN DO;
               DO L=1 TO 3;                 ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,GETNCARE.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
               END;
           END;
           ELSE IF K=2 THEN DO;
               DO L=1 TO 3;                 ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,GETCAREQ.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
               END;
           END;
           ELSE IF K=3 THEN DO;
               DO L=1 TO 5;                 ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,HOWWELL.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
               END;
           END;
           ELSE IF K=4 THEN DO;
               DO L=1 TO 3;                 ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,CUSTSERV.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
               END;
           END;
           ELSE IF K=5 THEN DO;
               DO L=1 TO 3;                 ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                  BENTYPE=PUT(L,CLMSPROC.);   ***that replaced BENTYPE hard assignment;
                  %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                  %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
               END;
           END;
```

```
               ELSE IF K=6 THEN DO;
                   %DO Q = 1 %TO &NUMQTR;
                       BENTYPE = "Composite";    ***MJS 07/07/03 Added;
                       TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                   %END;                               ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
               END;
               ELSE IF K=7 THEN DO;
                   %DO Q = 1 %TO &NUMQTR;
                       BENTYPE = "Composite";    ***MJS 07/07/03 Added;
                       TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                   %END;                               ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
               END;
               ELSE IF K=8 THEN DO;
                   %DO Q = 1 %TO &NUMQTR;
                       BENTYPE = "Composite";    ***MJS 07/07/03 Added;
                       TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                   %END;                               ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
               END;
               ELSE IF K=9 THEN DO;
                   %DO Q = 1 %TO &NUMQTR;
                       BENTYPE = "Composite";    ***MJS 07/07/03 Added;
                       TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/   ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                   %END;                               ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
               END;
               ELSE IF K=10 THEN DO;
                   DO L=1 TO 5;                   ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                       BENTYPE=PUT(L,PREVCARE.);    ***that replaced BENTYPE hard assignment;
                       %DO Q = 1 %TO &NUMQTR;    ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                           TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                       %END;    ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                   END;
               END;
               ELSE IF K=11 THEN DO;                ***RSG 02/2005 Added for smoking scores.;
                   DO M=1 TO 4;
                       BENTYPE=PUT(M,SMOKEF.);
                       %DO Q = 1 %TO &NUMQTR;
                           TIMEPD = "&&PERIOD&Q"; OUTPUT;
                       %END;
                   END;
               END;
           END;
       END;
     END;
   END;
RUN;
%MEND FAKE;
%FAKE;


/*** 12-13 MAB ***/
/*** Since quarterly files won't have catchment level data then delete ***/
DATA FAKE;
  SET FAKE;
  IF REGION=REGCAT;
RUN;

/*** 12-13 MAB ***/
/*** Need to create single benchmarks for ALL major groups ***/
DATA EXTRA;
  SET FAKE;
  IF MAJGRP="Prime Enrollees" AND REGION=REGCAT AND REGION^="Benchmark";
  MAJGRP="Benchmark";
RUN;
/*** Combine extra data with fake ***/
DATA FAKE;
```

```
  SET EXTRA FAKE;
RUN;

/*** Need to clean up data ***/
DATA OUT.FAKEQ;
  SET FAKE;

  /*** Need to set oddball records to missing ***/
  IF REGION="Benchmark" THEN SIG=.;
  if region=''|compress(regcat)='.' then delete;

  /*** Don't populate catchment areas for 4 major groups ***/
  *IF I IN(3,4,6,7) AND REGION^=REGCAT THEN DELETE;          /*** 12-13 MAB ***/

  DROP I K;

RUN;


PROC FREQ;
  TABLES MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG;   ***MJS 07/21/03 Added TIMEPD;
RUN;


ENDSAS;
```

I.5.B   Q3FY2013\PROGRAMS\PurchasedLOADWEB\MERGFINQ.SAS - Merge the final CAHPS and MPR Scores Databases into the WEB layout - Run Quarterly.

```
***************************************************************************
*
* PROGRAM:   MERGFINQ.SAS
* TASK:      Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE:   Merge the final CAHPS and MPR Scores Databases
*            into the WEB layout preserving the order of the FAKEQ.SD2.
*
* WRITTEN:   11/09/2000 BY KEITH RATHBUN, Adapted from MERGFINL.SAS.
*
* INPUTS:    1) MPR and CAHPS Individual and Composite data sets with adjusted
*               scores, and benchmark data for quarterly DoD HCS.
*               - LOADMPRQ.sas7bdat - MPR Scores Database
*               - LOADCAHQ.sas7bdat - CAHPS Scores Database
*               - BENCHA04.sas7bdat - CAHPS Benchmark Database
*               - FAKEQ.sas7bdat    - WEB Layout in Column order
*
* OUTPUT:    1) MERGFINQ.sas7bdat - Combined Scores Database in WEB layout
*
* INCLUDES:  1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*               and composite data sets
*
* MODIFIED:  1) 07/15/2002 by Mike Scott: Updated libnames for Q2 2002.
*            2) 03/21/2003 by Mike Scott: Updated for 2003 survey.
*            3) 07/09/2003 by Mike Scott: Updated for Q2 2003.  Added TIMEPD to KEYs.
*            4) 07/23/2003 by Mike Scott: Added TIMEPD to FREQs and PRINT.
*            5) 10/21/2003 by Mike Scott: Updated for Q3 2003.
*            6) 01/07/2004 by Mike Scott: Updated for Q4 2003.
*            7) 03/24/2004 by Mike Scott: Updated for Q1 2004.
*            8) 06/22/2004 by Regina Gramss: Updated for Q2 2004.
*            9) 09/2004    by Regina Gramss: Updated for Q3 2004, Use XTNEXREG vs XREGION
*           10) 01/2005    by Regina Gramss: Changed XTNEXREG to XSERVREG to compile
*               "Last conus_q" for Q4 2005
*           11) 04/2005    by Regina Gramss: Updated for Q1 2005
*           12) 07/2005    by Regina Gramss: updated for Q2 2005
*           13) 10/2005    by Regina Gramss: Updated for Q3 2005
*           14) 12/2005    by Regina Gramss: Updated for Q4 2005
*           15) 07/2006    by Justin Oh: Updated for Q3 FY 2006
*           16) 08/22/2006 by Justin Oh: Change DO REG = 1 TO 15 from 1 TO 16
*           17) 10/03/2006 by Justin Oh - Changed libname in2 and in3 for Q4FY2006.
*           18) 12/20/2006 by Justin Oh - Changed libname in2 and in3 for Q1FY2007.
*           19) 04/05/2007 by Justin Oh - Changed libname in2 and in3 for Q2FY2007.
*           20) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*               ReportCards OR PurchasedReportCards.
*           21) 04/05/2007 by Justin Oh - Added %LET BCHTYPE to select BCH types
*               Benchmark OR PurchasedBenchmark.
*           22) 09/05/2007 by Justin Oh - Changed libname in2 and in3 for Q4FY2007.
*           23) 01/10/2008 by Keith Rathbun - Changed libname in2 and in3 for Q1FY2008.
*           24) 04/11/2008 by Justin Oh - Changed libname in2 and in3 for Q2FY2008.
*           25) 06/13/2008 by Keith Rathbun - Changed libname in2 and in3 for Q3FY2008.
*           26) 10/02/2008 by Mike Rudacille - Changed libname in2 and in3 for Q4FY2008.
*           27) 01/06/2009 by Mike Rudacille - Changed libname in2 and in3 for Q1FY2009.
*           28) 01/16/2009 by Mike Rudacille - Changed CONUS to USA.
*           29) 03/11/2009 by Keith Rathbun - Changed libname in2 and in3 for Q2FY2009.
*           30) 06/23/2009 by Keith Rathbun - Changed libname in2 and in3 for Q3FY2009.
*           31) 09/30/2009 by Mike Rudacille - Changed libname in2 and in3 for Q4FY2009.
*           32) 12/17/2009 by Emma Ernst- Changed libname in2 and in3 for Q1FY2010.
*           33) 03/02/2010 by Mike Rudacille - Changed libname in2 and in3 for Q2FY2010.
*           34) 06/19/2010 by Mike Rudacille - Changed libname in2 and in3 for Q3FY2010.
*           35) 08/28/2010 by Mike Rudacille - Changed libname in2 and in3 for Q4FY2010.
*           36) 12/02/2010 by Mike Rudacille - Changed libname in2 and in3 for Q1FY2011.
*           37) 02/24/2011 by Mike Rudacille - Changed libname in2 and in3 for Q2FY2011.
*           38) 12/10/2011 by Mike Rudacille - Changed libname in2 and in3 for Q1FY2012.
*           39) 03/05/2012 by Amanda Kudis - Changed libname in2 and in3 for Q2FY2012.
*           40) 06/20/2012 by Amanda Kudis - Changed libname in2 and in3 for Q3FY2012.
*           41) 08/23/2012 by Christine Cheu - Changed libname in2 and in3 for Q4FY2012.
*           42) 11/03/2012 by Mike Rudacille - Updated for handling of
*               Joint Service facilities
*           43) 12/28/2012 by Aimee Valenzuela - Changed libname in2 and in3 for Q1FY2013.
*           44) 03/23/2013 by Mike Rudacille - Changed libname in2 and in3 for Q2FY2013.
```

```
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
* - STEP1Q.SAS     - Recode questions and generate CAHPS group files
* - STEP2Q.SAS     - Calculate CAHPS individual adjusted scores for groups 1-7
* - COMPOSIT.SAS   - Calculate composite adjusted scores for group 1-8
* - PRVCOMPQ.SAS   - Calculate MPR individual and composite scores
* - BENCHA01-04.SAS - Convert Benchmark Scores into WEB layout
* - LOADCAHQ.SAS   - Convert Quarterly CAHPS Scores Database into WEB layout
* - LOADMPRQ.SAS   - Convert Quarterly MPR Scores Database into WEB layout
*
* 2) The output file (MERGFINQ.SD2) will be run through the
*    MAKEHTMQ.SAS program to generate the WEB pages.
*
******************************************************************************
* Assign data libraries and options
******************************************************************************;


/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards              ***/
%LET RCTYPE = PurchasedReportCards;

/*** SELECT PROGRAM - Benchmark OR PurchasedBenchmark                  ***/
%LET BCHTYPE = PurchasedBenchmark;

LIBNAME IN1  ".";
LIBNAME IN2  "CAHPS_ADULTQ3FY2013\Data";
LIBNAME IN3  "..\&RCTYPE\MPR_AdultQ3FY2013";
LIBNAME IN4  "..\&BCHTYPE\Data";
LIBNAME OUT  ".";
LIBNAME LIBRARY  "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=232 COMPRESS=YES NOCENTER;   ***MJS 07/23/03 Changed LS from 132;

%INCLUDE "LOADCAHQ.INC";

******************************************************************************
* Construct ORDERing variable from WEB layout
******************************************************************************;
DATA ORDER;
   SET IN1.FAKEQ;
   ORDER = _N_;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP)) || UPCASE(TRIM(REGCAT)) ||
         UPCASE(TRIM(REGION)) || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added TIMEPD;
   KEEP KEY ORDER;
RUN;


PROC SORT DATA=ORDER; BY KEY; RUN;

******************************************************************************
* Merge the Scores Databases
******************************************************************************;
DATA MERGFINQ;
   SET IN2.LOADCAHQ(IN=INCAHPQ)
       IN3.LOADMPRQ(IN=INMPRQ )
       IN4.BENCHA04(IN=INBENQ );
   SVCAHPQ = INCAHPQ;
   SVMPRQ  = INMPRQ;
   SVBENQ  = INBENQ;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP)) || UPCASE(TRIM(REGCAT)) ||
         UPCASE(TRIM(REGION)) || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added TIMEPD;
   KEYLEN=LENGTH(KEY);
   KEYTEST=LENGTH(BENEFIT)+LENGTH(BENTYPE)+LENGTH(MAJGRP)+LENGTH(REGION)+LENGTH(TIMEPD);
   OUTPUT;
   IF INBENQ THEN DO;
      IF MAJGRP = "All Beneficiaries" THEN DO;
         DO REG = 1 TO 30; DROP REG;  /*JSO 08/24/2006, Changed Regions, 16 to 24*/ /*MER
11/03/12 24 to 30*/
            MAJGRP = "Benchmark";
```

```
                       REGION = PUT(REG,SERVREGF.);
                       REGCAT = PUT(REG,SERVREGF.);
                       KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                             UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                             UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added
TIMEPD;
                       OUTPUT;
                END;
              DO SERV = 1 TO 5; DROP SERV;  /*RSG 02/2005 Add in serv affiliation*/ /*MER 11/03/12 4
to 5*/
                       MAJGRP = "Benchmark";
                       REGION = PUT(SERV,XSERVAFF.);
                       REGCAT = PUT(SERV,XSERVAFF.);
                       KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                             UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                             UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
                       OUTPUT;
                END;

              MAJGRP = "Benchmark";
              REGION = 'NORTH';
              REGCAT = 'NORTH';
              KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                    UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                    UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
              OUTPUT;

              MAJGRP = "Benchmark";
              REGION = 'Overseas Europe';
              REGCAT = 'Overseas Europe';
              KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                    UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                    UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
              OUTPUT;

              MAJGRP = "Benchmark";
              REGION = 'Overseas Pacific';
              REGCAT = 'Overseas Pacific';
              KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                    UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                    UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
              OUTPUT;

              MAJGRP = "Benchmark";
              REGION = 'Overseas Latin America';
              REGCAT = 'Overseas Latin America';
              KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                    UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                    UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
              OUTPUT;

              MAJGRP = "Benchmark";
              REGION = 'SOUTH';
              REGCAT = 'SOUTH';
              KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                    UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                    UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
              OUTPUT;

              MAJGRP = "Benchmark";
              REGION = 'WEST';
              REGCAT = 'WEST';
              KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                    UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                    UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
              OUTPUT;

              MAJGRP = "Benchmark";
              REGION = 'OVERSEAS';
              REGCAT = 'OVERSEAS';
              KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                    UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                    UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
```

```
         OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'USA MHS';
         REGCAT = 'USA MHS';
        KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
              UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
              UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

      END;
   END;
   IF SCORE = . THEN DELETE;

RUN;

PROC SORT DATA=MERGFINQ; BY KEY; RUN;

*****************************************************************************
* Append ORDERing variable to the merged Scores database file
*****************************************************************************;
DATA MERGFINQ MISSING;
   MERGE MERGFINQ(IN=IN1) ORDER(IN=IN2);
   BY KEY;

   LENGTH FLAG $30;
   IF IN1 AND IN2 THEN FLAG = "IN SCORES DB AND LAYOUT";
   ELSE IF    IN1 THEN FLAG = "IN SCORES DB ONLY";
   ELSE IF    IN2 THEN FLAG = "IN LAYOUT ONLY";

   LENGTH SOURCE $30;
   IF SVCAHPQ = 1 THEN SOURCE = "CAHPS      ";
   IF SVMPRQ  = 1 THEN SOURCE = "MPR        ";
   IF SVBENQ  = 1 THEN SOURCE = "BENCHMARK ";

   IF IN1 AND NOT IN2 THEN OUTPUT MISSING; *Missing from layout;
   IF IN1 THEN OUTPUT MERGFINQ;
RUN;

*****************************************************************************
* Reorder file according to WEB layout
*****************************************************************************;
PROC SORT DATA=MERGFINQ OUT=OUT.MERGFINQ; BY ORDER; RUN;

DATA FAKEQ;
   SET IN1.FAKEQ;
   ORDER = _N_;
RUN;

DATA LAYONLY;
   MERGE FAKEQ(IN=IN1) OUT.MERGFINQ(IN=IN2 KEEP=ORDER);
   BY ORDER;
   IF IN1 AND NOT IN2;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6663-410)";
TITLE2 "Program Name: MERGFINQ.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MPR and CAHPS Combined Scores data sets and WEB Layout";
TITLE4 "Program Outputs: MERGFINQ.sas7bdat - Merged Final Scores Database for input to
MAKEHTML.SAS";

TITLE5 "MERGFINQ.sas7bdat Data source counts";
PROC FREQ DATA=OUT.MERGFINQ;
TABLES SOURCE FLAG SVCAHPQ SVMPRQ SVBENQ
                  SVCAHPQ*SVMPRQ*SVBENQ
      /MISSING LIST;
RUN;

TITLE5 "MERGFINQ.sas7bdat Data attribute counts";
PROC FREQ DATA=OUT.MERGFINQ;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/23/03 Added TIMEPD*/
       REGION*REGCAT
       /MISSING LIST;
```

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```
RUN;

TITLE5 "LAYONLY Data attribute counts";
PROC FREQ DATA=LAYONLY;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/23/03 Added TIMEPD*/
       REGION*REGCAT
      /MISSING LIST;
RUN;

TITLE5 "No matching record found in LAYOUT file (FAKEQ.sas7bdat)";
PROC PRINT DATA=MISSING;
VAR MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD;   ***MJS 07/23/03 Added TIMEPD;
RUN;
```

I.6   Q3FY2013\PROGRAMS\PurchasedLOADWEB\CONUS_Q.SAS - Generate CAHPS CONUS scores and perform significance tests - Run Quarterly.

```
*****************************************************************************
*
*  PROGRAM:   CONUS_Q.SAS
*  TASK:      Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
*  PURPOSE:   Generate CAHPS CONUS scores and perform significance tests.
*
*  WRITTEN:   11/13/2000 BY KEITH RATHBUN, Adapted from CONUS_A.SAS.
*             Merged SIGNIF_A.SAS funtionality.
*
*  MODIFIED:  1) 04/10/2002 BY KEITH RATHBUN, Update for 2002 survey:
*                changed code to process 4 rolling quarters.
*             2) 04/30/2002 By Eric Schone, to calculate & test trend.
*             3) 07/17/2002 BY MIKE SCOTT, Updated %LET statements for
*                Q2 2002.
*             4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*             5) 07/08/2003 BY MIKE SCOTT, Updated for Q2 2003.  Changed BENTYPE="&PERIOD4"
*                to BENTYPE="Composite".  Added TIMEPD to KEY and FREQ.
*             6) 07/23/2003 BY MIKE SCOTT, Added TIMEPD constraint to DATA LASTQTR.
*             7) 10/21/2003 BY MIKE SCOTT, Updated for Q3 2003.
*             8) 01/07/2004 BY MIKE SCOTT, Updated for Q4 2003.
*             9) 01/28/2004 BY MIKE SCOTT, Updated LSTCONUS to point to Q3_2003t.
*            10) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*            11) 06/22/2004 BY REGINA GRAMSS, Updated for Q2 2004, Added conditions
*                to avoid error messages in data sigtest2 step (ensure degree of freedom
*                is not zero for the probt function) and data trend steps (ensure division
*                by zero is not taking place).
*            12) 09/2004 BY REGINA GRAMSS, Updated for Q3, 2004.  Added in codes
*                for trend calculations (per Eric Schone). Revised to use XTNEXREG.
*            13) 01/2005 BY REGINA GRAMSS, Changed codes for XTNEXREG to XSERVREG
*                to incorporate service affiliation into regions.  Change
*                adjustments made to trend calculation to what was previous.
*            14) 06/2005 BY REGINA GRAMSS, Included relevant codes from TOTAL_Q.SAS
*                to consolidate both programs into one.  TOTAL_Q.SAS will no longer
*                be used. Also put in codes to set trend score to missing if any of the
*                previous scores are missing.
*            15) 10/2005 BY REGINA GRAMSS, Updated for Q3 2005
*            16) 12/2005 BY REGINA GRAMSS, Updated for Q4 2005
*            17) 07/2006 BY Justin Oh, Updated for Q3 FY 2006
*            18) 10/03/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*                Changed %LET LSTCONUS.
*            19) 12/20/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*                Changed %LET LSTCONUS.
*            20) 02/02/2007 By Justin Oh - Added "s" to Healthy Behaviors.
*            21) 02/16/2007 By Justin Oh - Added if statement to change BENEFIT
*                "Heathly Behavior" to Healthy "Behaviors" for the Last CONUS_Q.SD2 data
*            22) 04/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*                Changed %LET LSTCONUS.
*            23) 04/05/2007 by Justin Oh - Added %LET BCHTYPE to select BCH types
*                Benchmark OR PurchasedBenchmark.
*            24) 04/05/2007 by Justin Oh - Added changes to select RC types
*                ReportCards OR PurchasedReportCards.
*            25) 10/03/2007 by Justin Oh - Removed code that removed Civilian PCM.
*                IF "&RCTYPE" = 'ReportCards' AND
*                MAJGRP="Enrollees with Civilian PCM" THEN DELETE;
*            26) 10/03/2007 by Justin Oh - Removed %LET BCHTYPE to select BCH types
*                Benchmark OR PurchasedBenchmark.
*            27) 09/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*                Changed %LET LSTCONUS.
*            28) 01/10/2008 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*                Changed %LET LSTCONUS.
*            29) 04/11/2008 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*                Changed %LET LSTCONUS.
*            30) 10/02/2008 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                Changed %LET LSTCONUS.
*            31) 01/06/2009 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*                Changed %LET LSTCONUS.
*            32) 01/16/2009 By Mike Rudacille - Changed CONUS to USA where appropriate
*            33) 03/11/2009 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*                Changed %LET LSTCONUS
```

```
*           34) 04/11/2009 By Mike Rudacille - Changed BENTYPE and Composite definitions
*               to reflect modifications to beneficiary reports necessary for V4
*           35) 06/22/2009 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           36) 09/30/2009 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           37) 12/17/2010 by Emma Ernst- Changed %LET PERIOD1 - PERIOD4.
*               Changed %LET LSTCONUS
*           38) 03/02/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           39) 06/19/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           40) 08/28/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           41) 12/02/2010 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           42) 02/24/2011 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           43) 12/10/2011 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           44) 03/05/2012 By Amanda Kudis - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           45) 06/20/2012 By Amanda Kudis - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           46) 08/23/2012 By Christine Cheu - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS
*           47) 11/03/2012 By Mike Rudacille - Updated for handling of
*               Joint Service facilities
*           48) 12/28/2012 By Aimee Valenzuela - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS for Q1FY2013
*           49) 03/23/2013 By Mike Rudacille - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS for Q2FY2013
*
*    INPUTS:  1) MERGFINQ.sas7bdat - Scores Database in WEB Layout
*             2) FAKEQ.sas7bdat - Scores Database WEB Layout
*             3) CONUS_Q.sas7bdat - Previous Quarters Combined CAHPS/MPR Scores Database in WEB
layout
*
*    OUTPUT:  1) TOTAL_Q.sas7bdat - Combined CAHPS/MPR Scores Database in WEB layout
*             2) LT30Q.sas7bdat - Records with <= 30 observations
*             3) CONUS_Q.sas7bdat - Current Quarters Combined CAHPS/MPR Scores Database in WEB
layout
*
*
*    NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1Q.SAS   - Recode questions and generate group files
*    - STEP2Q.SAS   - Calculate individual adjusted scores for group 1-7
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*    - LOADCAHPQ.SAS - Combine all questionnaire (CAHPS) scores together
*    - PRVCOMPQ.SAS - Calculate preventative measure scores for group1-8
*    - SMOKING_BMI.SAS   - Calculate healthy behaviors scores for group1-8
*    - LOADMPRQ.SAS    - Combined preventative and healthy behaviors scores
*    - MERGFINQ.SAS - Merge the final CAHPS and MPR Scores Databases
*
*****************************************************************************
* Assign data libraries and options
*****************************************************************************;

LIBNAME IN1  ".";
LIBNAME OUT  ".";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER MPRINT MLOGIC;

*****************************************************************************;
* Define GLOBAL parameters for last CONUSQ.sas7bdat, rolling quarters, and
* input dataset name.
*
* IMPORTANT: Update these GLOBALS each quarter prior to rerunning program.
*****************************************************************************;
%LET LSTCONUS = ..\..\..\Q2FY2013t\Programs\PurchasedLoadweb;
```

```
%LET PERIOD1 = July, 2012;
%LET PERIOD2 = October, 2012;
%LET PERIOD3 = January, 2013;
%LET PERIOD4 = April, 2013;

%LET DSN     = MERGFINQ;

****************************************************************************;
* Set up empty template file for data merge purposes and set first time flag
****************************************************************************;
DATA INIT;
   SET IN1.&DSN;
   DELETE;
RUN;
%LET FLAG = 0;
****************************************************************************
*
* Process Macro Input Parameters:
*
* 1) BENTYPE = Benefit Type
* 2) MAJGRP = Major Group
* 3) TYPE = INDIVIDUAL or COMPOSITE
* 4) BENEFIT = COMPOSITE Benefit Type
*
****************************************************************************;
%MACRO PROCESS(BENTYPE=,MAJGRP=,TYPE=,BENEFIT=);
DATA TEMP;
   SET IN1.&DSN END=FINISHED;
   %IF "&TYPE" = "INDIVIDUAL" %THEN %DO;
       WHERE BENTYPE = "&BENTYPE" AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
             /*SUBSTR(REGION,1,5) NOT IN("Bench","USA") AND*/
             /*SUBSTR(REGCAT,1,5) NOT IN("Bench","USA") AND*/
             SUBSTR(REGION,1,5) NE "Bench" AND SUBSTR(REGION,1,3) NE "USA" AND
             SUBSTR(REGCAT,1,5) NE "Bench" AND SUBSTR(REGCAT,1,3) NE "USA" AND
             REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER","JOINT SERVICE");
   %END;
   %ELSE %IF "&TYPE" = "COMPOSITE" %THEN %DO;
       WHERE BENTYPE = &BENTYPE AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
             BENEFIT = "&BENEFIT" AND
             /*SUBSTR(REGION,1,5) NOT IN("Bench","USA") AND*/
             /*SUBSTR(REGCAT,1,5) NOT IN("Bench","USA") AND*/
             SUBSTR(REGION,1,5) NE "Bench" AND SUBSTR(REGION,1,3) NE "USA" AND
             SUBSTR(REGCAT,1,5) NE "Bench" AND SUBSTR(REGCAT,1,3) NE "USA" AND
             REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER","JOINT SERVICE");
   %END;
   %ELSE %DO;
       PUT "ERROR - Invalid Type = &TYPE";
   %END;

   IF SUBSTR(REGION,1,5) IN ('North','South') THEN DO;
      IF      SUBSTR(REGION,1,5)='North' THEN REGCON=1;
      ELSE IF SUBSTR(REGION,1,5)='South' THEN REGCON=2;
      TOTCON=1;
      IF      SUBSTR(REGION,7,4)='Army'      THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,7,9)='Air Force' THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,7,4)='Navy'      THEN SERVICE=3;
      ELSE IF SUBSTR(REGION,7,5)='Joint'     THEN SERVICE=5;
      ELSE                                        SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,4)='West' THEN DO;
      REGCON=3;
      TOTCON=1;
      IF      SUBSTR(REGION,6,4)='Army'      THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,6,9)='Air Force' THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,6,4)='Navy'      THEN SERVICE=3;
      ELSE IF SUBSTR(REGION,6,5)='Joint'     THEN SERVICE=5;
      ELSE                                        SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,6)='Europe' THEN DO;
      REGCON=4;
      TOTCON=2;
      IF      SUBSTR(REGION,8,4)='Army'      THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,8,9)='Air Force' THEN SERVICE=2;
```

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```
      ELSE IF SUBSTR(REGION,8,4)='Navy'        THEN SERVICE=3;
      ELSE IF SUBSTR(REGION,8,5)='Joint'       THEN SERVICE=5;
      ELSE                                     SERVICE=4;
  END;
     ELSE IF SUBSTR(REGION,1,7)='Pacific' THEN DO;
     REGCON=5;
     TOTCON=2;
     IF      SUBSTR(REGION,9,4)='Army'        THEN SERVICE=1;
     ELSE IF SUBSTR(REGION,9,9)='Air Force'   THEN SERVICE=2;
     ELSE IF SUBSTR(REGION,9,4)='Navy'        THEN SERVICE=3;
     ELSE IF SUBSTR(REGION,9,5)='Joint'       THEN SERVICE=5;
     ELSE                                     SERVICE=4;
  END;
  ELSE IF SUBSTR(REGION,1,13)='Latin America' THEN DO;
     REGCON=6;
     TOTCON=2;
     IF      SUBSTR(REGION,15,4)='Army'        THEN SERVICE=1;
     ELSE IF SUBSTR(REGION,15,9)='Air Force' THEN SERVICE=2;
     ELSE IF SUBSTR(REGION,15,4)='Navy'        THEN SERVICE=3;
     ELSE IF SUBSTR(REGION,15,5)='Joint'       THEN SERVICE=5;
     ELSE                                      SERVICE=4;
  END;


RUN;

*************************************************************************;
* RSG 01/2005 Calc. total Service Affiliation Scores        *;
*************************************************************************;
PROC SORT DATA=TEMP;
BY SERVICE;

DATA TEMP2;
   SET TEMP;
   BY SERVICE;
      length key $200;
   IF FIRST.SERVICE THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;


KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

   IF LAST.SERVICE THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
         SCORE   = SUMSCOR1/SUMWGT1;
         SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
      END;
      ELSE DO;
         SCORE   = .;
         SEMEAN  = .;
      END;

      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "USA";
      FLAG    = "USA";
      IF SERVICE=1 THEN REGION = "ARMY";
      IF SERVICE=2 THEN REGION = "AIR FORCE";
      IF SERVICE=3 THEN REGION = "NAVY";
      IF SERVICE=4 THEN REGION = "OTHER";
      IF SERVICE=5 THEN REGION = "JOINT SERVICE";
```

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```
      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
    END;
RUN;
***********************************************************************;
* RSG 01/2005 Calc. Total Region scores                             *;
***********************************************************************;
PROC SORT DATA=TEMP;
BY REGCON;
DATA TEMP3;
   SET TEMP;
   BY REGCON;
      length key $200;
   IF FIRST.REGCON THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;

KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

   IF LAST.REGCON THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
         SCORE = SUMSCOR1/SUMWGT1;
         SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
      END;
      ELSE DO;
         SCORE   = .;
         SEMEAN  = .;
      END;
      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "REGION";
      FLAG    = "REGION";
      IF REGCON=1 THEN REGION = "NORTH";
      IF REGCON=2 THEN REGION = "SOUTH";
      IF REGCON=3 THEN REGION = "WEST";
      IF REGCON=4 THEN REGION = "Overseas Europe";
      IF REGCON=5 THEN REGION = "Overseas Pacific";
      IF REGCON=6 THEN REGION = "Overseas Latin America";

      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
   END;
RUN;

***********************************************************************;
* RSG 01/2005 Calc. Total CONUS Scores                              *;
* MER 01/2009 Changed CONUS to USA                                  *;
***********************************************************************;
PROC SORT DATA=TEMP;
BY TOTCON;
DATA TEMP4;
   SET TEMP END=FINISHED;
   BY TOTCON;
      length key $200;
   IF FIRST.TOTCON THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
```

```
      SUMWGT1 = 0;      RETAIN SUMWGT1;
      SUMSE2 = 0;       RETAIN SUMSE2;
      SUMWGT2 = 0;      RETAIN SUMWGT2;
      N_OBS1 = 0;       RETAIN N_OBS1;
    END;


      IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
      IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
      IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
      IF N_OBS  NE . THEN N_OBS1 + N_OBS;

    IF LAST.TOTCON THEN DO;



      IF SUMWGT1 NOTIN (.,0) THEN DO;
        SCORE  = SUMSCOR1/SUMWGT1;
        SEMEAN = SQRT(SUMSE2)/SUMWGT1;
          END;
          ELSE DO;
            SCORE   = .;
            SEMEAN  = .;
          END;
      N_OBS  = N_OBS1;
      N_WGT  = SUMWGT1;
      SOURCE = "USA";
      FLAG   = "USA";
    IF TOTCON=1 THEN REGION = "USA MHS";
    IF TOTCON=2 THEN REGION = "OVERSEAS";
      REGCAT = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
END;
KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

RUN;

%IF &FLAG = 0 %THEN %DO;
   DATA FINAL;
      SET INIT TEMP2 TEMP3 TEMP4;
   RUN;
%END;
%ELSE %DO;
   DATA FINAL;
      SET FINAL TEMP2 TEMP3 TEMP4;
   RUN;
%END;
%LET FLAG = 1;

%MEND;

****************************************************************************
* Create CONUS for Active Duty - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly         ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service        ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand     ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information               ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                 ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                 ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                     ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You              ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit            ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care              ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);


****************************************************************************
```

```
* Create CONUS for Active Duty Dependents - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly          ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand      ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                  ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                      ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You               ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit             ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care               ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);


****************************************************************************
* Create CONUS for Enrollees with Civilian PCM - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly          ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                  ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You               ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit             ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care               ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);


****************************************************************************
* Create CONUS for Enrollees with Military PCM - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly          ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service         ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand      ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information                ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist        ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                  ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
```

```
%PROCESS(BENTYPE=Listens Carefully                ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                    ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You             ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit           ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care             ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);

****************************************************************************
* Create CONUS for Non-enrolled Beneficiaries - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly         ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service       ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand    ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information               ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist      ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                    ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You             ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit           ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care             ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);

****************************************************************************
* Create CONUS for Prime Enrollees - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly         ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service       ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand    ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information               ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist      ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                    ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You             ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit           ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care             ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);

****************************************************************************
* Create CONUS for Retirees and Dependents - Individual
****************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly         ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service       ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand    ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information               ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist      ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
```

```
%PROCESS(BENTYPE=Listens Carefully                 ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                     ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You              ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit            ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care              ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);


******************************************************************************
* Create CONUS for All Beneficiaries - Individual
******************************************************************************;
%PROCESS(BENTYPE=Claims Handled Correctly          ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous Customer Service        ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You Can Understand    ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Information               ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting to See a Specialist       ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Getting Treatment                 ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                 ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                     ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You              ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit            ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care              ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);


******************************************************************************
* Process Quarterly CONUS Composites
******************************************************************************
******************************************************************************
* Create CONUS for Claims Processing - Quarterly
******************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=Claims
Processing);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Claims
Processing);


******************************************************************************
* Create CONUS for Customer Service - Quarterly
******************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=Customer
Service);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Customer
Service);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Customer
Service);


******************************************************************************
* Create CONUS for Getting Care Quickly - Quarterly
******************************************************************************;
```

```
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents     , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Getting
Care Quickly);


*****************************************************************************
* Create CONUS for Getting Needed Care - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents     , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Getting
Needed Care);


*****************************************************************************
* Create CONUS for Health Care - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Health
Care);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents     , TYPE=COMPOSITE,BENEFIT=Health
Care);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Health
Care);


*****************************************************************************
* Create CONUS for Health Plan - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Health
Plan);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents      , TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Health
Plan);
```

```
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Health
Plan);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Health
Plan);

*****************************************************************************
* Create CONUS for How Well Doctors Communicate - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=How Well
Doctors Communicate);

*****************************************************************************
* Create CONUS for Primary Care Manager - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Primary
Care Manager);

*****************************************************************************
* Create CONUS for Specialty Care - Quarterly
*****************************************************************************;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to
BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);

*****************************************************************************
* Extract ORDER and KEY from the WEB Layout file.  TEMPQ will be used
* as place holders for missing records.  FAKEQ will be used for adding
* new records.
*****************************************************************************;
DATA FAKEQ;
   SET IN1.FAKEQ;
```

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```
   length key $200;
   SIG = .;
   SCORE = .;
   ORDER = _N_;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;

RUN;
PROC SORT DATA=FAKEQ OUT=TEMPQ;        BY KEY; RUN;
PROC SORT DATA=FAKEQ(KEEP=ORDER KEY); BY KEY; RUN;

*****************************************************************************
* Append BENCHMARK records to CAHPS records and perform significance tests
*****************************************************************************;
DATA BENCHMRK(KEEP=MAJGRP BENEFIT BENTYPE SEMEAN SCORE);
   SET IN1.&DSN;
   WHERE SUBSTR(REGION,1,5) = "Bench" AND SVMPRQ = 0;
RUN;
Data abnchmrk(keep=benefit bentype ascore);
set benchmrk;
where upcase(majgrp)='ALL BENEFICIARIES';
rename score=ascore;
run;
proc sort; by benefit bentype;
proc sort data=benchmrk; by benefit bentype;
data benchmrk;
merge benchmrk abnchmrk; by benefit bentype;run;
PROC SORT DATA=BENCHMRK; BY MAJGRP BENEFIT BENTYPE; RUN;

PROC SORT DATA=FINAL; BY KEY; RUN;

DATA CONUS_Q;
   MERGE FINAL(IN=IN1) FAKEQ(IN=IN2);
   BY KEY;
   IF IN1;
RUN;
PROC SORT DATA=CONUS_Q; BY MAJGRP BENEFIT BENTYPE; RUN;

*****************************************************************************
* Perform significance tests for CONUS scores
*****************************************************************************;
DATA SIGTEST1;
   MERGE CONUS_Q(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
   BY MAJGRP BENEFIT BENTYPE;
   length key $200;
   TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
   IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1)); /** RSG 06/22/2004 - PUT CONDITION TO
AVOID DF=0 WHICH CAUSES ERROR FOR PROBT FUNCTION **/
   ELSE TEST = .; /** RSG 06/22/2004 - ADDED FOR CASES WITH N_OBS = 1 OR LESS SINCE PROBT CAN'T
BE PERFORMED AND WOULD RESULT IN TEST = MISSING ANYWAY **/
   SIG = 0;
   IF TEST < 0.05 AND TEST NE . THEN SIG = 1; /** RSG 06/22/2004 - ADDED CONDITION "TEST NE ." IN
CASE MISSING IS CONSIDERED LESS THAN 0.05 **/
   IF SCORE < BSCORE THEN SIG = -SIG;


   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
   SOURCE = "USA_Q";
   FLAG   = "USA_Q";
   IF SIN;
   score=score+ascore-bscore;
RUN;
PROC SORT DATA=SIGTEST1; BY KEY; RUN;

*****************************************************************************
* Extract CAHPS scores to perform significance tests
*****************************************************************************;
DATA CAHPS MPR bench;
   SET IN1.&DSN;
   *************************************************************
```

```
   * Significance tests have already been performed for MPR scores,
   * so remove from file.
   ****************************************************************************;
   IF SVMPRQ = 1 THEN OUTPUT MPR;
   IF SVMPRQ = 0 THEN do;
    if majgrp ne 'Benchmark' then OUTPUT CAHPS;
    else output bench; end;
RUN;


PROC SORT DATA=CAHPS;
   BY MAJGRP BENEFIT BENTYPE;
RUN;

****************************************************************************
* Perform significance tests for CAHPS scores
****************************************************************************;
DATA SIGTEST2;
   MERGE CAHPS(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
   BY MAJGRP BENEFIT BENTYPE;
   TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
   IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1));  /** RSG 06/22/2004 PUT N_OBS > 1
CONDITION TO AVOID ERRORS BECAUSE PROBT CAN NOT HANDLE DF=0 **/
   ELSE TEST = .;
   SIG = 0;
   IF N_OBS >= 30 AND TEST < 0.05 THEN SIG = 1;
   IF SCORE < BSCORE THEN SIG = -SIG;
   IF SIN;
   score=score+ascore-bscore;
   RUN;
proc sort data=bench; by majgrp benefit bentype;
data sigtest2;
set sigtest2 bench; by majgrp benefit bentype;
PROC SORT DATA=SIGTEST2; BY KEY; RUN;

****************************************************************************
* When NOT 1st quarter: Get records from previous quarters
****************************************************************************;
%MACRO LASTQTR;
   ****************************************************************************
   * Input composite records from previous quarters.
   ****************************************************************************;
   LIBNAME IN2 "&LSTCONUS";
   DATA LASTQTR (drop=key2); /*RSG 10/2005 - KEY2 WAS CREATED AT END OF PROG TO HELP
                                SET TREND TO MISSING FOR SCORES MISSING IN ANY QUARTERS
                                THIS SHOULD BE DROPPED AND RESET AT THE END OF PROG*/
      SET IN2.CONUS_Q (DROP=KEY);

/*** Change BENEFIT "Heathly Behavior" to Healthy "Behaviors" JSO 02/16/2007 ***/
      IF BENEFIT = 'Healthy Behavior' THEN BENEFIT = 'Healthy Behaviors';

/*** Change SOURCE and FLAG from "CONUS_Q" to "USA_Q" MER 01/29/2009 ***/
/*** Change REGION and REGCAT from "CONUS MHS to USA MHS" MER 01/29/2009 ***/
      IF SOURCE = 'CONUS_Q' THEN SOURCE = 'USA_Q';
      IF FLAG = 'CONUS_Q' THEN FLAG = 'USA_Q';
      IF REGION = 'CONUS MHS' THEN REGION = 'USA MHS';
      IF REGCAT = 'CONUS MHS' THEN REGCAT = 'USA MHS';

      IF timepd IN ("&PERIOD1","&PERIOD2","&PERIOD3") AND
        (REGION = REGCAT) AND
         BENEFIT IN ("Getting Needed Care",
                     "Getting Care Quickly",
                     "How Well Doctors Communicate",
                     "Customer Service",
                     "Claims Processing",
                     "Health Care",
                     "Health Plan",
                     "Primary Care Manager",
                     "Specialty Care",
                     "Preventive Care",
                     "Healthy Behaviors") & TIMEPD NE "Trend";
```

```
        KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));

   RUN;
%MEND LASTQTR;
%LASTQTR;

PROC SORT DATA=LASTQTR(DROP=ORDER); BY KEY; RUN;

DATA LASTQTR;
   MERGE TEMPQ(IN=IN1) LASTQTR(IN=IN2);
   BY KEY;
   IF IN1 AND IN2;
RUN;

PROC SORT DATA=MPR; BY KEY; RUN;

*****************************************************************************
* Combine previously created records with the new file
*****************************************************************************;
DATA COMBINE OUT.LT30Q;
   SET SIGTEST1 SIGTEST2 LASTQTR MPR;
   BY KEY;
   if timepd="&period1" then period=1;   ***MJS 07/08/03 Changed from bentype="&period1";
   if timepd="&period2" then period=2;   ***MJS 07/08/03 Changed from bentype="&period2";
   if timepd="&period3" then period=3;   ***MJS 07/08/03 Changed from bentype="&period3";
   if timepd="&period4" then period=4;   ***MJS 07/08/03 Changed from bentype="&period4";
   *****************************************************************************
   * Remove N_OBS < 30 OR N_WGT < 200
   *****************************************************************************;
   IF (N_OBS < 30 OR N_WGT < 200) AND (MAJGRP NE "Benchmark") AND
      (REGION NE "Benchmark")
      THEN OUTPUT OUT.LT30Q;
   ELSE OUTPUT COMBINE;
RUN;

data trend;
set combine;
where period ne . ;
if period<4|benefit="Preventive Care" then score=score/100;

proc sort data=trend;
by majgrp region regcat benefit bentype period;
run;

data avg(keep=majgrp region regcat benefit t_obs a_period a_score twgt bentype) ;
set trend;   by majgrp region regcat benefit bentype period;
if majgrp="Benchmark"|region="Benchmark" then n_wgt=1;
if first.majgrp|first.region|first.regcat|first.benefit|first.bentype then do;
t_obs=0;
t_score=0;
twgt=0;
t_period=0;
end;
t_obs+n_obs;
t_Score+n_wgt*score;
twgt+n_wgt;
t_period+period*n_wgt;
 if last.majgrp|last.region|last.regcat|last.benefit|last.bentype then do;
    if twgt notin (.,0) then do;
       a_score=t_score/twgt;
       a_period=t_period/twgt;
    end;
    else do;
       a_score=.;
       a_period=.;
    end;
    output;
 end;
RUN;
```

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```
data trend2(drop=score) btrend(keep=majgrp benefit bentype trend serr);
merge trend avg;  by majgrp region regcat benefit bentype;
if majgrp="Benchmark"|region="Benchmark" then n_wgt=1;
if first.majgrp|first.region|first.regcat|first.benefit|first.bentype then do;
t_score=0;
t_se=0;
t_period=0;
end;
t_se+((n_wgt**2)*(semean**2));
t_score+n_wgt*(score-a_score)*(period-a_period);
t_period+n_wgt*(period-a_period)**2;
if last.majgrp|last.region|last.regcat|last.benefit|last.bentype then do;
if t_period ne 0 then do;   /* RSG 06/22/2004 Added to avoid division by zero*/
   trend=t_score/t_period;
   serr=sqrt(t_se/(t_period*twgt));
end;
else do;
   trend=.;
   serr=.;
end;
if region="Benchmark"|majgrp="Benchmark" then output btrend;
output trend2;
end;
proc sort data=trend2; by majgrp benefit bentype;RUN;
proc sort data=btrend; by majgrp benefit bentype;
data trend3(rename=(trend=score));
merge trend2 btrend(rename=(trend=btrend serr=bserr));
by majgrp benefit bentype;
   length key $200;
if ^(region="Benchmark"|majgrp="Benchmark") then do;
ttrend=trend-btrend;
serr=sqrt((serr**2)+(bserr**2));
sig=0;
if serr > 0 and t_obs notin (.,0) then test= 2*(1-probt(abs(ttrend/serr),t_obs));  /* RSG
06/22/2004 Added to avoid division by zero*/
else test = .;
if test<.05 & test ne . then sig=1;
if sig=1 & ttrend<0 then sig=-1;
end;
timepd="Trend";
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
        UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
        UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
run;

proc sort data=trend3(drop=t_obs twgt a_score a_period t_score t_se t_period serr
 bserr btrend ttrend order); by key;
 data trend4 ;
 merge trend3(in=din) fakeq(in=cin); by key;
 if din;
 RUN;



data combine2;
set combine trend4;RUN;

proc sort; by key;
data combine3 dupe;
set combine2; by key;
if ^(first.key & last.key) then output dupe;
output combine3;
proc print data=dupe;run;

/* RSG 06/2005 - set trend to missing for component/composite
   scores with missing scores in any of the quarter*/
data misses (keep=key2) all;
set combine3;
length key2 $200.;
KEY2 = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
          UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
          UPCASE(TRIM(REGION));
if score = . then output misses;
output all;
```

```
run;
proc sort data=misses;
by key2;
proc sort data=all;
by key2;
run;

data combine4;
merge all (in=a) misses (in=b);
by key2;
if a and b then do;
  if timepd = "Trend" then score = .;
end;
run;

*****************************************************************************
* Create place holders for missing records
*****************************************************************************;
DATA FAKEONLY;
   MERGE COMBINE4(IN=IN1) TEMPQ(IN=IN2);
   BY KEY;
   SOURCE = "FAKE ONLY";
   FLAG   = "FAKE ONLY";
   IF IN2 AND NOT IN1;

RUN;

*****************************************************************************
* Combine all of the missing records with the existing records to generate
* the complete WEB layout file.
*****************************************************************************;
DATA CONUS_Q;
   SET FAKEONLY COMBINE4;
   BY KEY;
   *****************************************************************************
   * Convert CAHPS Composites and Individual to 1-100 scale
   *****************************************************************************;
   IF timepd="Trend" OR (timepd="&PERIOD4" & benefit ne "Preventive Care")
      then
        SCORE = SCORE*100;
RUN;

PROC SORT DATA=CONUS_Q; BY ORDER; RUN;

DATA FAKEQ;
   SET IN1.FAKEQ;
   SIG = .;
   SCORE = .;
   ORDER = _N_;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/31/03 Added TIMEPD;

RUN;
PROC SORT DATA=FAKEQ OUT=TEMPQ;        BY KEY; RUN;
PROC SORT DATA=FAKEQ(KEEP=ORDER KEY); BY KEY; RUN;

PROC SORT DATA=CONUS_Q out=OUT.CONUS_Q;
BY KEY;
RUN;

DATA FAKEONLY;
   MERGE OUT.CONUS_Q(IN=IN1) TEMPQ(IN=IN2);
   BY KEY;
   SOURCE = "FAKE ONLY";
   FLAG   = "FAKE ONLY";
   IF IN2 AND NOT IN1;
RUN;

DATA TOTAL_Q;
   SET FAKEONLY OUT.CONUS_Q;
   BY KEY;
   IF MAJGRP="All Beneficiaries" then MAJGRP="All Users";
```

```
    IF MAJGRP="Non-enrolled Beneficiaries" then MAJGRP="Standard/Extra Users";
    IF BENEFIT="Primary Care Manager" THEN BENEFIT="Personal Doctor";   /*MJS 02/05/2003*/
    /* 11/14/2005 RSG - ADDED IN THESE CODE TO CAPITALIZE ALL WORDS IN TITLE */
    /*IF BENTYPE = "Problems Getting Referral to Specialist       "
       THEN BENTYPE = "Problems Getting Referral To Specialist  ";
    IF BENTYPE = "Delays in Care while Awaiting Approval        "
       THEN BENTYPE = "Delays In Care While Awaiting Approval   ";
    IF BENTYPE = "Advice over Telephone                         "
       THEN BENTYPE = "Advice Over Telephone                    ";
    IF BENTYPE = "Wait for Routine Visit                        "
       THEN BENTYPE = "Wait For Routine Visit                   ";
    IF BENTYPE = "Wait for Urgent Care                          "
       THEN BENTYPE = "Wait For Urgent Care                     ";
    IF BENTYPE = "Wait More than 15 Minutes Past Appointment    "
       THEN BENTYPE = "Wait More Than 15 Minutes Past Appointment";
    IF BENTYPE = "Explains so You can Understand                "
       THEN BENTYPE = "Explains So You Can Understand           ";
    IF BENTYPE = "Spends Time with You                          "
       THEN BENTYPE = "Spends Time With You                     ";
    IF BENTYPE = "Courteous and Respectful                      "
       THEN BENTYPE = "Courteous And Respectful                 ";
    IF BENTYPE = "Problem Getting Help from Customer Service    "
       THEN BENTYPE = "Problem Getting Help From Customer Service";
    IF BENTYPE = "Problem with Paperwork                        "
       THEN BENTYPE = "Problem With Paperwork                   ";
    IF BENTYPE = "Claims Handled in a Reasonable Time           "
       THEN BENTYPE = "Claims Handled In A Reasonable Time      ";*/
    IF substr(region,1,5) in ('Latin','Europ','Pacif')|Region='Overseas Latin America'
     then delete;
    IF REGION IN ("South Joint Service","West Joint Service","Europe Joint Service",
                "Pacific Joint Service","Latin America Joint Service") THEN DELETE;

RUN;


PROC SORT DATA=TOTAL_Q OUT=OUT.TOTAL_Q; BY ORDER; RUN;


TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6401-904)";
TITLE2 "Program Name: CONUS_Q.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MERGFINQ.sas7bdat - Scores Database in WEB Layout";
TITLE4 "Program Outputs: TOTAL_Q.sas7bdat - USA Scores Database in WEB layout";


PROC FREQ;
TABLES SIG FLAG SOURCE BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/08/03 Added
TIMEPD*/
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

APPENDIX J

SAS CODE FOR 2012 TRICARE PURCHASED CARE CONSUMER WATCH - QUARTERS I-III AND COMBINED ANNUAL

J.1.A   Q3FY2013\PROGRAMS\PurchasedConsumerWatch\consumerwatch_PurchasedCare.sas - Run Purchased Care TRICARE Consumer Watch reports - Run Quarterly.

```
******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH_PurchasedCare.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*          TO PRODUCE EXCEL TABLE FOR PURCHASED CARE REPORT.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004.
*
* UPDATE:  4/26/2005 FOR Q1 2005.
* UPDATE:  8/4/2005 FOR Q2 2005.
* UPDATE:  12/15/2005 FOR Q4 2005.
* UPDATE:  04/04/2006 FOR Q2 FISCAL YEAR 2006, LUCY Lu. STARTING THIS QUARTER,
*          THE PERIOD IS CHANGED TO FISCAL YEAR.
* UPDATE:  09/01/2006 Lucy Lu FOR FY 3 2006.
* UPDATE:  10/05/2006 Lucy Lu FOR FY 4 2006.
* MODIFIED 7/30/2007 BY LUCY LU
*          UNIFY THE PERDIOD MACRO VARIABLES WITH BENEFICIARY REPORT CARDS PROGRAMS
*          CURRNT  ===> PERIOD4
*          CURRNTQ ===> PERIOD4Q
*          PREV1   ===> PERIOD3
*          PREV1Q  ===> PERIOD3Q
*          PREV2   ===> PERIOD2
*          PREV2Q  ===> PERION2Q
*          PREV3   ===> PERIOD1
*          PREV3Q  ===> PERIOND1Q
* MODIFIED 8/29/2007 BY LUCY LU TO RUN CONSUMERWATCH_MACRO_COMB.INC
*          STARTING Q4 2007 CONSUMERWATCH_R(REGION) AND CONSUMERWATCH_CONUS RUN A SINGLE
*          MACRO TO PRODUCE CHARTS FOR BOTH PRIME ENROLLEES AND CIVILIAN PCM POPULATION
* MODIFIED 5/14/09 BY LUCY LU
*          1.MACRO INCLUDE PROGRAM IS MODIFIED BY REMOVING THE VALUE OF
*            'Courteous and Helpful Office Staff'. THE PROGRAM WILL DELETE
*             RELATED CODE.
*          2.THE EXCEL AND WORD TEMPLATES ARE MODIFIED TO REMOVE THE CHARTS
*            FOR  'Courteous and Helpful Office Staff'.
* MODIFIED 7/23/2010 LUCY
*          Rename CONSUMERWATCH_MACRO_COMB.INC to
*                 CONSUMERWATCH_PurchasedCare_MACRO.INC
*          MODIFY MACRO VARIABLES TO REFLECT THE CHANGE OF INCLUDE MACRO
*          PROGRAM. SEE consumerwatch_PurchasedCare_macro.inc FOR DETAILS.
*          1.CONSOLIDATE USMHS AND REGION PROGRAMS INTO ONE SAS PROGRAM.
*          2.REPLACE PERIOD MACRO VARIABLES WITH CURRENTQ AND CURRENTY.
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\&DAT.LOADWEB\TOTAL_Q.SD2
*
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH_PURCHASEDCARE_MACRO.INC
******************************************************************************;


/* LIBNAME IS EMBEDDED IN MACRO PROGRAM */

*starting 2006, the period is changed to fiscal year, LLU 4/5/06;

%LET CURRENTQ=3;        *CURRENT FISCAL QUARTER;
%LET CURRENTY=2013;     *CURRENT FISCAL YEAR;
*%LET PATH = L:\Q4FY2010\Programs\PurchasedConsumerWatch;  *TEMP;
%LET PATH = L:\Q&CURRENTQ.FY&CURRENTY.\Programs\PurchasedConsumerWatch;

TITLE "DOD PURCASED CARE CONSUMER WATCH Q&CURRENTQ, FY &CURRENTY";


%INCLUDE "CONSUMERWATCH_PURCHASEDCARE_MACRO.INC";


%RUNCW(AREA=USA MHS,FOLDER=USMHS);
/*
%RUNCW(FOLDER=NORTH);
%RUNCW(FOLDER=SOUTH);
```

```
%RUNCW(FOLDER=WEST);*/
```

**J.1.B   Q3FY2013\PROGRAMS\PurchasedConsumerWatch\consumerwatch_PurchasedCare_macro.inc -
produce numbers for Purchased Care TRICARE Consumer Watch reports.**

```
********************************************************************************
* PROJECT: 6077-420
* PROGRAM: consumerwatch_PurchasedCare_macro.inc
* PURPOSE: To produce numbers that go into data sheet in Excel to produce graphs
*          for regional consumer watch
* AUTHOR : MIKI SATAKE
* DATE   : 4/24/01
* UPDATED: 7/16/01 FOR QUARTER 2 BY NATALIE JUSTH
* UPDATED: 10/16/01 FOR QUARTER 3 BY NATALIE JUSTH
* UPDATED: 1/11/02 FOR QUARTER 4 BY NATALIE JUSTH
* UPDATED AND RENAMED: 4/9/02 FOR QUARTER 1 2002 BY NATALIE JUSTH
* UPDATED: 7/5/02 FOR QUARTER 2 2002 BY NATALIE JUSTH
* UPDATED: 7/15/02 FOR QUARTER 3 2002 BY NATALIE JUSTH
* UPDATED: 11/12/02 FOR QUARTER 4 2002 BY NATALIE JUSTH
* UPDATED: 4/3/03 FOR QUARTER 1 2003 BY NATALIE JUSTH
* UPDATED: 5/19/03 FOR QUARTER 2 2003 BY NATALIE JUSTH
* UPDATED: 8/28/03 FOR QUARTER 3 2003 BY NATALIE JUSTH
* UPDATED: 11/14/03 FOR QUARTER 4 2003 BY NATALIE JUSTH
* UPDATED: 05/18/2004 FOR QUARTER 1 2004 BY KEITH RATHBUN
* UPDATED: 06/30/2004 FOR QUARTER 2 2004 BY LUCY LU
* UPDATED: 06/30/2004 FOR QUARTER 3 2004 BY LUCY LU. CHANGING XREGION TO XTNEXREG.
* UPDATED: 10/07/2004 BY LUCY LU. ADD THE CODE TO COMPARE CONSUMER WATCH
*          WITH REPORT CARDS IN SCORES AND SIGNIFICANCE.*
* MODIFIED 2/10/05 BY LUCY LU:
*          1). CREATE UNIVERSAL MACRO PROGRAM BASED ON PROGRAM CONSUMERWATCH-R.SAS
*              TO ELIMINATE REDUNDANCY AND INCREASE THE EFFECTIVENESS OF PROGRAMMING.
*          2). ADD ADDITIONAL PREVENTION MEASURE "SMOKING CESSATION"
*              INTO PREVENTIVE CARE TABLE.
* MODIFIED 06/2/2005 BY LUCY LU FOR Q1 2005:
*          1). REMOVE CHOLESTEROL MEASUREMENT AND ADD BMI MEASUREMENT
*          2). COMMENT OUT DISENROLL CODE--NO DISENROLL DATA IN Q1 2005
*          3). ADD SPECIALIST RATING.
* MODIFIED 11/16/2006 BY LUCY LU FOR FY Q4 2006
*           ADD PURCHASE CARE VERSION-- CHANGE PRIME ENROLLEE TO
*           Enrollees with Civilian PCM.
* MODIFIED 6/4/2007 BY LUCY LU. UNIFY THE MACRO PROGRAMS FOR CONSUMER WATCH.
*          !! NEED TO DEFIND MACRO VARIABLE &POP IN SAS PROGRAMS:
*          DIRECT CARE CONSUMDER WATCH:  &POP=='Prime Enrollees'
*          PURCHASE CARE CONSUMDER WATCH:  &POP=='Enrollees with Civilian PCM'
* MODIFIED 8/30/2007 BY LUCY LU
*          1). COMBINE CONSUMERWATCH-MACRO.INC and CONSUMERWATCH-MACRO_PURCHASE.INC
*              PRODUCE CHARTS CONTAINING BOTH DIRECT CARE AND PURCAHSE CARE DATA
*          2). CREATE DUMMY ID FOR MERGE. SAS 9 doesn't allow merge without by variable
* MODIFIED 9/4/2007 BY LUCY LU. START Q4 2007,
*          DIRECT CARE CONSUMER WATCH &POP='Enrollees with Military PCM'
* MODIFIED 5/14/09 BY LUCY LU
*          1.MACRO INCLUDE PROGRAM IS MODIFIED BY REMOVING VALUE OF
*            'Courteous and Helpful Office Staff'. THE PROGRAM WILL DELETE
*             RELATED CODE.
*          2.THE EXCEL AND WORD TEMPLATES ARE MODIFIED TO REMOVE THE CHARTS
*            FOR  'Courteous and Helpful Office Staff'.
* MODIFIED 7/23/2010 BY LUCY LU
*          1. AUTOMATE PERIOD (QAURTER/YEAR) TO MINIMIZE POSSIBLE ERROR
*          2. ADD MACRO TO MINIMIZE EXCEL WAITING, REDUCE PROGRAM
*             RUNNING TIME
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\&DAT.LOADWEB\TOTAL_Q.SD2
*
* OUTPUT : INTO EXCEL SPREADSHEET
********************************************************************************;


OPTIONS PS=60 LS=120 ERRORS=2 NOCENTER NOFMTERR NOXWAIT SPOOL MPRINT;


*LLU 7/23/2010--AUTOMATING PERIOD, MINIMIZE POSSIBLE ERROR;

DATA M1;
```

```
*Set the first month of each quarter with order of running quarter 1 in FY;
DO MONTH='October', 'July', 'April', 'January';
   OUTPUT;
END;
RUN;


DATA _NULL_;
   SET M1;

INDEX=_N_;
IF &CURRENTQ =1 THEN DO;
   ORDER=INDEX; YR= &CURRENTY -1;
END;
IF &CURRENTQ = 2 THEN DO;
   IF INDEX = 4 THEN DO; ORDER=1; YR=&CURRENTY; END; ELSE
   IF INDEX < 4 THEN DO; ORDER = INDEX+1; YR=&CURRENTY-1; END;
END;
IF &CURRENTQ = 3 THEN DO;
   IF INDEX >=3 THEN DO; ORDER=INDEX-2; YR=&CURRENTY; END; ELSE
   IF INDEX < 3 THEN DO; ORDER=INDEX+2; YR=&CURRENTY-1; END;
END;
IF &CURRENTQ = 4 THEN DO;
   IF INDEX IN (2,3,4) THEN DO; ORDER=INDEX-1; YR=&CURRENTY; END; ELSE
   IF INDEX =1 THEN DO;  ORDER=4; YR=&CURRENTY-1;  END;
END;

LENGTH PERIOD $15;
PERIOD=TRIM(LEFT(MONTH))||','||' '||(PUT(YR,4.));
IF ORDER=1  THEN CALL SYMPUT('PERIOD4', TRIM(LEFT(PERIOD)));
IF ORDER=2  THEN CALL SYMPUT('PERIOD3', TRIM(LEFT(PERIOD)));
IF ORDER=3  THEN CALL SYMPUT('PERIOD2', TRIM(LEFT(PERIOD)));
IF ORDER=4  THEN CALL SYMPUT('PERIOD1', TRIM(LEFT(PERIOD)));

RUN;

%PUT PERIOD4 = &PERIOD4(current quarter);
%PUT PERIOD3 = &PERIOD3;
%PUT PERIOD2 = &PERIOD2;
%PUT PERIOD1 = &PERIOD1;

%MACRO RUNCW (AREA=&FOLDER,  /* Region/Service/conus                        */
              FOLDER=,       /* Folder containing excel template           */
              CURRENT=CURNTR.TOTAL_Q    /* Libname and dataset for the current quarter */
             );


*LLU 7/21/2010--DETECTING AVAILABILITY OF EXCEL, MINIMIZE WAITING TIME;
FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;

   LENGTH FID RC START STOP TIME 8;
   FID = FOPEN('CMDS' , 'S');
   IF (FID LE 0) THEN DO;
      RC = SYSTEM('START EXCEL');
      START = DATETIME();
      STOP = START + 10;
      DO WHILE (FID LE 0);
         FID = FOPEN('CMDS' , 'S');
         TIME = DATETIME();
         IF (TIME GE STOP) THEN FID = 1;
      END;
   END;
   RC = FCLOSE(FID);
RUN;

%MACRO SETUP;

   DATA _NULL_;
    SINGLE="'";
    DOUBLE='"';
```

```
LENGTH OPENXLS SAVEXLS $120;
   OPENXLS=SINGLE||"[OPEN("||DOUBLE||"&PATH.\Template_PurchasedCare.xlsb"||DOUBLE||")]"||SINGLE;

SAVEXLS=SINGLE||"[SAVE.AS("||DOUBLE||"&PATH.\&FOLDER.\&FOLDER._PurchasedCare.XLSB"||DOUBLE||")]"|
|SINGLE;

   CALL SYMPUT ("OPENXLS",TRIM(OPENXLS));
   CALL SYMPUT ("SAVEXLS",TRIM(SAVEXLS));

RUN;

%MEND SETUP;
%SETUP;


DATA _NULL_;

   FILE CMDS;
   PUT &OPENXLS;
   X=SLEEP(2);
   PUT '[ERROR(FALSE)]';
   PUT &SAVEXLS;
   PUT '[app.minimize()]';
RUN;


%MACRO RUNPOP(MAJPOP=, POP=,DAT=);

TITLE2 "&AREA.";

LIBNAME CURNTR "..\&DAT.Loadweb";
*LIBNAME CURNTR "L:\Q3FY2010\Programs\\&DAT.Loadweb"; *--TEMP;

/* This macro pulls data from the specified dataset to be used in the Consumer Watch */
%MACRO GETDATA (MAJGRP=,    /* Prime enrollee or civilian PCM  */
                REGION=,    /* Value of variable REGION  */
                REGCAT=,    /* Value of variable REGCAT  */
                BENEFIT=,   /* Value of variable BENEFIT */
                TIMEPD=,    /* Value of variable TIMEPD  */
                OUTDATA=,   /* Name of output data set   */
                FIGURE=     /* Figure number in consumer watch reports */
                );

PROC FREQ NOPRINT DATA=&CURRENT;
   WHERE MAJGRP = &MAJPOP
     AND REGION IN &REGION
     AND REGCAT IN &REGCAT
     AND BENEFIT IN &BENEFIT
     AND BENTYPE = 'Composite'
     AND TIMEPD = &TIMEPD;
   TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SCORE*N_OBS*N_WGT*SIG/OUT=&OUTDATA (DROP=COUNT
PERCENT);
RUN;

%MEND GETDATA;

%MACRO NEWSCORE (FIGURE=);
/* This macro re-calculates SCORE based on the quarterly benchmark */
%DO QUARTER=1 %TO 4;

DATA FIG&FIGURE&QUARTER FIG&FIGURE.B&QUARTER(KEEP=SCORE N);
   SET FIG&FIGURE.P&QUARTER;
   N=1;                        * DUMMY ID FOR NEXT MERGE STEP;
   IF REGION='Benchmark' THEN OUTPUT FIG&FIGURE.B&QUARTER;
      ELSE OUTPUT FIG&FIGURE&QUARTER;

RUN;

/*ADD CODE HERE TO PRESERVE ABOVE DATASET FOR LATER COMPARISON. LLU 10/7/04*/

DATA CFIG&FIGURE&QUARTER;
   SET FIG&FIGURE&QUARTER;
```

```
       KEEP MAJGRP REGION BENEFIT BENTYPE TIMEPD SCORE SIG;
       RUN;


       DATA FIG&FIGURE.P&QUARTER(DROP=RSCORE);
          MERGE FIG&FIGURE.B&QUARTER(RENAME=(SCORE=RSCORE))
                FIG&FIGURE&QUARTER;
       BY N;
       *   SCORE=SCORE-RSCORE;
       RUN;
       %END;
       %MEND NEWSCORE;


       %MACRO COMBDATA(FIGURE=);

       DATA &POP.FIG&FIGURE(DROP=BSCORE);
          SET BENCH FIG&FIGURE.P1 FIG&FIGURE.P4 FIG&FIGURE.P3 FIG&FIGURE.P2;
          RETAIN BSCORE;
          IF REGION = 'Benchmark' THEN DO;
             ROW = 3;
             BSCORE=SCORE;
          END;
          ELSE IF TIMEPD = "&PERIOD1" THEN DO;
             ROW = 4;
        *     SCORE=SCORE+BSCORE;
             IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
          END;
          ELSE IF TIMEPD = "&PERIOD2" THEN DO;
             ROW = 5;
        *    SCORE=SCORE+BSCORE;
             IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
          END;
          ELSE IF TIMEPD = "&PERIOD3" THEN DO;
             ROW = 6;
         *   SCORE=SCORE+BSCORE;
             IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
          END;
          ELSE IF TIMEPD = "&PERIOD4" THEN DO;
             ROW=7;
        *     SCORE=SCORE+BSCORE;
          END;
          &POP.SCORE = SCORE;;   *3/4/08 LLu, increase the score by 100 to align with fig. 5-10;
          &POP.SIG = SIG;
       RUN;
       PROC SORT;
          BY ROW;
       RUN;

       %MEND COMBDATA;

       ********************************************************************************
       * FIGURE 1: Health Care Rating
       ********************************************************************************;
       TITLE2 'Figure 1: Health Care Rating';

       %GETDATA (MAJGRP=&MAJPOP,
                 REGION=('Benchmark'),
                 REGCAT=('Benchmark'),
                 BENEFIT=('Health Care'),
                 TIMEPD="&PERIOD4",
                 OUTDATA=BENCH);
       %GETDATA (MAJGRP=&MAJPOP,
                 REGION=("&AREA",'Benchmark'),
                 REGCAT=("&AREA",'Benchmark'),
                 BENEFIT=('Health Care'),
                 TIMEPD="&PERIOD4",
                 OUTDATA=FIG1P4);
       %GETDATA (MAJGRP=&MAJPOP,
                 REGION=("&AREA",'Benchmark'),
                 REGCAT=("&AREA",'Benchmark'),
                 BENEFIT=('Health Care'),
                 TIMEPD="&PERIOD3",
```

```
            OUTDATA=FIG1P3);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Health Care'),
          TIMEPD="&PERIOD2",
          OUTDATA=FIG1P2);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Health Care'),
          TIMEPD="&PERIOD1",
          OUTDATA=FIG1P1);
%NEWSCORE(FIGURE=1);
%COMBDATA(FIGURE=1);



********************************************************************************
* FIGURE 2: Health Plan Rating
********************************************************************************;
TITLE2 'Figure 2: Health Plan Rating';

%GETDATA (MAJGRP=&MAJPOP,
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Health Plan'),
          TIMEPD="&PERIOD4",
          OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Health Plan'),
          TIMEPD="&PERIOD4",
          OUTDATA=FIG2P4);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Health Plan'),
          TIMEPD="&PERIOD3",
          OUTDATA=FIG2P3);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Health Plan'),
          TIMEPD="&PERIOD2",
          OUTDATA=FIG2P2);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Health Plan'),
          TIMEPD="&PERIOD1",
          OUTDATA=FIG2P1);
%NEWSCORE(FIGURE=2);
%COMBDATA(FIGURE=2);



********************************************************************************
* FIGURE 3: Personal Provider Rating
********************************************************************************;
TITLE2 'Figure 3: Personal Provider Rating';

%GETDATA (MAJGRP=&MAJPOP,
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Personal Doctor'),
          TIMEPD="&PERIOD4",
          OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Personal Doctor'),
          TIMEPD="&PERIOD4",
```

```
            OUTDATA=FIG3P4);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Personal Doctor'),
          TIMEPD="&PERIOD3",
          OUTDATA=FIG3P3);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Personal Doctor'),
          TIMEPD="&PERIOD2",
          OUTDATA=FIG3P2);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Personal Doctor'),
          TIMEPD="&PERIOD1",
          OUTDATA=FIG3P1);
%NEWSCORE(FIGURE=3);
%COMBDATA(FIGURE=3);


********************************************************************************
* FIGURE 4: Specialist Rating--added for Q1 2005, LLu 6/2/05
********************************************************************************;
TITLE2 'Figure 4: Specialist Rating';

%GETDATA (MAJGRP=&MAJPOP,
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Specialty Care'),
          TIMEPD="&PERIOD4",
          OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Specialty Care'),
          TIMEPD="&PERIOD4",
          OUTDATA=FIG4P4);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Specialty Care'),
          TIMEPD="&PERIOD3",
          OUTDATA=FIG4P3);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Specialty Care'),
          TIMEPD="&PERIOD2",
          OUTDATA=FIG4P2);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Specialty Care'),
          TIMEPD="&PERIOD1",
          OUTDATA=FIG4P1);
%NEWSCORE(FIGURE=4);
%COMBDATA(FIGURE=4);


********************************************************************************
* FIGURE 5 & 6: Access Composites
********************************************************************************;
TITLE2 'Figure 5 & 6: Access Composites';


%GETDATA (MAJGRP=&MAJPOP,
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          TIMEPD="&PERIOD4",
```

```
              OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          TIMEPD="&PERIOD4",
          OUTDATA=FIG5P4);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          TIMEPD="&PERIOD3",
          OUTDATA=FIG5P3);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          TIMEPD="&PERIOD2",
          OUTDATA=FIG5P2);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          TIMEPD="&PERIOD1",
          OUTDATA=FIG5P1);

/*Use macro for figures 5-10 */

%MACRO COMPSCORE (FIGNUM=
                 );

%DO QUARTER = 1 %TO 4;

DATA FIG&FIGNUM.P&QUARTER FIGB&QUARTER(KEEP=SCORE BENEFIT SIG);
   SET FIG&FIGNUM.P&QUARTER;
   IF REGION = 'Benchmark' THEN OUTPUT FIGB&QUARTER;
      ELSE OUTPUT FIG&FIGNUM.P&QUARTER;
RUN;
PROC SORT DATA=FIG&FIGNUM.P&QUARTER;
   BY BENEFIT;
RUN;
PROC SORT DATA=FIGB&QUARTER;
   BY BENEFIT;
RUN;


/*ADD CODE HERE TO PRESERVE THE SCORES IN CONUS_Q DATASET FOR LATER COMPARISON. LLU 10/7/04*/

DATA CFIG&FIGNUM.&QUARTER;
   SET FIG&FIGNUM.P&QUARTER;

KEEP MAJGRP REGION BENEFIT BENTYPE TIMEPD SCORE SIG;
RUN;


DATA FIG&FIGNUM.&QUARTER(DROP=RSCORE);
   MERGE FIGB&QUARTER(RENAME=(SCORE=RSCORE))
         FIG&FIGNUM.P&QUARTER;
   BY BENEFIT;
 *  SCORE=SCORE-RSCORE;
RUN;
%END;

%MEND COMPSCORE;

%COMPSCORE (FIGNUM=5);

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE RENAME=(SCORE1=COL4))          /*LLU 10/8/04, TO PRESERVE KEY VARS FOR LATER
COMPARISON*/
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
```

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```
      COL7(kEEP=ROW SIG RENAME=(SIG=COL7))
       ;
    SET BENCH FIG54 FIG53 FIG52 FIG51;
    BY BENEFIT;
    RETAIN BSCORE;
    IF REGION = 'Benchmark' THEN DO;
      BSCORE=SCORE;
       ROW = 18;
       SCORE1 = SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD1" THEN DO;
       ROW = 18;
 *      SCORE=BSCORE+SCORE;
       IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
          ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD2" THEN DO;
       ROW = 19;
  *     SCORE=BSCORE+SCORE;
       IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
          ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD3" THEN DO;
       ROW = 20;
  *     SCORE=BSCORE+SCORE;
       IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
          ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD4" THEN DO;
       ROW = 21;
 *      SCORE=BSCORE+SCORE;
       SCORE1 = SCORE;
    END;

    IF (BENEFIT = 'Getting Needed Care' AND REGION NE 'Benchmark') THEN OUTPUT COL2 COL6;
    IF (BENEFIT = 'Getting Needed Care' AND REGION = 'Benchmark') THEN OUTPUT COL3;
    IF (BENEFIT = 'Getting Care Quickly' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
    IF (BENEFIT = 'Getting Care Quickly' AND REGION = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 10/7/04*/

DATA FIG5A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG5B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG5AB;
   SET FIG5A FIG5B;
  BY ROW;
RUN;



DATA &POP.FIG5;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
   BY ROW;
RUN;
/*
```

```
DATA &POP.FIG6;
    MERGE COL4(KEEP=ROW COL4) COL5 COL7;
    BY ROW;
RUN;
*/


*********************************************************************************
* FIGURE 7:  Doctors Communicate
*********************************************************************************;
TITLE2 'Figure 7 :  Doctors Communicate';

%GETDATA (MAJGRP=&MAJPOP,
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          TIMEPD="&PERIOD4",
          OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          TIMEPD="&PERIOD4",
          OUTDATA=FIG7P4);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          TIMEPD="&PERIOD3",
          OUTDATA=FIG7P3);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          TIMEPD="&PERIOD2",
          OUTDATA=FIG7P2);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('How Well Doctors Communicate'),
          TIMEPD="&PERIOD1",
          OUTDATA=FIG7P1);

%COMPSCORE (FIGNUM=7);

DATA COL4(DROP=SCORE RENAME=(SCORE1=COL4))           /*LLU 10/8/04, TO PRESERVE KEY VARS FOR LATER
COMPARISON*/
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7))
     ;
    SET BENCH FIG74 FIG73 FIG72 FIG71;
    BY BENEFIT;
    RETAIN BSCORE;
    IF REGION = 'Benchmark' THEN DO;
      BSCORE=SCORE;
      ROW = 18;
      SCORE1 = SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD1" THEN DO;
      ROW = 18;
 *    SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD2" THEN DO;
      ROW = 19;
 *    SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = "&PERIOD3" THEN DO;
      ROW = 20;
 *    SCORE=BSCORE+SCORE;
```

```
        IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
            ELSE SCORE1=SCORE;
        END;
    ELSE IF TIMEPD = "&PERIOD4" THEN DO;
        ROW = 21;
    *   SCORE=BSCORE+SCORE;
        SCORE1 = SCORE;
    END;

    IF (BENEFIT = 'How Well Doctors Communicate' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
    IF (BENEFIT = 'How Well Doctors Communicate' AND REGION = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 6. LLU 10/7/04*/

DATA FIG7AB;
   MERGE  COL4 COL7;
  BY ROW;
RUN;


DATA &POP.FIG7;
   MERGE  COL4(KEEP=ROW COL4) COL5 COL7;
   BY ROW;
RUN;

*********************************************************************************
* FIGURE 8 & 9: Claims/Service Composites
*********************************************************************************;
TITLE2 'Figure 8 & 9: Claims/Service Composites';
%GETDATA (MAJGRP=&MAJPOP,
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          TIMEPD="&PERIOD4",
          OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          TIMEPD="&PERIOD4",
          OUTDATA=FIG9P4);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          TIMEPD="&PERIOD3",
          OUTDATA=FIG9P3);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          TIMEPD="&PERIOD2",
          OUTDATA=FIG9P2);
%GETDATA (MAJGRP=&MAJPOP,
          REGION=("&AREA",'Benchmark'),
          REGCAT=("&AREA",'Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          TIMEPD="&PERIOD1",
          OUTDATA=FIG9P1);

%COMPSCORE (FIGNUM=9);

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
```

```
    COL4(DROP=SCORE RENAME=(SCORE1=COL4))          /*LLU 10/8/04, TO PRESERVE KEY VARS FOR LATER
COMPARISON*/
    COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
    COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
    COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
  SET BENCH FIG94 FIG93 FIG92 FIG91;
  BY BENEFIT;
  RETAIN BSCORE;
  IF REGION = 'Benchmark' THEN DO;
    BSCORE=SCORE;
    ROW = 18;
    SCORE1 = SCORE;
  END;
  ELSE IF TIMEPD = "&PERIOD1" THEN DO;
    ROW = 18;
 *    SCORE=BSCORE+SCORE;
    IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
      ELSE SCORE1=SCORE;
  END;
  ELSE IF TIMEPD = "&PERIOD2" THEN DO;
    ROW = 19;
 *    SCORE=BSCORE+SCORE;
    IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
      ELSE SCORE1=SCORE;
  END;
  ELSE IF TIMEPD = "&PERIOD3" THEN DO;
    ROW = 20;
 *   SCORE=BSCORE+SCORE;
    IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
      ELSE SCORE1=SCORE;
  END;
  ELSE IF TIMEPD = "&PERIOD4" THEN DO;
    ROW = 21;
  *  SCORE=BSCORE+SCORE;
    SCORE1 = SCORE;
  END;

  IF (BENEFIT = 'Customer Service' AND REGION NE 'Benchmark') THEN OUTPUT COL2 COL6;
  IF (BENEFIT = 'Customer Service' AND REGION = 'Benchmark') THEN OUTPUT COL3;
  IF (BENEFIT = 'Claims Processing' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
  IF (BENEFIT = 'Claims Processing' AND REGION = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 7. LLU 10/7/04*/

DATA FIG9A;
  MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG9B;
  MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG9AB;
  SET FIG9A FIG9B;
  BY ROW;
RUN;


DATA &POP.FIG9;
  MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
  BY ROW;
```

```
RUN;




******************************************************************************
* TABLE 1: Preventive Care
******************************************************************************;
PROC FREQ NOPRINT DATA=&CURRENT;
   WHERE MAJGRP IN (&MAJPOP,'Benchmark')
     AND REGION = "&AREA"
     AND REGCAT = "&AREA"
     AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
     AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                     'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit')
     AND TIMEPD = "&PERIOD4";
   TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_P4(DROP=COUNT PERCENT);
   TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*N_OBS/ OUT=TAB2_P4(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=&CURRENT;
   WHERE MAJGRP = &MAJPOP
     AND REGION = "&AREA"
     AND REGCAT = "&AREA"
     AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
     AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                     'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
     AND TIMEPD = "&PERIOD3";
   TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_P3(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=&CURRENT;
   WHERE MAJGRP = &MAJPOP
     AND REGION = "&AREA"
     AND REGCAT = "&AREA"
     AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
     AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                     'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
     AND TIMEPD = "&PERIOD2";
   TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_P2(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=&CURRENT;
   WHERE MAJGRP = &MAJPOP
     AND REGION = "&AREA"
     AND REGCAT = "&AREA"
     AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
     AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                     'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
     AND TIMEPD = "&PERIOD1";
   TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_P1(DROP=COUNT PERCENT);
RUN;
DATA TAB1P4;
   SET TAB1_P4;
   IF MAJGRP = 'Benchmark' THEN DO;
      ROW=42;
      IF BENTYPE='Mammography' THEN COL2=SCORE;
         ELSE IF BENTYPE='Pap Smear' THEN COL3=SCORE;
         ELSE IF BENTYPE='Hypertension' THEN COL4=SCORE;
         ELSE IF BENTYPE='Prenatal Care' THEN COL5=SCORE;
         ELSE IF BENTYPE='Percent Not Obese' THEN COL6=SCORE;
         ELSE IF BENTYPE = 'Non-Smoking Rate' THEN COL7=SCORE;
         ELSE IF BENTYPE ='Counselled To Quit' THEN COL8=SCORE;
   END;
      ELSE DO;
      ROW = 40;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
```

```
         END;
         ELSE IF BENTYPE='Prenatal Care' THEN DO;
            COL5=SCORE;
            COL12=SIG;
         END;
         ELSE IF BENTYPE='Percent Not Obese' THEN DO;
            COL6=SCORE;
            COL13=SIG;
         END;
         ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
            COL7=SCORE;
            COL14=SIG;
         END;
         ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
            COL8=SCORE;
            COL15=SIG;
         END;
      END;
    PROC SORT;
    BY ROW;
RUN;
DATA TAB2P4;
   SET TAB2_P4;
   ROW=41;
   IF MAJGRP=&MAJPOP;
   IF BENTYPE='Mammography' THEN COL2=N_OBS;
      ELSE IF BENTYPE='Pap Smear' THEN COL3=N_OBS;
      ELSE IF BENTYPE='Hypertension' THEN COL4=N_OBS;
      ELSE IF BENTYPE='Prenatal Care' THEN COL5=N_OBS;
      ELSE IF BENTYPE='Percent Not Obese' THEN COL6=N_OBS;
      ELSE IF BENTYPE='Non-Smoking Rate' THEN COL7=N_OBS;
       ELSE IF BENTYPE='Counselled To Quit' THEN COL8=N_OBS;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB1P3;
   SET TAB1_P3;
   ROW=39;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         COL5=SCORE;
         COL12=SIG;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         COL6=SCORE;
         COL13=SIG;
      END;
      ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
         COL7=SCORE;
         COL14=SIG;
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB1P2;
   SET TAB1_P2;
   ROW=38;
      IF BENTYPE='Mammography' THEN DO;
```

```
              COL2=SCORE;
              COL9=SIG;
          END;
          ELSE IF BENTYPE='Pap Smear' THEN DO;
              COL3=SCORE;
              COL10=SIG;
          END;
          ELSE IF BENTYPE='Hypertension' THEN DO;
              COL4=SCORE;
              COL11=SIG;
          END;
          ELSE IF BENTYPE='Prenatal Care' THEN DO;
              COL5=SCORE;
              COL12=SIG;
          END;
          ELSE IF BENTYPE='Percent Not Obese' THEN DO;
              COL6=SCORE;
              COL13=SIG;
          END;
      ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
              COL7=SCORE;
              COL14=SIG;
          END;
          ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
              COL8=SCORE;
              COL15=SIG;
          END;
       PROC SORT;
       BY ROW;

RUN;
DATA TAB1P1;
      SET TAB1_P1;
      ROW=37;
          IF BENTYPE='Mammography' THEN DO;
              COL2=SCORE;
              COL9=SIG;
          END;
          ELSE IF BENTYPE='Pap Smear' THEN DO;
              COL3=SCORE;
              COL10=SIG;
          END;
          ELSE IF BENTYPE='Hypertension' THEN DO;
              COL4=SCORE;
              COL11=SIG;
          END;
          ELSE IF BENTYPE='Prenatal Care' THEN DO;
              COL5=SCORE;
              COL12=SIG;
          END;
          ELSE IF BENTYPE='Percent Not Obese' THEN DO;
              COL6=SCORE;
              COL13=SIG;
          END;
       ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
              COL7=SCORE;
              COL14=SIG;
          END;
          ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
              COL8=SCORE;
              COL15=SIG;
          END;
       PROC SORT;
       BY ROW;
RUN;

DATA TAB1;
      MERGE TAB1P1 TAB1P2 TAB1P3 TAB1P4 TAB2P4;
      BY ROW;
RUN;
DATA COL2(DROP=COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
      COL3(DROP=COL2 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
      COL4(DROP=COL2 COL3 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
```

```
      COL5(DROP=COL2 COL3 COL4 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
      COL6(DROP=COL2 COL3 COL4 COL5 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
      COL7(DROP=COL2 COL3 COL4 COL5 COL6 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
      COL8(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
      COL9(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL10 COL11 COL12 COL13 COL14 COL15)
     COL10(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL11 COL12 COL13 COL14 COL15)
     COL11(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL12 COL13 COL14 COL15)
     COL12(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL13 COL14 COL15)
   COL13(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL14 COL15)
    COL14(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL15)
    COL15(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14);

   SET TAB1;

   IF COL2 NE . THEN OUTPUT COL2;
   IF COL3 NE . THEN OUTPUT COL3;
   IF COL4 NE . THEN OUTPUT COL4;
   IF COL5 NE . THEN OUTPUT COL5;
   IF COL6 NE . THEN OUTPUT COL6;
   IF COL7 NE . THEN OUTPUT COL7;
   IF COL8 NE . THEN OUTPUT COL8;
   IF COL9 NE . THEN OUTPUT COL9;
   IF COL10 NE . THEN OUTPUT COL10;
   IF COL11 NE . THEN OUTPUT COL11;
   IF COL12 NE . THEN OUTPUT COL12;
   IF COL13 NE . THEN OUTPUT COL13;
   IF COL14 NE . THEN OUTPUT COL14;
   IF COL15 NE . THEN OUTPUT COL15;
RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;
PROC SORT DATA=COL8; BY ROW; RUN;
PROC SORT DATA=COL9; BY ROW; RUN;
PROC SORT DATA=COL10; BY ROW; RUN;
PROC SORT DATA=COL11; BY ROW; RUN;
PROC SORT DATA=COL12; BY ROW; RUN;
PROC SORT DATA=COL13; BY ROW; RUN;
PROC SORT DATA=COL14; BY ROW; RUN;
PROC SORT DATA=COL15; BY ROW; RUN;

DATA &POP.TABLE1;
   MERGE COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15;
   BY ROW;
RUN;




*********************************************************************************
      COMPARE SCORES AND SIG B/T CONSUMER WATCH AND REPORT CARDS.
      SET 0.015 DIFFERENCE AS THRESHOLD.
      LUCY LU 10/07/2004
********************************************************************************;

PROC SORT DATA=&POP.FIG1(DROP=SCORE);              *FROM CONSUMER WATCH. LLU 10/8/04;
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=&POP.FIG2(DROP=SCORE);
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=&POP.FIG3(DROP=SCORE);
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=FIG5AB OUT=&POP.FIG5;
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=FIG7AB OUT=&POP.FIG7;
BY BENEFIT TIMEPD REGION;
```

```
PROC SORT DATA=FIG9AB OUT=&POP.FIG9;
BY BENEFIT TIMEPD REGION;
RUN;




%MACRO COMPARE(I=, TITL=);

TITLE "DATA=&MAJPOP";

DATA CFIG&I;                    *FROM CONUS. LLU 10/8/04;

  SET CFIG&I.1
      CFIG&I.2
      CFIG&I.3
      CFIG&I.4
      ;
RUN;


PROC SORT DATA=&POP.FIG&I;
BY BENEFIT TIMEPD REGION;
RUN;

PROC SORT DATA=CFIG&I;
BY BENEFIT TIMEPD REGION;
RUN;

DATA COMBFIG&I;
   MERGE CFIG&I(IN=F1) &POP.FIG&I(IN=F2);
BY BENEFIT TIMEPD REGION;


IF F1 AND F2;

FIG = &I;

IF FIG <=4 THEN DO;
   SCORE2=&POP.SCORE;
   SIG2=&POP.SIG;
END;

ELSE IF FIG >4 THEN DO;
   IF COL2 >= 0 THEN SCORE2=COL2;
   ELSE IF COL4 >0 THEN SCORE2=COL4;

   IF COL6 >= .Z THEN SIG2=COL6;
   ELSE IF COL7>=.Z THEN SIG2=COL7;
END;


   SCOREDIF=SCORE2-SCORE;
   SIGDIF=SIG2-SIG;


IF ABS(SCOREDIF)>.015 OR SIGDIF>0 THEN FLAG=1;
ELSE FLAG=0;

KEEP BENEFIT TIMEPD REGION SCORE SIG SCORE2 SIG2 SCOREDIF SIGDIF FLAG;

LABEL
FLAG="DIFF IN SCORES >0.015 OR/AND DIFF IN SIG >0"
SCORE="SCORES FROM CONUS"
SCORE2="SCORES FROM CONSUMER WATCH"
SIG="SIG FROM CONUS"
SIG2="SIG FROM CONSUMER WATCH"
;

TITLE2 "*******************************************************";
TITLE3 "CONSUMER WATCH, &AREA, DATA=&MAJPOP ";
```

```
PROC PRINT L NOOBS;
TITLE4 "Compare &TITL.";
RUN;

%MEND COMPARE;

%COMPARE(I=1, TITL=Health Care Rating);
%COMPARE(I=2, TITL=Health Plan Rating);
%COMPARE(I=3, TITL=Personal Provider Rating);
%COMPARE(I=4, TITL=Specialist Rating);

%COMPARE(I=5, TITL=Access composites);

%COMPARE(I=7, TITL=Office composites);
%COMPARE(I=9, TITL=Claims/Service composites);


*prepare to merge data;

DATA &POP.FIG5(RENAME=(COL2=&POP.SCORE COL6=&POP.SIG))
     &POP.FIG6(RENAME=(COL4=&POP.SCORE COL7=&POP.SIG));
   SET &POP.FIG5;
   IF BENEFIT='Getting Needed Care' THEN OUTPUT &POP.FIG5;
   ELSE IF BENEFIT = 'Getting Care Quickly' THEN OUTPUT &POP.FIG6;
RUN;

DATA &POP.FIG7(RENAME=(COL4=&POP.SCORE COL7=&POP.SIG));
   SET &POP.FIG7;
   IF BENEFIT = 'How Well Doctors Communicate' THEN OUTPUT;
RUN;

DATA &POP.FIG8(RENAME=(COL2=&POP.SCORE COL6=&POP.SIG))
     &POP.FIG9(RENAME=(COL4=&POP.SCORE COL7=&POP.SIG));
   SET &POP.FIG9;
   IF BENEFIT='Customer Service' THEN OUTPUT &POP.FIG8;
   ELSE IF BENEFIT ='Claims Processing' THEN OUTPUT &POP.FIG9;
RUN;

%DO I= 1 %TO 9;
PROC SORT DATA=&POP.FIG&I;
BY ROW;
RUN;
%END;

%MEND RUNPOP;

%RUNPOP(MAJPOP='Enrollees with Military PCM', POP=DC,DAT=);
%RUNPOP(MAJPOP='Enrollees with Civilian PCM', POP=PC,DAT=PURCHASED);

%DO I=1 %TO 9;
DATA FIG&I;
   MERGE DCFIG&I PCFIG&I;
   BY ROW;
RUN;
%END;


DATA DCTABLE1;
  SET DCTABLE1;

  ROW=ROW-.5;       *CHANGE DIRECT CARES ROW NUMBER TO PREPARE NEXT STEP;
RUN;

DATA TABLE1;
   SET DCTABLE1 PCTABLE1;
   BY ROW;
RUN;



*****************************************************************************
* DDE LINK:  FIGURE 1-4: Health Care Rating
*****************************************************************************;
```

```
%MACRO RUNXLS1;

%DO I = 1 %TO 4;
FILENAME TBL DDE "EXCEL|RATINGS!R17C%EVAL(&I*6-4):R21C%EVAL(&I*6)";

DATA _NULL_;
   SET FIG&I;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT DCSCORE '09'X PCSCORE '09'X DCSIG '09'X PCSIG;
RUN;
%END;
%MEND;
%RUNXLS1;

********************************************************************************
* DDE LINK:  FIGURE 5-9: Composites
********************************************************************************;

%MACRO RUNXLS2;
%DO I = 5 %TO 9;
FILENAME TBL DDE "EXCEL|Composites!R18C%EVAL((&I.-4)*5-3):R21C%EVAL((&I.-4)*5-1)";

DATA _NULL_;
   SET FIG&I;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT DCSCORE '09'X PCSCORE '09'X BSCORE;
RUN;

FILENAME TBL DDE "EXCEL|Composites!R23C%EVAL((&I.-4)*5-3):R26C%EVAL((&I.-4)*5-1)";

DATA _NULL_;
   SET FIG&I;
   FILE TBL NOTAB LRECL=200;
   X=SLEEP(.1);
   PUT DCSIG '09'X PCSIG;
RUN;

%END;
%MEND;
%RUNXLS2;

********************************************************************************
* DDE LINK: TABLE 1: Preventive Care
********************************************************************************;
FILENAME TBL DDE "EXCEL|TABLES!R3C11:R14C25";

DATA _NULL_;
   SET TABLE1;
   FILE TBL NOTAB LRECL=200;
   IF ROW <=41 THEN DO;
   PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X COL8 '09'X COL9 '09'X COL10
      '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
   END;
   ELSE IF ROW=42 THEN DO;     *no benchmark for counselling;
   PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X '-' '09'X COL9 '09'X COL10
      '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
   END;
RUN;

/*Run Excel macro signif,  May 9 2006, LLU*/

options noxsync;
*-- Specify XL filename ;

*%let excelf = &FOLDER..XLS ;

*-- Specify XL macro name ;
%let macron = sig2.signif2 ;
```

```
FILENAME CMDS DDE "EXCEL|SYSTEM";


DATA _NULL_;
   FILE CMDS;
   DDECommand = '[Run("' || "&macron" || '",0)]' ;
   put DDEcommand ;

RUN;


DATA _NULL_;
    FILE CMDS;
    PUT '[CLOSE(TRUE)]';
RUN;
/*
DATA _NULL_;
    FILE CMDS;
    PUT '[SAVE]';
    PUT '[QUIT]';
RUN; */

%MEND RUNCW;
```

J.2.A **Q3FY2013\PROGRAMS\PurchasedConsumerWatch\consumerwatch_PurchasedCare_word.sas -**
Run program that generates MS Word Purchased Care TRICARE Consumer Watch reports - Run
Quarterly.

```
******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH_PurchasedCare_Word.SAS
*
* PURPOSE: CALL CONSUMERWATCH_PurchasedCare_MACRO.INC PROGRAM
*          TO PRODUCE WORD DOCUMENT FOR Purchased Care Consumer Watch report.
*
* WRITTEN: 2/21/2008 LUCY LU
*
* INPUT  : EXCEL CHARTS
*
* OUTPUT : WORD DOCUMENTS
*
* PROGRAM TO CALL: CONSUMERWATCH_PurchasedCare_MACRO_WORD.INC
* MODIFIED : 4/14/2010 BY LUCY LU, SEE COMMENT ON INCLUDE FILE.
* MODIFIED : 7/23/2010 BY LUCY LU
*          Rename CONSUMERWATCH_MACRO_COMB_WORD.INC to
*              CONSUMERWATCH_purchasedcare_MACR_WORD.INC
*          CONSOLIDATE USMHS AND REGION INTO ONE SAS PROGRAM
*
******************************************************************************;
OPTIONS MPRINT;

%LET QUARTER=3;                              *CURRENT FISCAL QUARTER;
%LET YEAR=2013;                              *CURRENT FISCAL YEAR;

%LET PATH=L:\Q&QUARTER.FY&YEAR.\Programs\PurchasedConsumerWatch;
*%LET PATH=L:\Q4FY2010\Programs\PurchasedConsumerWatch; *TEMP;


%INCLUDE "consumerwatch_PURCHASEDCARE_macro_word.inc";


%RUNWD(FOLDER=USMHS,NAME=US MHS,YOURSAY=US MHS);
%RUNWD(FOLDER=North,YOURSAY=your region);
%RUNWD(FOLDER=South,YOURSAY=your region);
%RUNWD(FOLDER=West,YOURSAY=your region);
```

**J.2.B   Q3FY2013\PROGRAMS\PurchasedConsumerWatch\consumerwatch_Purchased
Care_macro_word.inc - Generate MS Word quarterly Purchased Care TRICARE Consumer Watch
reports.**

```
********************************************************************************
* PROJECT: 6077-420
* PROGRAM: consumerwatch_PurchasedCare_macro_word.inc
*
* AUTHOR : LUCY LU
* PURPOSE: Automate the copy and paste process, update the year, region,
*          response rate and sample size for quarterly Consumer
*          Watch report.
*
* DATE   : 03/12/2009
*
* OUTPUT : WORD DOCUMENTS
* MODIFIED: 06/4/2010 BY LUCY LU
*           NOTE: 1. Replicating the template of Q2 2010 report found the lower quality
*                    of charts in Word report. Using copy and paste instead of link.
*                 2. Excel Triplet doeasn't work for MS 2007/SAS 9. Using direct VBA
*                    code in SAS.
*                 3. The final products are in Word and pdf format.
* MODIFIED: 7/23/2010 BY LUCY LU
*           ADD MACRO TO MINIMIZE EXCEL AND WORD WAITING, REDUCE PROGRAM
*           RUNNING TIME
********************************************************************************;

OPTIONS NOXWAIT SPOOL NOXSYNC;


%MACRO RUNWD(FOLDER=,NAME=&FOLDER,YOURSAY=);

*7/23/2010 LLU, Wait until Excel ready;

FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;

   LENGTH FID RC START STOP TIME 8;
   FID = FOPEN('CMDS' , 'S');
   IF (FID LE 0) THEN DO;
      RC = SYSTEM('START EXCEL');
      START = DATETIME();
      STOP = START + 10;
      DO WHILE (FID LE 0);
         FID = FOPEN('CMDS' , 'S');
         TIME = DATETIME();
         IF (TIME GE STOP) THEN FID = 1;
      END;
   END;
   RC = FCLOSE(FID);
RUN;


%MACRO SETUP;
   DATA TEST _NULL_;

   SINGLE="'";
   DOUBLE='"';

   LENGTH OPENXLS OPENWRD SAVEWRD $120;

OPENXLS=SINGLE||"[OPEN("||DOUBLE||"&PATH.\&FOLDER.\&FOLDER._PurchasedCare.xlsb"||DOUBLE||")]"||SI
NGLE;

OPENWRD=SINGLE||"[FileOpen.Name="||DOUBLE||"&PATH.\template_PurchasedCare.docm"||DOUBLE||"]"||SIN
GLE;

SAVEWRD=SINGLE||"[FileSaveAs.Name="||DOUBLE||"&PATH.\&FOLDER.\&FOLDER._PurchasedCare.DOCM"||DOUBL
E||"]"||SINGLE;
```

```
   CALL SYMPUT ("OPENXLS",TRIM(OPENXLS));
   CALL SYMPUT ("OPENWRD",TRIM(OPENWRD));
   CALL SYMPUT ("SAVEWRD",TRIM(SAVEWRD));

RUN;

%MEND SETUP;
%SETUP;

DATA _NULL_;
 FILE CMDS;
PUT &OPENXLS;
X=SLEEP(2);
PUT '[app.minimize()]';
RUN;


*7/23/2010 LLU, Wait until Word ready;
FILENAME CMNDS DDE "WINWORD|SYSTEM";

DATA _NULL_;
  LENGTH FID RC START STOP TIME 8;
  FID=FOPEN('CMNDS','S');
  IF (FID LE 0) THEN DO;
    RC=SYSTEM('START WINWORD');
    START=DATETIME();
    STOP=START+10;
    DO WHILE (FID LE 0);
      FID=FOPEN('CMNDS','S');
      TIME=DATETIME();
      IF (TIME GE STOP) THEN FID=1;
      END;
    END;
  RC=FCLOSE(FID);
RUN;

DATA _NULL_;
  FILE CMNDS;
  PUT &OPENWRD;
  X=SLEEP(2);
  PUT &SAVEWRD;
  PUT '[APPMINIMIZE]';
RUN;


%MACRO COPYIT;
%DO I=1 %TO 10;


      %LET WDMACRO=NEWPASTE&I;
      %LET EXMACRO=COPY&I;


      FILENAME CMDS DDE "EXCEL|SYSTEM";
      DATA _NULL_;
      X=SLEEP(1);
      RUN;

      DATA _NULL_;
      FILE CMDS;
      DDECommand = '[Run("' || "&exmacro" || '",0)]' ;
      PUT DDEcommand ;

      RUN;
      FILENAME CMDS CLEAR;

      FILENAME CMNDS DDE 'WINWORD|SYSTEM';

      DATA _NULL_;
      X=SLEEP(2);
      RUN;
```

```
        DATA _NULL_;
        FILE CMNDS;
        put '[ToolsMacro .Name = "' "&wdmacro" '", .Run]';
        RUN;


%END;
%MEND COPYIT;
%COPYIT;


DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Region1"]';
 put '[FormatFont.Font="Arial",.Points="20"]';
 PUT "&NAME";
RUN;

DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Quarter1"]';
 put '[FormatFont.Font="Arial",.Points="20"]';
 PUT "&QUARTER";
RUN;

DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Year1"]';
 put '[FormatFont.Font="Arial",.Points="20"]';
 PUT "&YEAR";
RUN;


DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="YourSay"]';
 put '[FormatFont.Font="Times New Roman",.Points="11"]';
 PUT "&YOURSAY";
RUN;


DATA _NULL_;
 FILE CMNDS;
 X=SLEEP(.2);
 put '[EditGoto.Destination="Region2"]';
 put '[FormatFont.Font="Arial",.Points="16"]';
 PUT "&NAME";
RUN;

DATA _NULL_;
 FILE CMNDS;
 *X=SLEEP(.2);
 put '[EditGoto.Destination="Quarter2"]';
 put '[FormatFont.Font="Arial",.Points="16"]';
 PUT "&QUARTER";
RUN;

DATA _NULL_;
 FILE CMNDS;
 put '[EditGoto.Destination="Year2"]';
 put '[FormatFont.Font="Arial",.Points="16"]';
 PUT "&YEAR";
RUN;

*savs as pdf;
%LET CMACRO=SaveAspdf;

FILENAME CMNDS DDE 'WINWORD|SYSTEM';
DATA _NULL_;
 FILE CMNDS;

PUT '[ToolsMacro .Name = "' "&CMACRO" '", .Run]';
```

```
run;


FILENAME CMDS DDE "EXCEL|SYSTEM";

DATA _NULL_;
   FILE CMDS;
   *PUT '[SAVE]';  *no save for Excel;
   PUT '[CLOSE(FALSE)]';
   PUT '[QUIT]';
RUN;

/*reserved for future use;
FILENAME CMNDS DDE 'WINWORD|SYSTEM';

DATA _NULL_;
 FILE CMNDS;

 PUT '[fileSave] ';
 PUT '[FileClose 2] ';
RUN;
*/

%MEND;
```