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2004 Health Care Survey of DoD Beneficiaries:

Adult Technical Manual

Final

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Chapter

1

Introduction

The 2004 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, at which time the survey was 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 2010*?
- 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 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). The DoD Defense Manpower Data Center (DMDC) 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, Inc. (MPR, Washington, D.C.) prepares a sample of 50,000 adult beneficiaries. National Research Corporation (NRC) fielded the survey in quarters I-III and Synovate fielded the survey in quarter IV. MPR analyzes the survey data, reports on the results, and prepares this document, the "2004 Health Survey of DoD Beneficiaries: Adult 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. The 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. The manual enables an analyst to link each cell in each table (or chart) in the reports to the associated question in the Adult questionnaire and/or to

the variable in the survey database. The 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 2004 adult sample design is based on three sample stratifications—enrollment type, beneficiary type, and geographic area. *Enrollment type* is defined by whether or not the beneficiary is enrolled in TRICARE Prime. Unlike in previous surveys, we did not create separate strata for beneficiaries enrolled in Prime with a military primary care manager (PCM) and beneficiaries enrolled in Prime with a civilian PCM.

Beneficiary type is defined as active duty, active duty family members, retirees and family members under age 65, and non-active duty beneficiaries and their family members age 65 and over. Compared with previous surveys, this stratification causes a larger proportion of the sample to be allocated to active duty personnel and their family members, and a smaller proportion of the sample to be allocated to retirees.

The *geographic area* stratification depends on enrollment type. Those enrolled in Prime who have a military PCM typically receive much of their health care from a military treatment facility (MTF), that is a military hospital or clinic. The geographic stratification for such beneficiaries is determined by the MTF that bears the financial responsibility for the beneficiary's health care. This stratification does not depend on the location of the beneficiary's residence, although most such beneficiaries live within the catchment area of the responsible MTF.

Those enrolled in Prime with a civilian PCM typically receive much of their health care from a TRICARE contractor. The geographic stratification for these beneficiaries is the catchment area in which they live.

Those not enrolled in Prime typically receive much of their care through TRICARE Extra/Standard (CHAMPUS) or through a non-MHS health plan. The service area they live in determines the geographic stratification. Conceptually, the service area is the health care market area in which the beneficiary resides. Operationally, the service area is the group of catchment areas in the metropolitan area the beneficiary lives in. For beneficiaries who do not live in a metropolitan area, the service area is the same as the catchment area in which they live.

As with last year's survey, more military clinics, as opposed to military hospitals, were included in the list of geographic areas. This means that a larger proportion of the 2004 sample is allocated to beneficiaries who receive much of their health care from a military clinic, and a smaller proportion is allocated to those receiving much of their care from a military hospital.

2. 2004 Adult HCSDB

The HCSDB questionnaire was converted from an annual to a quarterly survey in 2000, and is fielded in each quarter to a representative sample of MHS beneficiaries. The adult questionnaire for Quarters I-IV is reproduced in Appendix A. The 2004 survey consists of an unchanging core questionnaire with different 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 HCSDDB 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 2003 HCSDDB and this year's survey is the 2004 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-IV

Each quarter in 2004, we sent surveys to a random sample of 50,000 adult MHS beneficiaries. By the end of the fielding period in Quarter I, we received completed surveys from 27 percent of the sample. In Quarter II, 29 percent of the sample members returned completed surveys while in Quarter III, 29 percent of the sample members returned completed surveys. In Quarter IV, we received complete surveys from 29 percent of the beneficiaries sampled. Information pertaining to how we developed these response rates is presented in Chapter 4.

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. Therefore, the revised annual response rates were 28 percent for Quarter I, 30 percent for Quarter II, 30 percent for Quarter III, and 29 percent for the combined annual dataset.

4. Database Development

MPR 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, MPR 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

MPR 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>:

- 2004 TRICARE Beneficiary Reports
- 2004 TRICARE Consumer Watch
- Health Care Survey of DoD Beneficiaries: Annual Report

B. ORGANIZATION OF THIS MANUAL

Chapter 2 presents the procedures used in fielding the survey. Chapter 3 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, the development of satisfaction and health status scales, and weighting procedures. Chapter 4 describes how the database was analyzed. This includes rules for developing response rates, the development of table and chart specification for the Health Care Survey of DoD Beneficiaries: 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 questionnaire – Quarters I-IV survey questionnaire annotated with database variable names
- Appendix B: Survey Fielding Letters – Letters sent to the respondents
- Appendix C: Plan for Data Quality – Coding Scheme – Quarters I-IV
- Appendix D: A table mapping MTFs to the catchment area and region. The table also indicates the type of facility, such as teaching hospital or clinic, and the service affiliation of the MTF.
- Appendix E: Response rate tables for selected domains
- Appendix F: Technical Description of the 2004 TRICARE Beneficiary Reports
- Appendix G: SAS Code for File Development
- Appendix H: SAS Code for Statistical and Web Specifications for the 2004 TRICARE Beneficiary Reports
- Appendix I: SAS Code for 2004 TRICARE Consumer Watch
- Appendix J: The SUDAAN code for calculating variance estimates

Survey of Adults

In quarters I-III, the HCSDB was fielded by Synovate. In quarter IV, it was fielded by NRC. This chapter presents information on the survey administration cycle for each of the quarters I-IV, 2004 Adult Health Care Survey of DoD Beneficiaries (HCSDB), with specific details on the survey mailing cycle and the number of surveys received.

A. QUARTERS I-III - BY NRC

1. Survey Operations Activities

The operational support for mailing the survey involved four mailings to beneficiaries. Targeted mailings and remailings have been integrated into the mailing administration in order to increase response rates. The mailings are as follows: notification letter, first survey mailing, reminder/thank you post card, and second survey mailing. The notification letter was a short letter of explanation encouraging beneficiaries to participate. The first and second surveys were mailed with a cover letter of explanation and an option to complete the survey on-line. The reminder/thank you post card was mailed between the first and second surveys reminding beneficiaries to complete the survey and thanking those beneficiaries who had completed the survey. Examples of these are available in Appendix B. All mailings have been completed. The field period closed after 8 weeks.

2. Address Update Activities Prior to and During Survey Administration

The sample file was received from Mathematica Policy Research (MPR) via Standard Technology, Inc. (STI). The file contained 50,000 records of DoD beneficiaries and 82 variables constructed from the Defense Enrollment Eligibility Reporting System (DEERS). The file was sent to an NCOA vendor for address updating. The NRC+Picker Group (NRCPicker) sent a copy of all sample records to an outside vendor to receive address hygiene services and to be interfaced with the National Change of Address (NCOA) database to obtain updated address information. The NCOA vendor returned the updated address file and this information, along with the sample file from MPR, were loaded into NRCPicker's proprietary software system known as Qualisys. Qualisys is NRCPicker's "quality process" software and business discipline that standardizes and automates the entire survey process from data quality checks to the scanning of returned surveys.

The Configuration Manager module in Qualisys contains the layout for all mail items (e.g., the survey, cover letters, thankyou/reminder postcards), mail methodology, and cover letter personalization. Notification letters were mailed to one of the three DEERS addresses: residential address, sponsor address, and unit address. When possible, the residential address was given preference over the sponsor address and likewise the sponsor address was given preference over the unit address. When all records had been assigned an address for the notification letter mailing step, Qualisys began generating the personalized letters.

The updating of addresses is a continuous process throughout the survey administration cycle.

During survey administration, address updates are obtained from multiple sources:

- Self report by beneficiaries (via telephone, voice mail, or fax).
- Address correction information from the United States Postal Service (USPS).
- Out of date forwarding address information from the USPS.
- Mail items returned by the USPS as non-deliverable.

Updated address information was added to Qualisys through the use of the DoD Beneficiary Update System (DoDBUS), an interface created by NRCPicker developers to allow new address information to be entered into Qualisys and to track changes when using the DEERS addresses.

Address information received directly from the beneficiary was considered the most accurate and was the first address used whenever possible. Beneficiaries were provided with toll free telephone and toll free fax phone numbers and voice mail option to use in order to update their addresses. Collect calls were also available if a beneficiary could not access the toll free telephone number. The telephone and fax numbers were printed on the notification letter, the reminder/thank you card, and the cover letter that accompanied the first survey.

The United States Postal Service also provided address update information in the form of Address Correction Services. This service is accessed by the use of the "Address Service Requested" indices on the notification letter and the outer envelopes of the first and second surveys. Many post offices returned updated address information on diskettes, which are loaded into Qualisys. Post offices that did not have access to this technology returned copies of the mail piece with the old and new addresses provided. This information was entered into Qualisys through the DoDBUS.

The DoDBUS also provided the interface to enter non-deliverable mail pieces and mark the address used for that mail step as invalid. If other addresses were available, the DoDBUS operator would choose the next available address for the next mail step. When all addresses had been exhausted, the record was marked as a "final nondeliverable" and no further mailings were attempted. Second surveys that were returned as non-deliverable were also marked as "final nondeliverable" as it was the final mail step in this methodology.

Based on data from the final returns data set, beneficiaries who did not have sufficient address information were not included in any of the mail steps. The remaining beneficiaries were mailed the notification letter. Prior to mailing the first survey, NRCPicker removed any beneficiaries who were marked as "final nondeliverable" or any beneficiary who contacted NRC and refused to participate or was found to be ineligible. A reminder/thank you card was mailed on July 26, 2004. The reminder card was sent to all beneficiaries who received the first survey, with the exception of those beneficiaries whose first mail survey was returned, or their record marked as "final nondeliverable". Second surveys were mailed to all beneficiaries who did not return a first mail survey, and whose records had not been marked as "final nondeliverable".

Tables 2.A.1.a-2.A.1.c summarizes address sources by each of the four beneficiary categories for quarters I-III. This table shows the source of the last address used in sending a mailing piece to a beneficiary. As in past years, the largest number of invalid addresses fell in the Active Duty category. It has been speculated that this is due, in part, to this group being mobile.

TABLE 2.A.1.a

FREQUENCY OF ADDRESS SOURCE BY BENEFICIARY CATEGORY – QUARTER I, 2004
(N = 50,000)

	Active Duty	Active Duty Dependents	Retirees and Family Members < 65	Retirees and Family Members > 65	Total
Bad Address (disqualified by postal cleaning software)	2,616 5.23%	371 0.74%	244 0.49%	111 0.22%	3,342 6.68%
Phone call/Voice mail	64 0.13%	38 0.08%	55 0.11%	27 0.05%	184 0.37%
ACR	653 1.31%	631 1.26%	267 0.53%	45 0.09%	1,596 3.19%
Fax	18 0.04%	9 0.02%	11 0.02%	6 0.01%	44 0.09%
DEERS Unit	5 0.01%	0 0.00%	0 0.00%	0 0.00%	5 0.01%
DEERS Residential	21,106 42.21%	10,523 21.05%	8,594 17.19%	3,058 6.12%	43,281 86.56%
DEERS Sponsor	1,517 3.03%	11 0.02%	9 0.02%	3 0.01%	1,540 3.08%
ODF	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Electronic ACR	1 0.00%	5 0.01%	2 0.00%	0 0.00%	8 0.02%
Total	25,980 51.96%	11,588 23.18%	9,182 18.36%	3,250 6.50%	50,000 100.00%

TABLE 2.A.1.b

FREQUENCY OF ADDRESS SOURCE BY BENEFICIARY CATEGORY – QUARTER II, 2004
(N = 50,000)

	Active Duty	Active Duty Dependents	Retirees and Family Members < 65	Retirees and Family Members 65+	Total
No Valid Address	403 0.81%	2 0.00%	25 0.05%	29 0.06%	459 0.92%
Bad Address	127 0.25%	75 0.15%	155 0.31%	47 0.09%	404 0.81%
Phone call/Voice Mail	36 0.07%	25 0.05%	28 0.06%	28 0.06%	117 0.23%
ACR	445 0.89%	96 0.19%	34 0.07%	11 0.02%	586 1.17%
Fax	14 0.03%	4 0.01%	15 0.03%	5 0.01%	38 0.08%
NCOA	1789 3.58%	1275 2.55%	520 1.04%	138 0.28%	3,722 7.44%
DEERS Unit	2829 5.66%	0 0.00%	8 0.02%	0 0.00%	2,837 5.67%
DEERS Residential	20,010 40.02%	9,328 18.66%	8,467 16.93%	3,078 6.16%	40,883 81.77%
DEERS Sponsor	0 0.00%	680 1.36%	257 0.51%	16 0.03%	953 1.91%
ODF	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Electronic ACR	0 0.00%	1 0.00%	0 0.00%	0 0.00%	1 0.00%
Total	25,653 51.31%	11,486 22.97%	9,509 19.02%	3,352 6.70%	50,000 100.00%

TABLE 2.A.1.c

FREQUENCY OF ADDRESS SOURCE BY BENEFICIARY CATEGORY – QUARTER III, 2004
(N = 50,000)

	Active Duty	Active Duty Dependents	Retirees and Family Members < 65	Retirees and Family Members 65+	Total
No Valid Address	227 0.45%	1 0.00%	47 0.09%	45 0.09%	320 0.64%
Bad Address	1,056 2.11%	321 0.64%	225 0.45%	87 0.17%	1,689 3.38%
Phone call/Voice Mail	46 0.09%	42 0.08%	43 0.09%	32 0.06%	163 0.33%
ACR	308 0.62%	64 0.13%	27 0.05%	10 0.02%	409 0.82%
Fax	9 0.02%	4 0.01%	10 0.02%	4 0.01%	27 0.05%
NCOA	1,484 2.97%	937 1.87%	482 0.96%	128 0.26%	3,031 6.06%
DEERS Unit	2,043 4.09%	0 0.00%	6 0.01%	0 0.00%	2,049 4.10%
DEERS Residential	20,467 40.93%	9,628 19.26%	8,554 17.11%	3,066 6.13%	41,715 83.43%
DEERS Sponsor	0 0.00%	391 0.78%	153 0.31%	8 0.02%	552 1.10%
ODF	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Electronic ACR	41 0.08%	3 0.01%	1 0.00%	0 0.00%	45 0.09%
Total	25,681 51.36%	11,391 22.78%	9,548 19.10%	3,380 6.76%	50,000 100.00%

Table 2.A.2.a-2.A.2.c summarizes the address sources for returned surveys for quarters I-III.

TABLE 2.A.2.a

FREQUENCY OF ADDRESS SOURCES FOR RETURNED SURVEYS – QUARTER I, 2004
(N = 13,865)

<i>Address Type</i>	Frequency (n)	Percent of Returns
DEERS Residential	13,614	98.2%
DEERS Sponsor	5	0.0%
DEERS Unit	3	0.0%
Phone/Voice Mail	108	0.8%
NCOA	0	0.0%
Fax	23	0.2%
ACR & ODF	112	0.8%
Electronic ACR	0	0.0%
Total	13,865	100.0%

Note: If beneficiaries returned more than one completed survey, both surveys were included in the numbers in Table 2.A.2.a.

TABLE 2.A.2.b

FREQUENCY OF ADDRESS SOURCES FOR RETURNED SURVEYS – QUARTER II, 2004
(N = 14,756)

Address Type	Frequency (n)	Percent of Returns
DEERS Residential	13,482	91.37%
DEERS Sponsor	79	0.54%
DEERS Unit	122	0.83%
Phone/Voice Mail	55	0.37%
Fax	27	0.18%
NCOA	939	6.36%
ACR & ODF	52	0.35%
Electronic ACR	0	0.0%
Total	14,756	100.0%

Note: If beneficiaries returned more than one completed survey, both surveys were included in the numbers in Table 2.A.2.b.

TABLE 2.A.2.c

FREQUENCY OF ADDRESS SOURCES FOR RETURNED SURVEYS – QUARTER III, 2004
(N = 14,746)

<i>Address Type</i>	Frequency (n)	Percent of Returns
DEERS Resident address	13,701	92.91%
DEERS Sponsor address	46	0.31%
DEERS Unit address	75	0.51%
Telephone	85	0.58%
Fax or mail	10	0.07%
NCOA database	758	5.14%
U. S. Postal Service (ACRs and ODFs)	71	0.48%
Electronic ACR	0	0.00%
Total	14,746	100.00%

Note: If beneficiaries returned more than one completed survey, both surveys were included in the numbers in Table 2.A.2.c.

3. Letter Processing Procedures

A vital component to effective management and monitoring of the data collection process is the Survey Control System (SCS). The SCS ensures that data are accurate, integrated, and available during all phases of the survey administration. NRCPicker's unique identifier known as a "lithocode" links all records in the SCS to the original sample file. The lithocode is a unique identification number assigned by Qualisys at the time that letters or surveys are generated. A new lithocode number is created for each mail step. These lithocodes are stored for each beneficiary in a table in the SCS. This allows NRCPicker staff to determine whether a returned survey is a first or second survey and identify instances where a beneficiary may return both the first and second survey. The lithocode also allows the surveys to be monitored without use of a beneficiary's social security number or other information that could identify the beneficiary. Lithocodes are used to identify the beneficiary when returned surveys are scanned, whenever beneficiaries are removed from future mailings due to refusal/ineligibility or no valid address, and when addresses are updated or changed in DoDBUS.

4. On-Line Processing Procedures

In addition to receiving a mail survey, beneficiaries are given the option of completing the survey via a secure internet web site. The cover letter that accompanies the first and second mail surveys contains an internet URL and unique password that allows beneficiaries to complete the survey on-line. All passwords provided to beneficiaries are randomly generated by NRCPicker and consist of three alpha and four numeric characters. Similar to lithocodes, the passwords are unique to each beneficiary and allow the surveys to be monitored without the use of a beneficiary's social security number or any other personal identifying information. Upon completion or early termination of the on-line survey, the beneficiary does not have the ability to access the on-line survey again. All questions on the on-line survey are identical to the mail survey. However, the questions on the on-line survey are presented individually on a screen by screen basis and skip patterns are programmed into the survey.

5. Survey Administration Timeline

a. Quarter I

The HCSDB mailing process was designed so that each beneficiary with a usable address could receive up to four documents: a notification letter, a first survey, a reminder/thank you card, and a second survey. If a beneficiary returned a first mail survey or accessed the on-line version, a second survey was not sent. If a beneficiary identified themselves as refusing to participate or as ineligible, they were removed from future mail steps as well. Beneficiaries who were marked as "final non-deliverable" were also removed from future mail steps.

A total of 46,658 notification letters were mailed on December 15, 2003. Immediately following this mailing, NRCPicker staff began entering address changes and updating records to indicate beneficiaries who identified themselves as refusing to participate or as ineligible to participate. There were 395 records marked as "final non-deliverable" and 106 records marked as refused/ineligible prior to mailing the first survey. The survey is a 16-page booklet accompanied by a cover letter of explanation and a postage paid return envelope. A total of 46,157 first surveys were mailed to beneficiaries on January 9, 2004.

The reminder/thank you card was sent to 38,623 beneficiaries on January 23, 2004. The number of reminder/thank you cards was reduced by 1,667 records marked as "final non-deliverables", 1,036 records marked as refused/ineligible, and 4,831 records marked due to beneficiaries who returned the first mail survey or accessed the survey on-line.

The second survey was mailed to 34,564 beneficiaries on February 6, 2004. This number was reduced by 725 records marked as "final non-deliverables", 15 records marked as refused/ineligible, and 3,319 records marked due to beneficiaries who returned the first survey or accessed the survey on-line.

Prior to the mailing of the first survey, 20 mail questionnaires were completed by NRCPicker staff and scanned into the SCS. Additionally, 10 on-line questionnaires were completed by NRCPicker staff. Copies of the mail questionnaires and a data set which included the mail and on-line test files were sent to the analysis contractor to determine if the file was readable, scanned correctly for the mail version and programmed correctly for the on-line version.

Table 2.A.3.a summarizes the HCSDB mailings for quarter I. Data includes the date of each mail step, the quantity mailed in each step, and the number of records that were removed prior to the next mail step.

TABLE 2.A.3.a

MAILING TIMELINE – QUARTER I, 2004

<i>Mail Step</i>	Action	Records Removed	Sample
	Total Sample Size		50,000
	Subtract no address	1,021	
	Subtract bad address	2,321	
	Total: beneficiaries not receiving a pre note		3,342
Notification Letter	Mailed on 12/15/03		46,658
	Subtract PND	395	
	Subtract ineligible/refused	106	
	Total		501
First Survey	Mailed on 01/09/04		46,157
	Subtract PND	1667	
	Subtract ineligible/refused	1036	
	Subtract 1st Surveys received (mail or on-line)	4831	
	Total		7,534
Reminder/Thank You Post Card	Mailed on 01/23/04		38,623
	Subtract PND	725	
	Subtract ineligible/refused	15	
	Subtract 1st Surveys received (mail or on-line)	3319	
	Total		4,059
Second Survey	Mailed on 02/06/04		34,564

b. Quarter II

The HCSDDB mailing process was designed so that each beneficiary with a usable address could receive up to four documents: a notification letter, a first survey, a reminder/thank you card, and a second survey. A second survey was not sent if a beneficiary returned a first mail survey. If a beneficiary identified themselves as refusing to participate or as ineligible, they were removed from future mail steps as well. Beneficiaries who were marked as “final nondeliverable” were also removed from future mail steps.

A total of 49,137 notification letters were mailed on March 15, 2004. Immediately following this mailing, NRCPicker staff began entering address changes and updating records to indicate beneficiaries who identified themselves as refusing to participate or as ineligible to participate. There were 831 records marked as “final nondeliverable” or as refused/ineligible prior to mailing the first survey. The survey is a 16-page booklet accompanied by a cover letter of explanation and a postage paid return envelope. A total of 48,306 first surveys were mailed to beneficiaries on April 2, 2004.

The reminder/thank you card was sent to 44,439 beneficiaries on April 16, 2004. The number of reminder/thank you cards was reduced from the previous step by 1,362 records marked as “final nondeliverables” or as refused/ineligible, and 2,505 records marked due to beneficiaries who returned the first mail survey.

The second survey was mailed to 37,163 beneficiaries on May 7, 2004. This number was reduced from the previous step by 1,167 records marked as “final nondeliverables” or as refused/ineligible, and 6,109 records marked due to beneficiaries who returned the first survey.

Prior to the mailing of the first survey, 20 mail questionnaires were completed by NRCPicker staff and scanned into the SCS. Additionally, 10 on-line questionnaires were completed by NRCPicker staff. Copies of the mail questionnaires and a data set which included the mail and on-line test files were sent to the analysis contractor to determine if the file was readable, scanned correctly for the mail version and programmed correctly for the on-line version.

Table 2.A.3.b summarizes the HCSDB mailings for quarter II. Data includes the date of each mail step, the quantity mailed in each step, and the number of records that were removed prior to the next mail step.

TABLE 2.A.3.b
MAILING TIMELINE – QUARTER II, 2004

<i>Mail Step</i>	Action	Records Removed	Sample
	Total Sample Size		50,000
	Subtract no address	459	
	Subtract bad address	404	
	Total: beneficiaries not receiving a pre note		863
Notification Letter	Mailed on March 15, 2004		49,137
	Subtract PND or ineligible/refused	831	
	Total		831
First Survey	Mailed on April 2, 2004		48,306
	Subtract PND or ineligible/refused	1,362	
	Subtract 1st Surveys received	2,505	
	Total		3,867
Reminder/Thank You Post Card	Mailed on April 16, 2004		44,439
	Subtract PND or ineligible/refused	1,167	
	Subtract 1st Surveys received	6,109	
	Total		7,276
Second Survey	Mailed on May 07, 2004		37,163

c. Quarter III

The HCSDB mailing process was designed so that each beneficiary with a usable address could receive up to four documents: a notification letter, a first survey, a reminder/thank you card, and a second survey. A second survey was not sent if a beneficiary returned a first mail survey. If a beneficiary identified themselves as refusing to participate or as ineligible, they were removed from future mail steps as well. Beneficiaries who were marked as "final nondeliverable" were also removed from future mail steps.

A total of 47,966 notification letters were mailed on June 3, 2004. Immediately following this mailing, NRCPicker staff began entering address changes and updating records as appropriate or to indicate beneficiaries who identified themselves as refusing to participate or as ineligible to participate. There were 2,087 records marked as "final nondeliverable" or as refused/ineligible prior to mailing the first survey. The survey is a 16-page booklet accompanied by a cover letter of explanation and a postage paid return envelope. A total of 45,879 first surveys were mailed to beneficiaries on July 2, 2004.

The reminder/thank you card was sent to 38,949 beneficiaries on July 26, 2004. The number of reminder/thank you cards was reduced from the previous step by 3,239 records marked as "final nondeliverable" or as refused/ineligible, and 3,691 records marked due to beneficiaries who returned the first mail survey.

The second survey was mailed to 36,466 beneficiaries on August 6, 2004. This number was reduced from the previous step by 219 records marked as "final nondeliverable" or as refused/ineligible, and 2,264 records marked due to beneficiaries who returned the first survey.

Prior to the mailing of the first survey, 20 mail questionnaires were completed by NRCPicker staff and scanned into the SCS. Additionally, 10 on-line questionnaires were completed by NRCPicker staff. Copies of the mail questionnaires and a data set which included the mail and on-line test files were sent to MPR to determine if the file was readable, scanned correctly for the mail version and programmed correctly for the on-line version.

Table 2.A.3.c summarizes the HCSDB mailings for quarter III. Data includes the date of each mail step, the quantity mailed in each step, and the number of records that were removed prior to the next mail step.

TABLE 2.A.3.c

MAILING TIMELINE – QUARTER III, 2004

<i>Mail Step</i>	Action	Records Removed	Sample
	Total Sample Size		50,000
	Subtract no address	320	
	Subtract bad address	1,689	
	Subtract no first name	25	
	Total		2,034
Notification Letter	Mailed on June 3, 2004		47,966
	Subtract PND or ineligible/refused	2,087	
	Total		2,087
First Survey	Mailed on July 2, 2004		45,879
	Subtract PND or ineligible/refused	3,239	
	Subtract 1st Surveys received	3,691	
	Total		6,930
Reminder/Thank You Post Card	Mailed on July 26, 2004		38,949
	Subtract PND or ineligible/refused	219	
	Subtract 1st Surveys received	2,264	
	Total		2,483
Second Survey	Mailed on August 6, 2004		36,466

6. Processing and Classification of Incoming Surveys**a. Mail Surveys**

Returned surveys were visually checked for any written comments prior to scanning. Refusal or ineligibility comments were entered into Qualisys using the DoDBUS. Any other comments were referred to the Account Director to be forwarded to the DoD Task Manager.

Each morning, NRCPicker staff open non-deliverables and update address changes or “final nondeliverable” status for each record. Surveys are scanned using software called FAQSS. The Scanner Interface module of Qualisys receives the information from FAQSS and identifies the beneficiary and their responses to the survey questions.

Surveys must be imported from the Qualisys directory into the FAQSS System by running a “create text definitions files” from the scanner interface application. During the import process, the surveys are run through three passes. In the first pass, the lithocode is read. Any unread lithocodes are manually entered. The system then creates a lithocode list. From the complete

lithocode list, Qualisys exports the text definition files to match the lithocodes. Lastly, FAQSS separates the files into batches and moves them into the processing queue.

The next step in scanning is batch processing. This template is used by the processor to find response areas and to read the responses as valid or spurious. If the system is not 99 percent certain of a response, it is sent to a data editing workstation.

Any questionable marks as detected by the processor are brought up at the data editing station for review by an editor. The editor decides if the mark is a valid response and enters the appropriate system instructions. If the editor is unable to determine the response, a "non-response" instruction is entered. From scanner interface, a transfer results application is applied which moves the scanning files into the Qualisys database and logs the transaction. A final check is then performed to ensure that all surveys have been entered in the Qualisys database.

Throughout the administration of HCSDB, all records are marked with a final disposition code known as FLAG_FIN. Some records (such as no valid addresses) can be marked prior to the first mail step. Other records cannot be marked until all mail steps have been completed. The FLAG_FIN variables and their descriptions are :

- FLAG_FIN=1
Returned survey – survey was completed and returned.
- FLAG_FIN=2
Returned ineligible – survey was returned with at least one question marked and information that the beneficiary was ineligible. The information indicating ineligibility may have come by phone, fax, or the survey itself.
- FLAG_FIN=3
Returned blank – temporarily ill or incapacitated. Survey was returned blank along with information that the beneficiary was temporarily ill or incapacitated. These sample members were eligible.
- FLAG_FIN=4
Returned blank – deceased. Survey was returned blank along with information that the beneficiary was deceased. These sample members were ineligible.
- FLAG_FIN=5
Returned blank – incarcerated or permanently incapacitated. Survey was returned blank along with information that the beneficiary was incarcerated or permanently hospitalized. These sample members were ineligible.
- FLAG_FIN=6
Returned blank – left military or divorced after "sampling date", retired. Survey was returned blank along with information that the beneficiary left the military after "sampling date", divorced after "sampling date", or retired. These sample members were eligible.
- FLAG_FIN=7
Returned blank – not eligible on "sampling date". Survey was returned blank along with information that the beneficiary was not eligible for Military Health System Plan on "sampling date". These sample members were ineligible.
- FLAG_FIN=8
Returned blank – other eligible. Survey was returned blank along with a reason given by the sample member. These sample members were eligible.

- FLAG_FIN=9
Returned blank – no reason. Survey was returned blank without an explanation. These sample members were eligible.
- FLAG_FIN=10
No return – temporarily ill or incapacitated. Survey was not returned and beneficiary was temporarily ill or incapacitated. These sample members were eligible.
- FLAG_FIN=11
No return – active refuser. Survey was not returned and beneficiary refused to take part in the survey. These sample members were eligible.
- FLAG_FIN=12
No return – deceased. Survey was not returned and beneficiary deceased. These sample members were ineligible.
- FLAG_FIN=13
No return – incarcerated or permanently incapacitated. Survey was not returned, beneficiary was incarcerated or permanently hospitalized. These sample members were ineligible.
- FLAG_FIN=14
No return – left military or divorced after “sampling date”, retired. Survey was not returned, beneficiary left service after “sampling date”, divorced after “sampling date”, or retired. These sample members were eligible.
- FLAG_FIN=15
No return – not eligible on “sampling date”. Survey was not returned, beneficiary was not eligible for Military Health System Plan on “sampling date”. These sample members were ineligible.
- FLAG_FIN=16
No return – other eligible. Survey was not returned, beneficiary gave other reason for not completing the survey. These sample members were eligible.
- FLAG_FIN=17
No return – no reason. Survey was not returned, beneficiary gave no reason.
- FLAG_FIN=18
PND – no address remaining. All addresses were attempted, mailing was returned PND.
- FLAG_FIN=19
PND – address remaining at the close of field. At the close of field, the last address used was found invalid, next available was not attempted.
- FLAG_FIN=20
Original Non-Locatable – no address at start of mailing. Substantially incomplete or blank address field before the survey was administered, no mailings attempted.
- FLAG_FIN=21
Beneficiary provides written documentation declining to participate but doesn’t specify a reason.
- FLAG_FIN=22
Beneficiary indicates they are hospitalized but without providing any way to determine whether incapacity is temporary or permanent. Therefore, eligibility determination can not be made.

- FLAG_FIN=23
Returned blank – deployed. Survey was returned blank along with information that the beneficiary was deployed.
- FLAG_FIN=24
No return – deployed. Survey was not returned, beneficiary was deployed.

Tables 2.A.4.a-2.A.4.c documents the final disposition of the survey sample by each beneficiary group. The ENBGSMPL variable was used to create the beneficiary groups. The ENBGSMPL variable has values 1-10. The value of 1 is = Active Duty; values of 2, 3, & 4 = Active Duty Dependents, values of 5, 6, & 7 = Retired and Family Members < 65; and values of 8, 9, & 10 = Retired and Family Members > 65.

b. On-Line Surveys

At the conclusion of the fielding period, all on-line data is transferred into a database format file. A data check program using SAS statistical software is run to ensure that all values in the file correspond with the values in the annotated questionnaire sent by the DoD. The file is then matched back to the original sample file to obtain the beneficiaries MPRID identifier using the unique passwords generated by NRCPicker. A value of 1 is then assigned to the FLAG_FIN field as the on-line surveys are all considered returned. Next, the on-line data is merged with the mail data and a field is created to identify the two surveys. Finally, in cases where beneficiaries completed both the mail survey and on-line survey, the on-line survey is always considered a second returned survey.

TABLE 2.A.4.a

FREQUENCY AND PERCENT DISTRIBUTION OF FINAL DISPOSITION OF SURVEY SAMPLE BY BENEFICIARY GROUP – QUARTER I

Final Survey Disposition	Active Duty	Active Duty Dependents	Retirees and Family Members < 65	Retirees and Family Members > 65	Total
Returned non-blank survey	4,122 8.24%	2,832 5.66%	4,249 8.50%	2,322 4.64%	13,525 27.05%
Returned – ineligible	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - temp ill or incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank – deceased	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank – incarcerated or perm incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - left military or divorced after 7/31/03	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - not eligible for MHS on 7/31/03	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - other eligible	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - no reason	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
No return - temp ill or incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
No return – active refuser	0 0.00%	3 0.00%	2 0.00%	1 0.00%	6 0.01%
No return - deceased	2 0.00%	1 0.00%	3 0.00%	12 0.02%	18 0.04%
No return - incarcerated or perm incapacitated	0 0.00%	2 0.00%	1 0.00%	4 0.01%	7 0.01%
No return - left military or divorced after 7/31/03	1 0.00%	3 0.00%	4 0.01%	0 0.00%	8 0.02%
No return – not eligible on 7/31/03	0 0.00%	3 0.00%	2 0.00%	0 0.00%	5 0.01%
No return – other eligible	0 0.00%	4 0.01%	2 0.00%	0 0.00%	6 0.01%
No return - no reason given	15,596 31.19%	6,841 13.68%	3,901 7.80%	613 1.23%	26,951 53.90%
PND - no address remaining	1,300 2.60%	176 0.35%	228 0.46%	108 0.22%	1,812 3.62%
PND – address remaining	2,492 4.98%	1,314 2.63%	440 0.88%	41 0.08%	4,287 8.57%
Original Non-Locatable - no address at start	2,434 4.87%	409 0.82%	350 0.70%	149 0.30%	3,342 6.68%
Beneficiary writes and refuses participation	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Hospitalized – unknown if temp or perm incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank – deployed	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
No return – deployed	33 0.07%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Total	25,980 51.96%	11,588 23.18%	9,182 18.36%	3,250 6.50%	50,000 100.00%

Note: This table does not include duplicate surveys.

TABLE 2.A.4.b

FREQUENCY AND PERCENT DISTRIBUTION OF FINAL DISPOSITION OF SURVEY SAMPLE BY BENEFICIARY GROUP – QUARTER II

Final Survey Disposition	Active Duty	Active Duty Dependents	Retirees and Family Members < 65	Retirees and Family Members > 65	Total
Returned non blank survey	4,576 9.15%	3,023 6.05%	4,544 9.09%	2,426 4.85%	14,569 29.14%
Returned – ineligible	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - temp ill or incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank – deceased	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank – incarcerated or perm incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - left military or divorced after 10/31/03	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - not eligible for MHS on 10/31/03	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - other eligible	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - no reason	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
No return - temp ill or incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
No return - active refuser	9 0.02%	10 0.02%	7 0.01%	8 0.02%	34 0.07%
No return - deceased	2 0.00%	1 0.00%	5 0.01%	34 0.07%	42 0.08%
No return - incarcerated or perm incapacitated	0 0.00%	1 0.00%	5 0.01%	5 0.01%	11 0.02%
No return - left military or divorced after 10/31/03	3 0.01%	7 0.01%	3 0.01%	0 0.00%	13 0.03%
No return - not eligible on 10/31/03	1 0.00%	4 0.01%	15 0.03%	2 0.00%	22 0.04%
No return - other eligible	4 0.01%	1 0.00%	3 0.01%	0 0.00%	8 0.02%
No return - no reason given	17,201 34.40%	7,236 14.47%	4,293 8.59%	669 1.34%	29,399 58.80%
PND - no address remaining	1,577 3.15%	257 0.51%	257 0.51%	105 0.21%	2,196 4.39%
PND - address remaining	1,695 3.39%	867 1.73%	197 0.39%	26 0.05%	2,785 5.57%
Original Non-Locatable - no address at start	530 1.06%	77 0.15%	180 0.36%	76 0.15%	863 1.73%
Beneficiary writes and refuses participation	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Hospitalized - unknown if temp or perm incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - deployed	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
No return - deployed	55 0.11%	2 0.00%	0 0.00%	1 0.00%	58 0.12%
Total	25,653 51.31%	11,486 22.97%	9,509 19.02%	3,352 6.70%	50,000 100.00%

Note: This table does not include duplicate surveys.

TABLE 2.A.4.c

FREQUENCY AND PERCENT DISTRIBUTION OF FINAL DISPOSITION OF SURVEY SAMPLE BY BENEFICIARY GROUP – QUARTER III

Final Survey Disposition	Active Duty	Active Duty Dependents	Retirees and Family Members < 65	Retirees and Family Members 65 +	Total
Returned non blank survey	4,349 8.70%	2,837 5.67%	4,543 9.09%	2,465 4.93%	14,194 28.39%
Returned – ineligible	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - temp ill or incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank – deceased	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank – incarcerated or perm incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - left military or divorced after 1/31/04	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - not eligible for MHS on 1/31/04	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - other eligible	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - no reason	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
No return - temp ill or incapacitated	0 0.00%	0 0.00%	0 0.00%	1 0.00%	1 0.00%
No return - active refuser	5 0.01%	1 0.00%	2 0.00%	5 0.01%	13 0.03%
No return - deceased	0 0.00%	1 0.00%	9 0.02%	11 0.02%	21 0.04%
No return - incarcerated or perm incapacitated	1 0.00%	1 0.00%	2 0.00%	9 0.02%	13 0.03%
No return - left military or divorced after 1/31/04	4 0.01%	2 0.00%	3 0.01%	0 0.00%	9 0.02%
No return - not eligible on 1/31/04	0 0.00%	8 0.02%	9 0.02%	0 0.00%	17 0.03%
No return - other eligible	2 0.00%	0 0.00%	3 0.01%	1 0.00%	6 0.01%
No return - no reason given	16,198 32.40%	7,058 14.12%	4,175 8.35%	630 1.26%	28,061 56.12%
PND - no address remaining	1,414 2.83%	158 0.32%	243 0.49%	97 0.19%	1,912 3.82%
PND - address remaining	2,370 4.74%	998 2.00%	259 0.52%	23 0.05%	3,650 7.30%
Original Non-Locatable - no address at start	1,271 2.54%	326 0.65%	299 0.60%	138 0.28%	2,034 4.07%
Beneficiary writes and refuses participation	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Hospitalized - unknown if temp or perm incapacitated	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Blank - deployed	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
No return - deployed	67 0.13%	1 0.00%	1 0.00%	0 0.00%	69 0.14%
Total	25,681 51.36%	11,391 22.78%	9,548 19.10%	3,380 6.76%	50,000 100.00%

Note: This table does not include duplicate surveys.

The data in Tables 2.A.5.a-2.A.5.c displays the number of first and second surveys returned.

TABLE 2.A.5.a

RETURNED SURVEYS BY SURVEY TYPE – QUARTER I, 2004

Survey Indicator	First Survey	Second Survey	Total
Returned non-blank survey	10,668 76.94%	2,955 21.31%	13,623 98.26%
Returned non-blank duplicate survey	0 0.00%	242 1.75%	242 1.75%
Total	10,668 76.94%	3,197 23.06%	13,865 100.00%

Note: This table includes duplicate surveys.

TABLE 2.A.5.b

RETURNED SURVEYS BY SURVEY TYPE – QUARTER II, 2004

Survey Indicator	First Survey	Second Survey	Web Survey	Total
Returned non-blank survey	10,453 70.84%	2,245 15.21%	1,871 12.68%	14,569 98.73%
Returned non-blank duplicate survey	0 0.00%	85 0.58%	102 0.69%	187 1.27%
Total	10,453 70.84%	2,330 15.79%	1,973 13.37%	14,756 100.00%

Note: This table includes duplicate surveys.

TABLE 2.A.5.c

RETURNED SURVEYS BY SURVEY TYPE – QUARTER III, 2004

Survey Indicator	First Survey	Second Survey	Web Survey	Total
Returned non-blank survey	9,655 65.47%	2,906 19.71%	1,633 11.07%	14,194 96.26%
Returned non-blank duplicate survey	7 0.05%	391 2.65%	154 1.04%	552 3.74%
Total	9,662 65.52%	3,297 22.36%	1,787 12.12%	14,746 100.00%

Note: This table includes duplicate surveys.

B. QUARTER IV - BY SYNOVATE

1. Survey Operations Activities

Operational support for the Healthcare Survey of DoD Beneficiaries (HCSDB) involved three mailings to beneficiaries between October 19, 2004 and January 11, 2005. For each quarter, beginning 2005 Q1, Synovate will send four mailings.

The mailings include:

- Pre-Notification Letter – Letter of explanation encouraging participation (Sent by NRC on 9/01/2004)
- Questionnaire 1 – The survey, including a brief letter of explanation
- Postcard – A reminder to complete the survey and a thank you for completion
- Questionnaire 2 – The survey, including a brief letter of explanation

2. Survey Administration Timeline

File Receipt	N/A
File Diagnostic Report	N/A
NCOA Update	N/A
Pre-Notification *	9.1.04
STI-DEERS Update	10.19.04
Questionnaire 1	10.28.04
STI-DEERS Update	10.30.04
Postcard	11.17.04
STI-DEERS Update	11.17.04
Questionnaire 2	12.13.04
Close of Field	1.11.05
File to MPR	1.14.05
Final Report to DoD	1.26.05

3. Sample

Upon receipt of the sample, Synovate provides a brief File Diagnostic Report that outlines the number of variables and records. The report highlights any change in variables from the previous quarter and notes variables with missing values.

The Adult HCSDB is conducted quarterly on a sample of 50,000 beneficiaries. The Child HCSDB is conducted during the 3rd quarter of each calendar year and surveys 35,000 beneficiaries.

For the year 2004, quarter 4, the Department of Defense provided a supplemental sample of 5,700 records in addition to the standard 50,000.

4. Survey Processing

Synovate applies a Bar Code, Control Number (MIQ) and Password to each beneficiary upon receipt of the Sample. This system ensures that all data collected is aggregated and available throughout the survey lifecycle. Each of the identifying labels is detailed below:

Barcode

Digit 1 - Quarter Marker (1-4)

Digit 2 - Wave Marker (1-4)

Digit 3 - Study Marker (1=sample, 2=supplemental, 3=child)

Digits 4-8 - Sequential ID#

Control Number (MIQ) - 8-digit unique identifier
Digits 1-7 – Sequential ID #
Digit 8 – Check Digit

Password

Non-sequential 6-digit password (for online response access) – Password is unique across all Samples

5. Addresses

The HCSDDB is designed so that beneficiaries may receive up to four mailings. Synovate may collect up to eight addresses for each beneficiary in order to maximize the receipt rate for mailing.

The first available address in the following order was used for each mailing.

1. Respondent Updated
2. Residential Updated
3. NCOA
4. Original Residential
5. Sponsor Updated
6. Original Sponsor
7. Unit Updated
8. Original Unit

▪ STI-DEERS Addresses

In the initial sample file, STI provides up to three addresses for each beneficiary. Synovate considers these addresses to be Original Residential, Original Sponsor and Original Unit.

STI also provides updates on each of the three addresses prior to the questionnaire, postcard and 2nd questionnaire mailings. Synovate records these addresses as Residential Updated, Sponsor Updated, Unit Updated.

▪ NCOA Address

Upon receipt of the initial sample and prior to the pre-notification mailing, Synovate sends each address to a National Change of Address (NCOA) vendor for updating and hygiene services. The updated address returned by the vendor is marked as the NCOA address.

▪ Respondent Updates

Respondents were able to report address and status changes via telephone, voicemail, fax, and email. Addresses changes submitted by respondent were considered priority over any other address type.

▪ Address correction via USPS

The United States Postal Service provided address corrections on returned mail if available.

Table 2.B.1 gives the Address breakdown for each mailing by Beneficiary Category.

TABLE 2.B.1

FREQUENCY OF ADDRESS BY BENEFICIARY CATEGORY – SAMPLE

	Active Duty (ACT)	Dependent of Active Duty (DA)	Guard/ Reserve (GRD)	Dependent of Guard/ Reserve (DGR)	Retiree (RET)	Dependent of Retiree (DR)	Survivor (DS)	Other (OTH)	Unknown (Z)	Total
QUESTIONNAIRE 1										48056
NCOA	20946 43.59%	8750 18.21%	2468 5.14%	1636 3.4%	5459 11.36%	5781 12.03%	1019 2.12%	188 0.39%	1 0.00%	46248 96.24
Original Residential	1047 2.18%	286 0.60%	81 0.17%	28 0.06%	157 0.33%	131 0.27%	37 0.08%	7 0.01%	1 0.00%	1774 3.69%
Original Sponsor	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%
Original Unit	33 0.07%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	33 0.07
POSTCARD										43451
Updated Residential	1440 3.31%	441 1.01%	94 0.22%	34 0.08%	61 0.14%	64 0.15%	5 0.01%	2 0.00%	0 0.00%	2141 4.93%
NCOA	18639 42.90%	7682 17.68%	2216 5.10%	1479 3.40%	4033 9.28%	4708 10.84%	798 1.84%	171 0.39%	1 0.00%	39727 91.43%
Original Residential	921 2.12%	250 0.58%	77 0.18%	25 0.06%	135 0.31%	120 0.28%	29 0.07%	7 0.02%	0 0.00%	1564 3.60%
Original Sponsor	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.02%	0 0.00%	0 0.00%	0 0.00%	1 0.00%
Original Unit	18 0.04%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	18 0.04%
QUESTIONNAIRE 2										36255
Respondent Updated	796 2.20%	434 1.20%	57 0.16%	32 0.09%	53 0.15%	56 0.15%	10 0.03%	10 0.03%	0 0.00%	1448 3.99%
Updated Residential	2 0.01%	3 0.01%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	5 0.01
NCOA	1682 46.41%	6424 17.72%	1979 5.46%	1287 3.55%	2738 7.55%	3456 9.53%	509 1.40%	141 0.39%	1 0.00%	33362 92.02%
Original Residential	890 2.45%	218 0.60%	76 0.21%	19 0.05%	98 0.27%	100 0.28%	26 0.07%	4 0.01%	0 0.00%	1431 3.95%
Original Sponsor	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%
Original Unit	8 0.02%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	8 0.02%

2004 HEALTH CARE SURVEY OF DOD BENEFICIARIES

Frequency of Disposition by Beneficiary Category – Sample – A full definition of Disposition Codes are given below

	Active Duty (ACT)	Dependent of Active Duty (DA)	Guard/ Reserve (GRD)	Dependent of Guard/ Reserve (DGR)	Retiree (RET)	Dependent of Retiree (DR)	Survivor (DS)	Other (OTH)	Unknown (Z)	Total
RETURNED										14118
Completed (1)	3826 7.63%	2239 4.47%	500 1.00%	428 0.85%	3452 6.88%	2926 5.83%	602 1.20%	25 0.05%	0 0.00%	13998 27.91
Ineligible (2)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Temporarily ill or Incapacitated (3)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Deceased (4)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%
Incarcerated or Permanently Incapacitated (5)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	5 0.01%	2 0.00%	0 0.00%	0 0.00%	0 0.00%	7 0.00%
Left Military or divorced after 4.30.04, retired (6)	0 0.00%	1 0.00%	0 0.00%	1 0.00%	0 0.00%	2 0.00%	0 0.00%	0 0.00%	0 0.00%	4 0.00%
Not Eligible on 4.30.04 (7)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	2 0.00%	1 0.00%	0 0.00%	0 0.00%	3 0.00%
Other Eligible (8)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	2 0.00%	4 0.01%	1 0.00%	0 0.00%	0 0.00%	7 0.00%
No Reason (9)	38 0.08%	17 0.03%	10 0.02%	0 0.00%	12 0.02%	17 0.03%	3 0.01%	1 0.00%	0 0.00%	98 0.00%
NO RETURN										29418
Temporarily ill or Incapacitated (10)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%
Active Refusal (11)	3 0.01%	1 0.00%	1 0.00%	2 0.00%	3 0.01%	2 0.00%	1 0.00%	0 0.00%	0 0.00%	13 0.00%
Deceased (12)	2 0.00%	1 0.00%	0 0.00%	0 0.00%	7 0.01%	2 0.00%	4 0.02%	0 0.00%	0 0.00%	16 0.00%
Incarcerated or Permanently Incapacitated (13)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	4 0.01%	1 0.00%	1 0.00%	0 0.00%	0 0.00%	6 0.00%
Left Military or divorced After 4.30.04, retired (14)	0 0.00%	3 0.01%	0 0.00%	0 0.00%	0 0.00%	4 0.01%	0 0.00%	0 0.00%	0 0.00%	7 0.00%
Not Eligible on 4.30.04 (15)	0 0.00%	2 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	2 0.00%
Other Eligible (16)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	4 0.01%	1 0.00%	0 0.00%	0 0.00%	5 0.00%
No Reason (17)	15649 31.20%	5847 11.66%	1710 3.41%	1075 2.14%	1960 3.91%	2666 5.32%	366 0.73%	94 0.19%	1 0.00%	29368 58.56
PND										4209

2004 HEALTH CARE SURVEY OF DOD BENEFICIARIES

	Active Duty (ACT)	Dependent of Active Duty (DA)	Guard/ Reserve (GRD)	Dependent of Guard/ Reserve (DGR)	Retiree (RET)	Dependent of Retiree (DR)	Survivor (DS)	Other (OTH)	Unknown (Z)	Total
No Address Remaining (18)	198 0.39%	134 0.27%	33 0.07%	20 0.04%	98 0.20%	59 0.12%	49 0.10%	3 0.01%	0 0.00%	594 0.01%
Address Remains at Close of Field (19)	2130 4.25%	720 1.44%	161 0.32%	73 0.15%	104 0.21%	223 0.44%	32 0.06%	12 0.02%	0 0.00%	3455 0.07%
No Address at Start of Mailing (20)	107 0.21%	0 0.00%	8 0.02%	0 0.00%	22 0.04%	4 0.01%	19 0.04%	0 0.00%	0 0.00%	160 0.00%
MISCELLANEOUS										3
Written Refusal without Reason (21)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.00%
Ill or Incapacitated – Unsure whether Temporary or Permanent (22)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	2 0.00%	0 0.00%	0 0.00%	2 0.00%
DEPLOYED										2401
Returned Blank (23)	10 0.02%	0 0.00%	5 0.01%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	15 0.00%
No Return (24)	18 0.04%	1 0.00%	14 0.03%	2 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	35 0.00%
Deceased Indicated by STI-DEERS Update(25)	18 0.04%	5 0.01%	6 0.01%	2 0.00%	22 0.04%	15 0.03%	5 0.01%	0 0.00%	0 0.00%	73 0.00%
Not Eligible Indicated by STI-DEERS Update (26)	845 1.68%	411 0.82%	369 0.74%	271 0.54%	10 0.02%	113 0.23%	12 0.02%	247 0.49%	0 0.00%	2278 0.00%

a. Disposition Codes

- FLAG_FIN=1
Returned survey – survey was completed and returned.
- FLAG_FIN=2
Returned ineligible – survey was returned with at least one question marked and information that the beneficiary was ineligible. The information indicating ineligibility may have come by phone, fax, or the survey itself.
- FLAG_FIN=3
Returned blank – temporarily ill or incapacitated. Survey was returned blank along with information that the beneficiary was temporarily ill or incapacitated. These sample members were eligible.
- FLAG_FIN=4
Returned blank – deceased. Survey was returned blank along with information that the beneficiary was deceased. These sample members were ineligible.
- FLAG_FIN=5
Returned blank – incarcerated or permanently incapacitated. Survey was returned blank along with information that the beneficiary was incarcerated or permanently hospitalized. These sample members were ineligible.
- FLAG_FIN=6
Returned blank – left military or divorced after “sampling date”, retired. Survey was returned blank along with information that the beneficiary left the military after “sampling date”, divorced after “sampling date”, or retired. These sample members were eligible.
- FLAG_FIN=7
Returned blank – not eligible on “sampling date”. Survey was returned blank along with information that the beneficiary was not eligible for Military Health System Plan on “sampling date”. These sample members were ineligible.
- FLAG_FIN=8
Returned blank – other eligible. Survey was returned blank along with a reason given by the sample member. These sample members were eligible.
- FLAG_FIN=9
Returned blank – no reason. Survey was returned blank without an explanation. These sample members were eligible.
- FLAG_FIN=10
No return – temporarily ill or incapacitated. Survey was not returned and beneficiary was temporarily ill or incapacitated. These sample members were eligible.
- FLAG_FIN=11
No return – active refuser. Survey was not returned and beneficiary refused to take part in the survey. These sample members were eligible.
- FLAG_FIN=12
No return – deceased. Survey was not returned and beneficiary deceased. These sample members were ineligible.

- FLAG_FIN=13
No return – incarcerated or permanently incapacitated. Survey was not returned, beneficiary was incarcerated or permanently hospitalized. These sample members were ineligible.
- FLAG_FIN=14
No return – left military or divorced after “sampling date”, retired. Survey was not returned, beneficiary left service after “sampling date”, divorced after “sampling date”, or retired. These sample members were eligible.
- FLAG_FIN=15
No return – not eligible on “sampling date”. Survey was not returned, beneficiary was not eligible for Military Health System Plan on “sampling date”. These sample members were ineligible.
- FLAG_FIN=16
No return – other eligible. Survey was not returned, beneficiary gave other reason for not completing the survey. These sample members were eligible.
- FLAG_FIN=17
No return – no reason. Survey was not returned, beneficiary gave no reason.
- FLAG_FIN=18
PND – no address remaining. All addresses were attempted, mailing was returned PND.
- FLAG_FIN=19
PND – address remaining at the close of field. At the close of field, the last address used was found invalid, next available was not attempted.
- FLAG_FIN=20
Original Non-Locatable – no address at start of mailing. Substantially incomplete or blank address field before the survey was administered, no mailings attempted.
- FLAG_FIN=21
Beneficiary provides written documentation declining to participate but doesn’t specify a reason.
- FLAG_FIN=22
Beneficiary indicates they are hospitalized but without providing any way to determine whether incapacity is temporary or permanent. Therefore, eligibility determination cannot be made.
- FLAG_FIN=23
Returned blank – deployed. Survey was returned blank along with information that the beneficiary was deployed.
- FLAG_FIN=24
No return – deployed. Survey was not returned, beneficiary was deployed.
- FLAG_FIN=25
Deceased. Updating process identified beneficiary as deceased.
- FLAG_FIN=26
Ineligible. Updating process identified beneficiary as not eligible for Military Health System Plan.

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 2004 Adult HCSDDB consists of variables from various sources. When NRC (in Quarters I-III) and Synovate (in quarter IV) deliver the file to MPR after fielding the sample, the following types of variables are present:

- DEERS information on beneficiary group, social security number, sex, age, etc.
- Sampling variables used to place beneficiaries in appropriate strata
- Core and supplemental questionnaire responses
- NRC (in quarters I-III) and Synovate (in quarter IV) information from fielding the sample, such as scan date and flags developed during the fielding to assist us in determining eligibility

MPR removes all identifying information such as SSN so that respondents can not be identified and 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, MPR updated and cleaned the questionnaire responses using the coding scheme tables found in Appendix C. 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 3.1 lists all variables in the annual database by source and briefly describes these sources. For specific information on variable location within the database, refer to the “2004 Adult Health Care Survey of DoD Beneficiaries: Adult Codebook and User’s Guide.”

1. Data Sources

a. DEERS

DMDC provided the sampling frame to MPR 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

MPR 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 NRC (in quarters I-III) and Synovate (in quarter IV) are cleaned and recoded as necessary to ensure that responses are consistent throughout the questionnaire. The coding scheme tables found in Appendix C are the basis for insuring data quality.

d. Survey Fielding Variables

In the process of fielding the survey, NRC (in quarters I-III) and Synovate (in quarter IV) 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 C) 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

MPR 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 3.D.

g. Weights

MPR 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 3.E.

TABLE 3.1

VARIABLES IN THE 2004 ADULT HCSDB DATA FILE – QUARTERS I-IV

SAMPLING VARIABLES	
MPRID	- Unique MPR Identifier
SVCSMPL	- Branch of Service Sampling Variable
SEXSMPL	- Sex Sampling Variable
STRATUM	- Sampling STRATUM
CACSMPL	- Catchment Area
ENBGSMPL	- Enrollment by beneficiary category
MPCSMPL	- Military Personnel Category
NHFF	- Stratum Sample Size
SERVAREA	- Service Area
DCATCH	- Catchment Area
ENRID	- Enrollment DMIS ID
DMIS_ID	- DMIS ID
MSM	- Multiple Service Market Areas
D_FAC	- Facility Type Code
D_PAR	- DMIS Parent ID
D_HEALTH	- Health Service Region
TNEXREG	- TRICARE Next Generation of Contracts Region grouping
E1	- Eligibility indicator for period = 1
E2	- Eligibility indicator for period = 2
E3	- Eligibility indicator for period = 3
E4	- Eligibility indicator for period = 4
E5	- Eligibility indicator for period = 5
E6	- Eligibility indicator for period = 6
E7	- Eligibility indicator for period = 7
E8	- Eligibility indicator for period = 8
E9	- Eligibility indicator for period = 9
E10	- Eligibility indicator for period = 10
E11	- Eligibility indicator for period = 11
E12	- Eligibility indicator for period = 12
E13	- Eligibility indicator for period = 13
E14	- Eligibility indicator for period = 14
E15	- Eligibility indicator for period = 15
E16	- Eligibility indicator for period = 16
DEERS VARIABLES	
SERVAFF	- Service Affiliation
MRTLSTAT	- Marital Status
RACEETHN	- Race/Ethnic Code
PNSEXCD	- Person Gender
LEGDDSCD	- DDS Code
DAGEQY	- Age at time of data collection
PCM	- Primary Manager Code (Civilian or Military)
DBENCAT	- Beneficiary Category
DMEDELG	- Medical Privilege Code
DSPONSVC	- Derived Sponsor Branch of Service
MBRRELCD	- Member Relationship Code
MEDTYPE	- Medicare Type
PATCAT	- Aggregated Beneficiary Category
PNLCATCD	- Personnel Category Code (Duty Status)
FIELDAGE	- Age at start of fielding period
QUESTIONNAIRE RESPONSES	
H04001	- Are you the person listed on envelope
H04002A	- Health plan(s) covered: TRICARE Prime

- H04002C - Health plan(s) covered: TRICARE Ext/Std
- H04002F - Health plan(s) covered: MEDICARE
- H04002G - Health plan(s) covered: FEHBP
- H04002H - Health plan(s) covered: Medicaid
- H04002I - Health plan(s) covered: Civilian HMO
- H04002J - Health plan(s) covered: Other civilian
- H04002K - Health plan(s) covered: USFHP
- H04002L - Health plan(s) covered: Not sure
- H04002M - Health plan(s) covered: Veterans
- H04002N - Health plan(s) covered: TRICARE Plus
- H04002O - Health plan(s) covered: TRICARE For Life
- H04003 - Currently Covered Medicare Part A
- H04004 - Currently Covered Medicare Part B
- H04005 - Currently Covered Medicare Supplemental
- H04006 - Which health plan did you use most in the past 12 months?
- H04007 - Years in a row with health plan
- H04008 - Have one person you think of as personal doctor
- H04009 - Rating of your personal doctor or nurse
- H04010 - Had same personal Dr/nurse before joining health plan
- H04011 - Health plan: problem to get a personal doctor or nurse you are happy with
- H04012 - In last year: you or a doctor or nurse think you needed to see a specialist
- H04013 - In last year: how much of a problem to see a specialist you needed to see
- H04014 - In last year: did you see a specialist
- H04015 - Rating of specialist seen most often in last year
- H04016 - In last year: specialist saw was the same as personal doctor
- H04017 - In last year: called a doctor's office or clinic during regular office hours to get help or advice for yourself
- H04018 - In last year: when you called during regular office hours how often got help or advice you needed
- H04019 - In last year: have illness/injury/condition that needed care right away
- H04020 - In last year: when needed care right away for an illness or injury got care as soon as wanted
- H04021 - In last year: wait between trying to get care and actually seeing a provider for an illness or injury
- H04022 - In last year: made any appointment for regular or routine health care
- H04023 - In last year: how often made appointments for regular or routine health care as soon as you wanted
- H04024 - In last year: days between making an appointment for regular or routine care and actually seeing a provider
- H04025 - In last year: times went to an emergency room for own care
- H04026 - In last year: times went to a doctors office or clinic for yourself (not counting times went to an emergency room)
- H04027 - In last year: Did you/Dr believe you needed any care, tests, or treatment
- H04028 - In last year: problem to get necessary care
- H04029 - In last year: Need approval from health plan for any care, tests, or treatment
- H04030 - In last year: problem with delays in healthcare while waiting for approval from health plan
- H04031 - In last year: how often taken to exam room within 15 minutes of appointment
- H04032 - In last year: how often office staff at a doctor's office or clinic treat you with courtesy and respect
- H04033 - In last year: how often office staff at a doctor's office or clinic as helpful as expected
- H04034 - In last year: how often doctors or other health providers listen carefully to you
- H04035 - In last year: how often doctors or other health providers explain things in way you could understand
- H04036 - In last year: how often doctors or other health providers show respect for what you had to say

- H04037 - In last year: how often doctors or other health providers spend enough time with you
- H04038 - Rating of all healthcare in last year
- H04039 - In last year: facility used most for health care
- H04040 - In last year: sent in any claims to your health plan
- H04041 - In last year: health plan handled claims in a reasonable time
- H04042 - In last year: how often health plan handled claims correctly
- H04043 - In last year: before went for care knew amount to pay
- H04044 - In last year: look for any information in written materials/internet on how health plan works
- H04045 - In last year: problem to find or understand information in the written materials/internet
- H04046 - In last year: called health plan's customer service to get information or help
- H04047 - In last year: problem to get the help you needed when called health plan's customer service
- H04048 - Called or written health plan with a complaint or problem
- H04049 - How long for health plan to resolve complaint
- H04050 - Complaint or problem settled to satisfaction
- H04051 - How long waiting for health plan to resolve complaint
- H04052 - In last year: have to fill out paperwork for your health plan
- H04053 - In last year: how much problem with paperwork for your health plan
- H04054 - Rating of all experience with health plan
- H04055 - In next year: likely to disenroll in TRICARE Prime
- H04056 - Blood pressure: when last reading
- H04057 - Blood pressure: know if blood pressure is too high or not
- H04058 - When did you last have a cholesterol screening
- H04059 - When did you last have a flu shot
- H04060 - Smoked at least 100 cigarettes in life
- H04061 - Smoke everyday, some days, or not at all
- H04062 - How long since you quit smoking
- H04063 - Last year: number of visits advised to quit smoking
- H04064 - Last year: number of visits medication was recommended or discussed to assist with quitting smoking
- H04065 - Last year: number of visits recommended or discussed methods and strategies to assist quitting smoking
- H04066 - Are you male or female
- H04067 - Male: Last prostate disease exam or blood test
- H04068 - Female: Last have a Pap smear test
- H04069 - Female: Are you under age 40
- H04070 - Female age 40 and up: Last time breasts checked mammography
- H04071 - Female age 40 and up: Last time breast exam by professional
- H04072 - Female: Been pregnant in last year or pregnant now
- H04073 - Pregnant female: In what trimester is your pregnancy
- H04074 - Pregnant female: Trimester first received prenatal care
- H04075 - In general how would you rate your overall health
- SRHGTF - Height without shoes (feet)
- SRHGTI - Height without shoes (inches)
- SRWGT - Weight without shoes
- H04076 - Limited in any way in any activities because of any impairment or health problem
- H04077 - Last 30 days: Number of Days when your physical health not good
- H04078 - Last 30 days: Number of Days when your mental health not good
- H04079 - Last 30 days: Number of Days when poor physical/mental health kept you from doing usual activities
- H04080 - Last 30 days: Number of Days when pain made it hard to do your usual activities
- H04081 - Last 30 days: Number of Days when you have felt sad, blue, or depressed

H04082	- Last 30 days: Number of Days when you have felt worried, tense or anxious
H04083	- Last 30 days: Number of Days when you did not get enough rest or sleep
H04084	- Last 30 days: Number of Days when you have felt very healthy and full of energy
H04085	- Are you Spanish/Hispanic/Latino
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 Islanders
SRAGE	- What is your age now?
S04F01	- Miltry hosp: Workers use best possible methods to ensure patient safety
S04F02	- Miltry hosp surgical/diagnostic procedure: confdnt won't be accidentally injured/infected
S04F03	- Miltry hosp: Confident will get right drugs/dosage
S04F04	- Miltry hosp: Dr/Nur/Phrm get support they need to keep patients safe
S04F05	- Miltry pharm: Confident will get right drugs/dosage
S04F06	- Miltry pharm: Workers use best methods of patient safety
S04F07	- Miltry facility: Confident test will be correctly performed, analyzed, and reported
S04F08	- Miltry hosp/clinic: Confident Dr/Nur will examine carefully and thoroughly
S04F09	- In last year: Safety at military hospitals, clinics, pharmacies gotten better/worse
S04V01	- In last year: Amount of healthcare from TRICARE civilian network(TCN)
S04V02	- In last year: Problem getting wanted healthcare from TCN
S04V04	- In last year: Problem finding convenient TCN lab or x-ray facility
S04V05	- In last year: Learn physician whom you wanted to see left TCN
S04V06	- In last year: Problem finding convenient doctor from TCN
S04V07	- In last year: Problem finding specialist in Civilian network
S04C01	- General Doctor, specialist, physician assistant, or nurse
S04C02	- Months/years been going to personal Doctor
S04C03	- Physical or mental condition that interferes with your work
S04C04	- Doctor undrstnds how your health problems affect your daily life
S04C05	- In last year: # of times you went to a specialist
S04C06	- In last year were any decisions made about your health care
S04C07	- In last year: involved as much as you wanted with your health care decisions
S04C08	- In last year: how much of a problem to agree on best care
S04C09	- In last year: did you need special medical equipment
S04C10	- In last year: How much of a problem was it to get special medical equipment
S04C11	- In last year: did you need special therapy
S04C12	- In last year: how much of a problem was it to get special therapy
S04C13	- In last year: did you need home health care or assistance
S04C14	- In last year: how much of a problem to get care or assistance needed
S04C15	- Need help with personal care needs
S04C16	- Need help with routine needs
S04C17	- Physical or mental condition that interferes with independence
S04C18	- Rating of equipment, services, or help provided
S04C19	- In last year: patient overnight or longer
S04C20	- Have a Physical or mental condition that has lasted 3 months
S04C21	- In last year: seen Doctor more than twice for condition lasting > 3 months
S04C22	- Taking prescription medications for at least 3 months
S04R01	- Are you enrolled in TRICARE Prime
S04R02	- Enrolled to a military/civilian PCM
S04R03	- In last year: Referred to Specialist by PCM
S04R04A	- In last year: Called the appointment center
S04R04B	- In last year: Called an MTF
S04R04C	- In last year: Called the doctor's office
S04R04D	- In last year: Asked my PCM to make the appointment

S04R04E	- In last year: Other
S04R05	- In last year: Problem to see specialist
S04R06	- In last year: Referred to any civilian specialist
S04R07	- In last year: Longest wait to see a civilian specialist
S04R08	- In last year: Longest travel time to see civilian specialist
S04R09	- In last year: PCM learn about care from civilian specialist
S04R10	- In last year: PCM know enough about care from civilian specialist
S04R11	- In last year: Referred to specialist at an MTF
S04R12	- In last year: Longest wait to see a MTF specialist
S04R13	- In last year: Longest travel time to see MTF specialist
S04R14	- In last year: PCM learn about care from MTF specialist
S04R15	- In last year: PCM know enough about care from MTF specialist
S04G02	- Before family member mobilized:Covered by civilian health insurance
S04G03	- Reservist's employer pays civilian health insurance premium
S04G04	- Describe coverage:TRICARE/Civilian
S04G05	- Problem getting TRICARE benefits information when reservist in family was mobilized
S04G06	- Personal Dr/Nurse a member of TRICARE's civilian network
S04G07	- Since reservist mobilized, how difficult is it to see personal doctor
S04G08	- Since reservist mobilized, how difficult is it to see specialist
S04G09	- Before current mobilization:covered by civilian health insurance
S04G10	- Kept civilian insurance coverage
S04G11	- Your employer pays all or part civilian health insurance premium
S04G12	- For which operation are you or reservist family member mobilized
S04G13	- When were you or reservist family member mobilized for this operation
S04G14	- How long did initial mobilization orders state mobilization would last
S04G15	- Member of/In family of someone in National Guard/Reserve
S04G16	- Reservist family member currently mobilized
S04G17	- Currently mobilized member of National Guard/Reserve

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
QUARTER	- Survey Quarter
TRICKDUP	- Ontime and after fielding period indicator
WEB	- Web survey indicator

CODING SCHEME FLAGS AND COUNTS

N1	- Coding Scheme Note 1
N2	- Coding Scheme Note 2
N2A	- Coding Scheme Note 2A
N3	- Coding Scheme Note 3
N4	- Coding Scheme Note 4
N5	- Coding Scheme Note 5
N5A	- Coding Scheme Note 5A
N6	- Coding Scheme Note 6
N7	- Coding Scheme Note 7
N8	- Coding Scheme Note 8
N9	- Coding Scheme Note 9
N10	- Coding Scheme Note 10
N11	- Coding Scheme Note 11
N11A	- Coding Scheme Note 11A
N11B	- Coding Scheme Note 11B
N11C	- Coding Scheme Note 11C
N11D	- Coding Scheme Note 11D
N11E	- Coding Scheme Note 11E

N11F	- Coding Scheme Note 11F
N11G	- Coding Scheme Note 11G
N11H	- Coding Scheme Note 11H
N11I	- Coding Scheme Note 11I
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
N18A	- Coding Scheme Note 18A
N18B	- Coding Scheme Note 18B
N18C	- Coding Scheme Note 18C
N18D	- Coding Scheme Note 18D
N18E	- Coding Scheme Note 18E
N18F	- Coding Scheme Note 18F
N18G	- Coding Scheme Note 18G
N19	- Coding Scheme Note 19
N20A	- Coding Scheme Note 20A
N20B	- Coding Scheme Note 20B
N20C	- Coding Scheme Note 20C
N21	- Coding Scheme Note 21
N22	- Coding Scheme Note 22
N23	- Coding Scheme Note 23
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_8	- Count of: Multiple response error
MISS_9	- Count of: No response - invalid skip
MISS_TOT	- Total number of missing responses
CONSTRUCTED VARIABLES	
XTNEXREG	- TRICARE Next Generation of Contracts Region grouping
XBMI	- Body Mass Index
XBMICAT	- Body Mass Index Category
XENRLLMT	- Enrollment in TRICARE Prime
XENR_PCM	- Enrollment by PCM type
XINS_COV	- Insurance Coverage
XREGION	- Region
XCATCH	- XCATCH - Catchment Area (Reporting)
CONUS	- CONUS/OCONUS Indicator
OUTCATCH	- Out of Catchment Area Indicator
XSEX	- Male or Female (Recode)
XBNFGRP	- Constructed Beneficiary Group
KDISENRL	- Intention to disenroll
KMILOFFC	- Office wait of 15 min or more at Military facility
KCIVOFFC	- Office wait of 15 min or more at Civilian facility
KBGPRB1	- Big problem getting referrals to specialist
KBGPRB2	- Big problem getting necessary care
KMILOPQY	- Outpatient visits to Military facility
KCIVOPQY	- Outpatient visits to Civilian facility
KCIVINS	- Beneficiary covered by civilian insurance
KBRSTCR	- Women age 40 and over ever had mammogram and breast exam
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 know results
HP_FLU	- Age 65 and older flu shot in last 12 months
HP_PROS	- Men age 50 or over prostate exam in last 12 months
HP_BRST	- Women age 40 and over breast exam in last 12 months
HP_CHOL	- Cholesterol screening in last 5 years
HP_SMOKE	- Advised to quit smoking in last 12 months
HP_SMOKH	- Smoker under HEDIS definition
HP_CESS	- Had smoking cessation counseling
ADJ_CELL	- Adjusted STRATUM cell

WEIGHTS

BWT	- Basic Sampling Weight
WRWT	- Final Quarterly Weight
CWRWT	- Combined Annual Final Weight

2. Variable Naming Conventions

To preserve continuity with survey data from previous years, MPR followed the same variable naming conventions for the core questions used for the 1996, 1997, 1998, 1999, 2000, 2002, and 2003 survey data. Variable naming conventions for the 2004 Adult HCSDB core and supplemental questions, shown in Table 3.2 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 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”.

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 2004 conventions for missing variables are the same as the 2003 conventions. All missing value conventions used in the 2004 HCSDB are shown in Table 3.3

TABLE 3.2

NAMING CONVENTIONS FOR 2004 HCSDB VARIABLES – QUARTER I
(VARIABLES REPRESENTING SURVEY QUESTIONS)

1 st Character: Survey Type	2 nd – 3 rd Characters: Survey Year	4 th – 6 th Characters: Question #	Additional Characters: Additional Information
<p>H= Health Beneficiaries (18 and older, Adult Questionnaire)</p> <p>-----</p> <p>S = Supplemental Question</p>	<p>04</p>	<p>001 to 085</p> <p>-----</p> <p>Quarter I F01-F09 – Supplemental questions about patient safety at military facilities. V01-V02, V04-V07 – Supplemental questions about TRICARE’s civilian network.</p> <p>Quarter II C01-C22 – Supplemental questions about beneficiaries’ chronic conditions. V01-V02, V04-V07 – Supplemental questions about TRICARE’s civilian network.</p> <p>Quarter III R01-R15 – Supplemental questions about referrals to specialists. V01-V02, V04-V07 – Supplemental questions about TRICARE’s civilian network.</p> <p>Quarter IV G02-G17 – Supplemental questions about reservists. V01-V02, V04-V07 – Supplemental questions about TRICARE’s civilian network.</p>	<p>A to O are used to label responses associated with a multiple response question</p> <p>_O denotes an original version of a recoded variable</p> <p>-----</p>

1 st 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
HP=Constructed <i>Healthy People 2010</i> 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)

TABLE 3.3

CODING OF MISSING DATA AND "NOT APPLICABLE" RESPONSES

ASCII or Raw Source Data	Edited and Cleaned SAS Data	Description
Numeric	Numeric	
-9	.	No response
-8	.A	Multiple response error
-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
- Checks for multiple responses to any question that should have one response
- 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

NRC (in quarters I-III) and Synovate (in quarter IV) spot checked the scanned results from the original survey to verify the accuracy of the scanning process and made any necessary corrections by viewing the returned survey.

2. Additional NRC & Synovate Editing and Coding

In preparing the database for MPR, NRC (in quarters I-III) and Synovate (in quarter IV) used variable names and response values provided by MPR in the annotated questionnaire (see Appendix A). NRC (in quarters I-III) and Synovate (in quarter IV) delivered to MPR a database in SAS format. In this database, any questions with no response were encoded with a SAS missing value code of '.'. Also, as part of the scanning procedure, NRC (in quarters I-III) and Synovate (in quarter IV) entered the SAS missing value of '.A' for any question with multiple responses where a single response was required.

3. Duplicate or Multiple Surveys

At this stage, NRC (in quarters I-III) and Synovate (in quarter IV) delivered to MPR 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 3.C.

4. Removal of Sensitive or Confidential Information

The file that MPR received from NRC (in quarters I-III) and Synovate (in quarter IV) 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

MPR 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. MPR 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

MPR's plan for data quality for each quarter is found in the 2004 Adult Coding Scheme. It contains detailed instructions for all editing procedures used to correct data inconsistencies and errors. The Coding Scheme tables are found in Appendix C. 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 program implementing the coding scheme is found in Appendix G.

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, active duty status, 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 rather than the recoded self-reported information 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 will be checked to determine which are most accurate, given the answers to other questions. Questions that are 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 2004 Adult Coding Scheme (see Appendix C) 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

NRC (in quarters I-III) and Synovate (in quarter IV) initially encoded any question with missing responses to a SAS missing value code of ' '. After verifying skip patterns, MPR 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 multiple responses, incomplete grids, and questions that should not have been answered is shown in Table 3.3.

Occasionally, missing questionnaire responses can be inferred by examining other responses. For example, if a respondent fails to answer H04017 about getting advice or help over the phone from his/her doctor's office or clinic, but goes on to answer how often he/she received help or advice,

then we assume that the answer to H04017 should have been “yes”. Using this technique, we recoded some missing questionnaire responses to legitimate responses.

d. Multiple Response Errors

If a respondent gives more than one answer to a question that should have only one answer, the response to that question was coded with a SAS missing value of ‘.A’.

Using an approach similar to that used for missing values, we examined other questionnaire responses in an attempt to infer what the respondent intended for those questions with multiple marks. For example, if there are multiple responses to H04017 “In the last 12 months, did you call a doctor’s office or clinic *during regular office hours* to get help or advice *for yourself?*” and the response to H04018 indicates that the respondent usually got the medical advice they needed for themselves, we assume that the response to H04017 should have been “yes”.

e. 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

MPR 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 C) 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, MPR 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. MPR 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 NRC (in quarters I-III) and Synovate (in quarter IV) for each sampled beneficiary. This information is contained in the FLAG_FIN variable which is described in Table 3.4

TABLE 3.4
FLAG_FIN VARIABLE FOR 2004 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	----
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. Information came in by phone	Ineligible
14	No return	Left military or divorced after reference date, or retired. Information came in by phone	Eligible
15	No return	Not eligible on reference date. Information came in by phone	Ineligible
16	No return	Other eligible. Information came in by phone	Eligible
17	No return	No reason	---
18	PND	No address remaining	---
19	PND	Address remaining at the close of field	---
20	Original Non-Locatable	No address at start of mailing	---
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	---
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 3.4, 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, 26 key questions were chosen. The key survey variables are: H04006, H04008, H04009, H04010, H04011, H04012, H04014, H04015, H04017, H04018, H04019, H04020, H04022, H04025, H04026, H04028, H04031, H04038, H04039, H04044, H04046, H04052, H04054, H04075, SREDA, H04085. If thirteen or more of these key items are completed, then the questionnaire can be counted as complete.

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

- G3-1. Returned ineligible
- G3-2. Ineligible at time of STI address update

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 4.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 336 duplicate questionnaires in the data set NRC (in quarters I-III) and Synovate (in quarter IV) 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 = 3, i.e., ineligible), then we regarded the questionnaire as being ineligible.

Only beneficiaries with FNSTATUS = 11 were retained. All other records were dropped. In Quarters I-IV, we retained 56,687 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 3.1 there is a list of all constructed variables for 2004. 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 G.

1. Demographic Variables

a. Region (XREGION)

Catchment area codes (CACSMPL) are used to classify beneficiaries into specific regions. 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, 9901 ) THEN XREGION= 1;
```

```

ELSE IF CACSMPL IN (0089, 0090, 0091, 0092, 0120,
                    0121, 0122, 0124, 0335, 0378, 0387, 0432,
                    0433, 0508, 7143, 7286, 7294, 9902      ) THEN XREGION= 2;
ELSE IF CACSMPL IN (0039, 0041, 0045, 0046, 0047,
                    0048, 0049, 0050, 0051, 0101,
                    0103, 0104, 0105, 0337, 0356,
                    0422, 0511, 9903      ) THEN XREGION= 3;
ELSE IF CACSMPL IN (0001, 0002, 0003, 0004, 0038,
                    0042, 0043, 0073, 0074, 0107,
                    0297, 7139, 9904      ) 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, 0248, 5205, 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= .;

```

b. Continental United States (CONUS)

XREGION is used to classify beneficiaries either in the continental United States (CONUS) or overseas (OCONUS).

Assign indicator of CONUS based on XREGION. CONUS stands for Contential United States but it includes both Alaska and Hawaii.

```

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

```

c. TRICARE Next Generation of Contracts Region (XTNEXREG)

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

```

Assign indicator of XTNEXREG based on XREGION.
IF XREGION IN (1,2,5) THEN XTNEXREG=1;           /* North */
ELSE IF XREGION IN (3,4,6) THEN XTNEXREG=2;     /* South */
ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG=3; /* West */
ELSE IF XREGION IN (13,14,15) THEN XTNEXREG=4;  /* Other */

```

d. Out of Catchment Area (OUTCATCH)

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

```

Assign indicator of OUTCATCH based on CACSMPL.
/* 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 */

```

e. Gender of Beneficiary (XSEXA)

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

```

/** Note 20 - gender H04066, SEX, H04067, H04068--H04074, XSEXA */
/* 1/21/98 use SRSEX & responses to gender specific questions
   if there is discrepancy between SRSEX and SEX */
/* set imputed MALE, FEMALE based on gender specific questions */

```

```

ARRAY fmaleval H04068 H04069 H04070 H04071 H04072 H04073 H04074;

```

```

IF H04067 > 0 THEN MALE=1; /* prostate */
ELSE MALE = 0;
cntfemale=0;
DO OVER fmaleval; /* mammogram/pap smear/PREGNANT*/
  IF fmaleval>0 THEN cntfemale=cntfemale+1;
END;
IF cntfemale>0 THEN FEMALE=1;
ELSE FEMALE = 0;

```

```

IF H04066=. OR H04066=.A THEN DO;
  IF (SEX='F' AND MALE AND FEMALE) THEN DO;
    N20a=1;
    XSEXA=2;
    END;
  ELSE IF (SEX='F' AND MALE=0 AND FEMALE=0) THEN DO;
    N20a=2; XSEXA=2;
    END;
  ELSE IF (SEX='M' AND MALE AND FEMALE) THEN DO;
    N20a=3;
    XSEXA=1;
    END;
  ELSE IF (SEX='M' AND MALE=0 AND FEMALE=0) THEN DO;
    N20a=4;
    XSEXA=1;
    END;
  ELSE IF MALE AND NOT FEMALE THEN DO;
    N20a=5;
    XSEXA=1;
    END;

```

```
ELSE IF FMALE AND NOT MALE THEN DO;
N20a=6;
XSEXA=2;
END;
ELSE IF (SEX='Z' AND MALE AND FMALE) THEN DO;
N20a=7;
XSEXA=.;
END;
ELSE IF (SEX='Z' AND MALE=0 AND FMALE=0) THEN DO;
N20a=8;
XSEXA=.;
END;
END;
ELSE IF (H04066=1) THEN DO;
IF MALE AND NOT FMALE THEN DO;
N20a=9;
XSEXA=1;
END;
ELSE IF NOT MALE AND FMALE THEN DO;
IF SEX='F' THEN DO;
N20a=10;
XSEXA=2; END;
ELSE DO;
N20a=11;
XSEXA=1;
END;
END;
ELSE IF MALE AND FMALE THEN DO;
N20a=12;
XSEXA=1;
END;
ELSE IF MALE=0 AND FMALE=0 THEN DO;
N20a=13;
XSEXA=1;
END;
END;
ELSE IF (H04066=2) THEN DO;
IF NOT MALE AND FMALE THEN DO;
N20a=14;
XSEXA=2;
END;
ELSE IF MALE AND NOT FMALE THEN DO;
IF SEX='M' THEN DO;
N20a=15;
XSEXA=1;
END;
ELSE DO;
N20a=16;
XSEXA=2;
END;
END;
ELSE IF MALE AND FMALE THEN DO;
N20a=17;
XSEXA=2;
END;
ELSE IF MALE=0 AND FMALE=0 THEN DO;
N20a=18;
```

```

XSEXA=2;
END;
END;

```

f. Beneficiary Group (XBNFGRP)

We redefined beneficiary groups to exclude active duty personnel and 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 */*

```

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;

```

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 18 <= FIELDAGE < 65 THEN DO;
  IF ENBGSMPL = 1 THEN XENRLLMT = 1;          /* Active duty (<65) */
  ELSE IF ENBGSMPL IN (2, 3, 5, 6) THEN XENRLLMT = 2; /* Non-active duty enrolled (<65)*/
  ELSE IF ENBGSMPL IN (4, 7) THEN XENRLLMT = 3; /* Not Enrolled (<65)*/
END;
ELSE IF FIELDAGE >= 65 THEN DO;
  IF ENBGSMPL = 10 THEN XENRLLMT = 4;        /* Not Enrolled (65+)*/
  IF ENBGSMPL 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 'other enrollees' 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 six 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 18 <= 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) 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;

c. Most-Used Health Plan (XINS_COV)

The respondent's most-used health plan comes directly from Question 6 (unless the respondent is active duty) and the respondent's age. All active duty personnel are automatically enrolled in Prime. The eight 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)
- . = Unknown

/ XINS_COV--INSURANCE COVERAGE */*

IF XENRLLMT = 1 THEN XINS_COV = 1; */* Prime <65-Active Duty */*

ELSE IF 18 <= FIELDAGE < 65 AND H04006 IN (1) THEN XINS_COV = 2; */* Prime <65-Non-active Duty */*

ELSE IF H04006 = 3 THEN XINS_COV = 3; */* Standard/Extra */*

ELSE IF H04006 = 11 THEN XINS_COV = 7; */* Plus and Medicare */*

ELSE IF H04006 = 4 THEN XINS_COV = 4; */* Medicare*/*

ELSE IF H04006 IN (5,6, 7, 8, 9) THEN XINS_COV = 5; */* Other civilian health insurance*/*

ELSE IF H04006 = 10 THEN XINS_COV = 8; */* Veterans Administration (VA) */*

ELSE IF (FIELDAGE >= 65 AND XENRLLMT = 5 and H04006 = 1) THEN XINS_COV = 6; */* Prime, >= 65 */*

ELSE IF H04003=1 AND H04004=1 AND H04006 NE .N THEN XINS_COV = 4;

/* NEW Q2 Medicare/Medicaid */

d. Types of Coverage (KCIVINS)

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

- Is the respondent covered by Civilian insurance (KCIVINS)

This variables has the following values:

- 1 = Yes
- 2 = No
- . = Unknown

```
/* KCIVINS--IS BENEFICIARY COVERED BY PRIVATE CIVILIAN INSURANCE */
IF H04002G=1 OR H04002I=1 OR H04002J=1 THEN KCIVINS=1; /* YES
*/ /*NJ_Q2*/
ELSE KCIVINS=2; /* NO */
```

3. Satisfaction Measures

a. Enrollment Intentions (KDISENRL)

If a respondent is enrolled in TRICARE Prime, he or she is asked about the likelihood of disenrolling (H04055). A binary variable is created to group the responses to the enrollment questions into these categories:

- 1 = response of likely or very likely
- 2 = all other valid responses
- . = missing response

```
/* KDISENRL--INTENTION TO DISNEROLL */
IF H04055 IN (4, 5) THEN KDISENRL = 1; /* Yes */
ELSE IF H04055 IN (1, 2, 3, .D) THEN KDISENRL = 2; /* No */
```

4. Access to Care (KMILOFFC, KCIVOFFC, KBGPRB1, KBGPRB2)

Some of the survey questions on access relate to a TRICARE performance standard. For these questions, we constructed binary variables, separately for beneficiaries using military and civilian facilities, to approximate the TRICARE standard. Table 3.5 presents those standards that were analyzed in the reports. The new variables have the following values:

- 1 = Standard was met
- 2 = Standard was not met
- . = Missing response

TABLE 3.5

TRICARE STANDARDS FOR ACCESS

Access Measure	TRICARE Standard	Variable Name	Relevant Question
Waiting Room Wait	Within 15 minutes	KMILOFFC, KCIVOFFC	H04031

```

/* KMILOFFC--OFFICE WAIT OF MORE THAN 15 MINUTES AT MILITARY FACILITES
   KCIVOFFC--OFFICE WAIT OF MORE THAN 15 MINUTES AT CIVILIAN FACILITES */
IF H04039 = 1 THEN DO;           /* Military */
  IF H04031 IN (1,2) THEN KMILOFFC = 1;   /* Yes */
  ELSE IF H04031 IN (3,4) THEN KMILOFFC = 2; /* No */
END;
ELSE IF H04039 IN (2, 3, 4) THEN DO;     /* Civilian */
  IF H04031 IN (1,2) THEN KCIVOFFC = 1;   /* Yes */
  ELSE IF H04031 IN (3,4) THEN KCIVOFFC = 2; /* No */
END;

```

H04013 asks how much of a problem, if any, it was to get a referral to a specialist. The responses to this question are regrouped by a binary variable KBGPRB1. KBGPRB1 looks at these two categories:

1 = Those who reported a “big problem”
 2 = Those who reported not a “big problem”
 . = Missing response

```

/* KBGPRB1--BIG PROBLEM GETTING REFERRALS TO SPECIALISTS */
IF H04013 = 1 THEN KBGPRB1 = 1;           /* YES */
ELSE IF H04013 IN (2,3) THEN KBGPRB1 = 2; /* NO */

```

Similarly, variable KBGPRB2 was constructed. H04028 asks about how much of a problem, if any, it was to get the care you or a doctor believed necessary. The responses to this question are regrouped by a binary variable KBGPRB2. KBGPRB2 looks at these two categories:

1 = Those who reported a “big problem”
 2 = Those who reported not a “big problem”
 . = Missing response

```

/* KBGPRB2--BIG PROBLEM GETTING NECESSARY CARE */
IF H04028 = 1 THEN KBGPRB2 = 1;           /* YES */
ELSE IF H04028 IN (2,3) THEN KBGPRB2 = 2; /* NO */

```

5. Preventive Care (KBRSTCR, HP_PRNTL, HP_MAMOG, HP_MAM50, HP_PAP, HP_BP, HP_FLU, HP_PROS, HP_CHOL, HP_SMOKE, HP_BRST HP_SMOKH, HP_CESS)

As in some of the access analyses, preventive care analyses incorporated either a TRICARE standard or a federal Healthy People 2010 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 3.6 for the list of the variables developed for analysis of preventive care; these variables will be compared to the TRICARE standard or Healthy People 2010 Goal. The new 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 3.6
PREVENTIVE CARE STANDARDS

Preventive Care Delivered	Question Number – Q1	Variable Name	Received Service In Recommended Time Period (Numerator)	Population Involved (Denominator)	Standard
Blood Pressure Check	56&57	HP_BP	Number with care in the past 24 months and know the results	Adults	95% within past 2 years
Cholesterol Screening	48	HP_CHOL	Number with care in the past 60 months	Adults	80% in the past 60 months
Flu Shot	59	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	68	HP_PAP	Number with care in the past 36 months	Adult females	90% in the past 36 months
Mammography	70	HP_MAMOG	Number with care in the past 24 months	Females age 40 and over	70% in the past 24 months
Mammography	70	HP_MAM50	Number with care in the past 24 months	Females age 50 and over	70% in the past 24 months
Breast Exam	71	HP_BRST	Number with care in the past 12 months	Females age 40 and over	60% in the past 12 months
Prostate Exam	67	HP_PROS	Number with care in the past two years	Males age 50 and over	All males age 50 and over an annual exam and PSA blood test ¹
Smoking Counseling	63	HP_SMOKE	Number with care in the past 12 months	All current adult smokers and those who quit smoking within the past year	None
Prenatal Care	74	HP_PRNTL	Number with care in the first trimester	Currently pregnant adult females and all adult females who were pregnant in the past 12 months, excluding those less than 3 months pregnant who haven't received care	90% had care in first trimester

¹ Not in Healthy People 2010 standards

```

/* KBRSTCR--WOMEN 40>=, EVER HAD MAMMOGRAM & EVER HAD BREAST EXAM */
IF XSEXA = 2 AND FIELDAGE >= 40 THEN DO;
  IF (H04070 IN (5, 4, 3, 2) AND H04071 IN (5, 4, 3, 2)) THEN KBRSTCR = 1; /* Yes */
  ELSE IF (H04070 = 1 OR H04071=1) THEN KBRSTCR = 2; /* No */
END;

```

```

/* HP_PRNTL--IF PREGNANT LAST YEAR, RECEIVED PRENATAL CARE IN 1ST TRIMESTER */
IF H04072 IN (1,2) THEN DO; /* Pregnant in last 12 months */
  IF H04074 = 4 THEN HP_PRNTL = 1; /* Yes */
  ELSE IF (H04073 = 1 AND H04074 = 1) THEN HP_PRNTL = .; /* <3 months pregnant now */
  ELSE IF H04074 IN (1,2,3) THEN HP_PRNTL = 2; /* No */
END;

```

```

/* HP_MAMOG--FOR WOMEN AGE 40 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS */
IF XSEXA = 2 AND FIELDAGE >= 40 THEN DO;
  IF H04070 IN (5, 4) THEN HP_MAMOG = 1; /* Yes */

```

```
ELSE IF H04070 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 FIELDAGE >= 50 THEN DO;
  IF H04070 IN (5, 4) THEN HP_MAM50 = 1; /* Yes */
  ELSE IF H04070 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 H04068 IN (4, 5) THEN HP_PAP = 1; /* Yes */
  ELSE IF H04068 IN (1, 2, 3) THEN HP_PAP = 2; /* No */
END;

/* HP_BP--HAD BLOOD PRESSURE SCREENING IN LAST 2 YEARS AND KNOW RESULT */
IF H04056 IN (2,3) AND H04057 IN (1,2) THEN HP_BP = 1; /* Yes */
ELSE IF H04056 = 1 THEN HP_BP = 2; /* No */
ELSE IF H04056 < 0 OR H04057 < 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 FIELDAGE >= 65 THEN DO;
  IF H04059 = 4 THEN HP_FLU = 1; /* Yes */
  ELSE IF H04059 IN (1, 2, 3) THEN HP_FLU = 2; /* No */
END;

/* HP_PROS--FOR MEN AGE 50 AND OVER, HAD PROSTATE EXAM W/IN PAST 12
MONTHS */
IF XSEXA = 1 AND FIELDAGE >= 50 THEN DO;
  IF H04067 = 5 THEN HP_PROS = 1; /* Yes */
  ELSE IF H04067 IN (1, 2, 3, 4) THEN HP_PROS = 2; /* No */
END;

/* HP_CHOL--HAD CHOLESTEROL SCREENING IN PAST 5 YEARS */
IF H04058 IN (3, 4, 5) THEN HP_CHOL = 1; /* Yes */
ELSE IF H04058 IN (1, 2) THEN HP_CHOL = 2; /* No */

/* HP_SMOKE--ADVISED TO QUIT SMOKING IN PAST 12 MONTHS */
IF H04063 IN (2, 3, 4, 5) THEN HP_SMOKE = 1; /* Yes */
ELSE IF H04063 = 1 THEN HP_SMOKE = 2; /* No */

/* HP_BRST--BREAST EXAM IN PAST 12 MONTHS */
IF XSEXA=2 AND FIELDAGE >= 40 THEN DO;
  IF H04071 = 5 THEN HP_BRST = 1; /* Yes */
  ELSE IF H04071 IN (1, 2, 3, 4) THEN HP_BRST = 2; /* No */
END;

/* 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. */
IF H04060 IN (1,2) THEN DO;
  IF H04060=1 AND (H04061=3 OR H04061=4 OR (H04061=2 AND H04062=3)) THEN
HP_SMOKH=1; /* Yes */
  ELSE IF H04060=2 OR H04061 > 0 THEN HP_SMOKH=2; /* No */
END;
```

```

IF HP_SMOKH=1 AND H04026>1 AND H04063>0 THEN DO;
  IF H04063>1 THEN HP_CESS=1;           /* Yes */
  ELSE HP_CESS=2;                       /* No */
END;

```

6. Utilization

a. Outpatient Utilization (KMILOPQY, KCIVOPQY)

H04026 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 H04039 = 1 THEN DO;
  KMILOPQY=H04026;
  KCIVOPQY=1;
END;
ELSE IF H04039 IN (2, 3, 4) THEN DO;
  KCIVOPQY=H04026;
  KMILOPQY=1;
END;
ELSE IF H04039 = 5 THEN DO;
  KMILOPQY=1;
  KCIVOPQY=1;
END;

```

E. WEIGHTING PROCEDURES

Quarterly and annual estimates based on the 2004 HCSDDB must account for the survey's complex sample design and for possible bias due to nonresponse. As part of sample selection, MPR constructed sampling weights (BWT) that reflect the differential selection probabilities used to sample beneficiaries across strata. Nonresponse can also lead to distortions of the respondent sample with respect to the total population of DoD health care beneficiaries. Adjustments were made to the sampling weights, BWT, to compensate for such distortions, using a weighting class method. We also generated replicate weights for the final database so that users have the option of obtaining variance estimates with a replication method as well as the Taylor series method. This section presents these weighting procedures for the 2004 Adult HCSDDB.

1. Constructing the Sampling Weight

The sampling weight was constructed on the basis of the sample design. In the 2004 Adult HCSDDB, 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 2004 adult sample design, see Health Care Survey of DoD Beneficiaries: 2004 Adult Sampling Report. (2003). Our first step in weighting was to construct sampling weights that reflect 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 or:

$$(1) \quad W_s(h, i) = \frac{N(h)}{n(h)}$$

where:

$W_s(h, i)$ is the sampling weight for the i -th sampled beneficiary within the h -th stratum,

$N(h)$ is the total number of beneficiaries in the h -th stratum, and

$n(h)$ is the number of sampled beneficiaries from stratum h .

The sum of the sampling weights over selections i , from the h -th stratum equals the total population size of the h -th stratum 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 depends on the response mechanism that underlies the study population. To reduce this bias, we developed procedures to compensate for the potential bias due to nonresponse. 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 classes. Two types of nonresponse were associated with the 2004 Adult HCSDb:

- Unit or total nonresponse occurs when a sampled beneficiary did not respond to the survey questionnaire (e.g., refusals, no questionnaire returned, blank questionnaire returned, bad address).
- Item nonresponse occurs when a question that should have been answered is 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 2004 Adult HCSDb. To account for unit or total nonresponse, we implemented a weighting class adjustment.

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 2004 Adult HCSDb weighting classes were defined on the basis of the stratification variables: TRICARE Prime enrollment status, beneficiary group, and geographic area.

Nonresponse adjustment factors for the 2004 Adult 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 or incomplete questionnaire returned (FNSTATUS = 11 or 12)
- $d=2$ Eligible — no questionnaire returned (FNSTATUS = 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 STI 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 $d=4$ and defined as:

$$(2) \quad A_{wc1}(c,d) = \frac{\sum_{i \in S(c)} W_s(c,i)}{\sum_{i \in S(c)} I_1(i)W_s(c,i) + \sum_{i \in S(c)} I_2(i)W_s(c,i) + \sum_{i \in S(c)} I_3W_s(c,i)} \quad \text{for } d = 1, 2, 3$$

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 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 i -th 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:

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

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 c from the previous step 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:

$$(4) \quad A_{wc2}(c,1) = \frac{\sum_{i \in S(c)} I_1(i)W_{wc1}(c,i) + \sum_{i \in S(c)} I_2(i)W_{wc1}(c,i)}{\sum_{i \in S(c)} I_1(i)W_{wc1}(c,i)}$$

By definition, all $d=3$ and $d=5$ ineligible beneficiaries “respond,” so the $d=3$ adjustment factor is 1, or $A_{wc2}(c,3)=1$. 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:

$$(5) \quad W_{wc2}(c,d,i) = A_2(c,d) W_{wc1}(c,d,i)$$

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 $W_{wc2}(c,3,i)=W_{wc1}(c,3,i)$.

4. Calculation of Combined Annual Weights

A dataset combining the four consecutive quarterly data was constructed. Since there were a total of 1842 late respondents who were not included in the Quarters I–III 2004 files, the first three quarters were re-weighted before they were merged into the combined annual dataset. The new Quarters I–III datasets contain the responses of respondents who “trickled” in past the deadline for the survey. In addition, a few additional changes were made in re-weighting the data in order to provide consistent small cell collapsements among the quarters. First, we uniformly collapsed small cells for all four quarters. Collapsing cells uniformly across all quarters ensures that all quarters, ultimately, contain identical catchment areas and identical final adjusted cells. We applied the Quarter IV general collapsing rules for small cells to all four quarters. After implementing the above mentioned changes to the data and obtaining new weights, the Quarters I–III datasets and the Quarter IV dataset were merged to form a combined annual dataset with data for all four quarters.

Because combined sample sizes are sufficiently large to provide statistically reliable estimates with this combined dataset, users will be able to calculate survey estimates for finer domains, such as catchment areas. Construction of an appropriate 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 four quarters into a combined data set.

The method used for combining the four quarters and calculating combined estimates assumes that the variance in estimates from one quarter to the next is merely due sampling variation. That is, combined estimates can be calculated from the four independent samples by averaging the estimates for the four 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. 2003).

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 Q4. Then, the combined dataset would include the four quarterly datasets: Q1, Q2, Q3, and Q4. Let us denote quarterly final survey weights by WQ1, WQ2, WQ3, and WQ4. To retain the sum of the weights from the combined data as the population count, we average the population over the four quarters, by rescaling each quarterly survey weights to meet the following condition:

$$(6) \quad WCOM = q_i \times WQi$$

where q_i is between 0 and 1 with the constraint $q_1 + q_2 + q_3 + q_4 = 1$. We can make choice of q_i based on various assumptions. We have decided that each quarterly contribution should be equal. If we assume an equal relationship among the quarters, then, each q_i is as follows:

$$q_1 = 0.25; q_2 = 0.25; q_3 = 0.25; q_4 = 0.25$$

Then, the weight for the combined annual data will be $WCOM$ in (6).

The final data file retains the quarterly sampling stratum variables and quarterly weight as well as the combined weight. The file also contains an indicator variable for the quarters. From this combined dataset, one can calculate both combined data and revised quarterly estimates.

5. Calculation of Jackknife Replicates

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. Software for replication methods requires either replicate weights or sample design information, including the sampling weight and stratification information. WesVarPC® (Brick et al. 1996) is a publicly available package for replication methods which may be used to produce variance estimates. WesVarPC allows jackknife variance estimation for two primary sampling units per stratum up to 100 strata, or up to 256 replicates without stratification. However, the design for the 2004 HCSDB for adults involves 389 adjustment cells. To use WesVarPC, we modified the design to create fewer strata. The two options for doing this are to (1) form fewer than 256 replicates by ignoring stratification, or (2) form replicates by collapsing strata to fewer than 100 and by assigning each unit to one of two pseudo primary sampling units (PSUs). For either option, the entire weighting process as described in the previous sections must be applied for each jackknife replicate.

We use option 1 to construct the quarterly jackknife replicates as follows. First, the entire file of sampled beneficiaries is 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, the same number of different jackknife replicates as subsamples is defined. The entire weighting process as 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. Then, the series of jackknife replicate weights (WRWT1-WRWT60) 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.

We also constructed 240 jackknife replicates for combined estimates by calculating the weights in a manner similar to the one described above. For the combined data, a jackknife replicate was obtained by using the quarterly jackknife replicate weights and the quarterly analysis weights. To compute the replicate weights for the combined file from quarter q_i (where $i = 1$ to 4) we used the quarterly replicate weight $WRWT_j$ where $j = 1$ to 60 and the quarterly weight WQ_k (where $k = 1$ to 4) for all cases where i is not equal to k . Therefore, we have four times sixty or 240 jackknife replicates. For each replicate each quarter contributes an equal 25 percent toward the total weight. For example, for the first replicate, we used the replicates weights associated with the first replicate in quarter 1, $WRWT_1$, and the final quarterly weights for quarters 2, 3, and 4, WQ_2 , WQ_3 , and WQ_4 . The combined replicate weight is then calculated as:

$$(9) \quad \begin{array}{ll} \text{If quarter } i = 1, \text{ then} & CWRWT_1 = 0.25 \times WRWT_1 \\ \text{Otherwise} & CWRWT_1 = 0.25 \times WQ_i \end{array}$$

Like the analysis weight, each replicate weight ($CWRWT_1$ - $CWRWT_{240}$) for the combined data set was trimmed. The same procedure described above was used for each replicate weight. These trimmed replicate weights are the final variables needed for jackknife variance estimation for combined annual estimates.

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Analysis

This chapter explains how the HCSDB variables were processed during the analysis phase of the project. It covers the procedure for calculating response rates, developing dependent and independent variables for the analysis and estimating the variance of the statistics. The Health Care Survey of DoD Beneficiaries: Annual Report is described briefly along with an outline of the steps involved in creating charts for the reports.

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 2004 Adult HCSDB were calculated in the same way as they were calculated in 2003. The procedure is based on the guidelines established by the Council of American Survey Research Organization (CASRO 1982) in 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 2004 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 3, all sampled beneficiaries were completely classified into these four main (six detailed) groups: Group 1 (G1-1 and G1-2), Group 2, Group 3 (G3-1 and G3-2), and Group 4 (G4-1 and G4-2):

- 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): ineligible
- Group 3 (G3-2): ineligible
- 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 size¹ (\hat{N}_i for Group i , where $i=1,2,3,4$) for the four main response categories.

¹ 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.

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 $\hat{N}_{1,1}$, $\hat{N}_{1,2}$, $\hat{N}_{3,1}$, $\hat{N}_{4,1}$, and $\hat{N}_{4,2}$. With these values, we calculated response rates as follows.

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)

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

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)

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

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

(3)

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

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)

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

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 “Unweighted” and “Weighted”, respectively. In the following, we focus on discussing unweighted response rates for domains of interest.

Table 4.1 includes response rates for the 2004 Adult HCSDB for the all quarters of 2004 as well as for the combined annual dataset (for a further discussion of the combined process, please see section E.4 at the end of chapter 3). It also contains response rates by beneficiary groups, and by enrollment status.

- Overall: The overall unweighted response rate for the combined 2004 Adult HCSDB was about 29 percent (which is found in Table 4.1 in the row of “Overall”). This rate is less than 30 percent rate achieved in the combined 2003 Adult HCSDB.
- Beneficiary group and enrollment status: All response rates calculated by beneficiary group and enrollment status show similar patterns to the 2003 survey, i.e., active duty beneficiaries had the lowest response rates and beneficiaries 65 years and older had the highest rate.²
- The response rates for the first three quarters include late respondents (respondents whose survey “trickled-in” after the deadline).

² 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.

TABLE 4.1

RESPONSE RATES OVERALL AND BY ENROLLEE BENEFICIARY GROUP: QUARTERS I-IV, 2004

	Q1 2004		Q2 2004		Q3 2004		Q4 2004		COMBINED	
	RR (%)	RR _w (%)	RR (%)	RR _w (%)						
Overall	27.6	43.5	30.0	45.6	29.6	45.5	29.0	44.4	29.0	44.8
Active duty	16.3	15.7	18.5	17.5	17.9	16.9	17.4	16.7	17.5	16.7
Active duty family, enrollee	29.1	29.8	30.9	31.4	28.8	29.5	27.5	27.9	29.1	29.7
Active duty family, non-enrollee	18.1	18.2	20.0	20.8	21.4	22.9	19.8	21.5	19.8	20.8
Retired, <65, enrollee	53.1	53.8	54.7	55.7	54.4	55.9	53.3	55.6	53.9	55.2
Retired, <65, non-enrollee	41.4	46.5	43.7	48.7	43.8	48.3	42.9	46.2	43.0	47.5
Retired, 65+	71.7	74.8	73.8	76.3	72.7	75.4	71.7	73.0	72.5	74.9

RR = Weighted
RR_w = Unweighted

For domains of special interest, Appendix E contains tables showing response rates and weighted response rates for each quarter and the combined dataset. We summarize unweighted results about response rates for selected domains as follows:

- Regions: Combined response rates across regions range from 16.7 percent for Western Pacific Command to 36.9 percent for Golden Gate (Table E.1).
- Sex: Combined response rate for men is 25.2 percent as compared to 34.3 percent for women. (Table E.2).
- Conus: Combined response rate for CONUS is 31.4 percent as compared to 18.5 percent for OCONUS. (Table E.3).
- Catchment areas: Combined response rates across catchment areas range from 13.1 percent for Okinawa to 43.6 percent for Wright Patterson AFB. (Table E.5).
- Beneficiary groups by sex: Women respond at a higher rate than men for both active duty and active duty family members, 20.6 percent versus 16.9 percent and 27.4 percent versus 15.4 percent, respectively. The opposite pattern emerges for retirees, survivors and family members 65 and older. The response rates for retirees less than 65 is 49.4 for men vs 47.1 for women. (Table E.7).
- Beneficiary group by service affiliation (Army, Navy, Air Force, Marine Corps, Coast Guard): Among service affiliations, the smallest combined response rate comes from active duty in the Marine Corps with 10.7 percent and the largest from beneficiaries over 65 from the Marine Corps with 75 percent (Table E.8).

B. VARIANCE ESTIMATION

Due to the complex sample design, variance estimation for the 2004 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), 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 2004 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 2004 HCSDB.

1. Taylor Series Linearization

MPR uses Taylor series linearization to produce standard errors for the estimates from the 2004 HCSDB. For most sample designs, including the 2004 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.

Some of the reported estimates are composite scale scores that are linear functions of individual estimates. The sampling variances for these scale estimates can be directly obtained from the usual design-based variance estimation formula by incorporating the covariance terms among individual items within the scale.

$$(5) \quad \text{Let } \bar{y} = \frac{\sum_{h=1}^L \sum_{i=1}^{n_h} W_{hi} Y_{hi}}{\sum_h \sum_i W_{hi}}$$

denote an estimator of a composite scale where the individual composite measure for beneficiary (h, i) consists of r items is thus denoted as:

$$(6) \quad Y_{hi} = \sum_{j=1}^r X_{hi,j} / r .$$

Then, a customary variance estimator of \bar{y} is the sum of the item variances and covariances among item estimates:

$$(7) \quad v(\bar{y}) = \frac{1}{r^2} \left\{ \sum_{j=1}^r \text{var}(\bar{x}_j) + \sum_{j \neq j'} \text{cov}(\bar{x}_j, \bar{x}_{j'}) \right\} ,$$

Variance components can be obtained from the usual survey specific software such as SUDAAN and WesVarPC, described above.

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, 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 $\bar{y}_1 - \bar{y}_2$ is approximately distributed as a normal distribution with mean zero and variance $\sigma_{y_1-y_2}^2$ under the null hypothesis. In testing the hypothesis, a test Statistic T is thus calculated as:

$$T = \frac{\bar{y}_1 - \bar{y}_2}{\hat{\sigma}_{y_1-y_2}}$$

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

$$\hat{\sigma}_{y_1-y_2}^2:$$

$$\hat{\sigma}_{y_1-y_2}^2 = \text{var}(\bar{y}_1) + \text{var}(\bar{y}_2) - 2 \text{cov}(\bar{y}_1, \bar{y}_2).$$

If \bar{y}_1 and \bar{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 H.

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 CAHPS, 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 3.0 Survey and Reporting Kit (DHHS, 1999)

The model used for this adjustment is:

$$Y_{ijkl} = \beta_{1l}A_{1l} + \beta_{2l}A_{2l} + \dots + \beta_{7l}A_{7l} + \beta_{8l}P_l + \varepsilon_{ijkl},$$

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, $A_6 =$ age 65-74, and $A_7 =$ age 75 and older), P_l is health status. The subscripts i, j, k and l refer to the region, MTF, and beneficiary, and beneficiary in enrollment group, respectively.

Given 15 regions and $J+1$ catchment areas, the specifications that we use are:

$$\varepsilon_{ijkl} = \delta_{0l} + \delta_{1l}R_{1l} + \delta_{2l}R_{2l} + \dots + \delta_{15l}R_{15l} + w_{ijkl},$$

where R_i 's are regional dummy variables ($R_i = 1$ if the beneficiary is in region i and beneficiary group l , and 0 otherwise), and

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

where H_j 's are catchment area dummy variables ($H_j = 1$ 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 providers 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:

$$\bar{y}_i = \hat{\delta}_0 + \hat{\delta}_i + \hat{\beta}_1 \hat{A}_1 + \hat{\beta}_2 \hat{A}_2 + \dots + \hat{\beta}_7 \hat{A}_7 + \hat{\beta}_8 \hat{P},$$

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 means of the variable P . For beneficiary group l , the adjusted regional value is:

$$\bar{y}_{il} = \hat{\delta}_{0l} + \hat{\delta}_{il} + \hat{\beta}_{1l} \hat{A}_1 + \hat{\beta}_{2l} \hat{A}_{2l} + \dots + \hat{\beta}_{7l} \hat{A}_{7l} + \hat{\beta}_{8l} \hat{P}_l,$$

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:

$$\bar{y}_{ijl} = \hat{\gamma}_{0l} + \hat{\gamma}_{ijl} + \hat{\beta}_{1l} \hat{A}_{1l} + \hat{\beta}_{2l} \hat{A}_{2l} + \dots + \hat{\beta}_{7l} \hat{A}_{7l} + \hat{\beta}_{8l} \hat{P}_l,$$

while the regional value can be calculated as:

$$\bar{y}_{il} = \hat{\gamma}_{0l} + \bar{\hat{\gamma}}_{il} + \hat{\beta}_{1l} \hat{A}_{1l} + \hat{\beta}_{2l} \hat{A}_{2l} + \dots + \hat{\beta}_{7l} \hat{A}_{7l} + \hat{\beta}_{8l} \hat{P}_l,$$

where $\bar{\hat{\gamma}}_{il}$ is the weighted mean for all catchment areas in Region i .

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

$$y = \alpha + \beta_1 A_1 + \beta_2 A_2 + \dots + \beta_7 A_7 + \beta_8 P$$

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

$$\hat{y}_l = \hat{\alpha} + \hat{\beta}_1 \bar{A}_{1l} + \hat{\beta}_2 \bar{A}_{2l} + \dots + \hat{\beta}_7 \bar{A}_{7l} + \hat{\beta}_8 \bar{P}_l$$

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 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 total score.

1. Composites and Ratings

The preventive care composite is calculated as $P_i = \sum w_r r_i$, 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

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

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 . The value n_i is calculated using sampling weights. 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).

2. Total Score

The total score, T , is a weighted average of 11 scales shown in the Beneficiary Reports. $T = \sum w_i S_i$, where S_i is a composite or rating score calculated for a geographic area such as a region. The total weight is $w_i = f_i p_i$.

The weights f_i come from $F(1) = \sum f_i S_i$, where $F(1)$ is the first component identified in principal components analysis. For an observation to be included, all variables must be non-missing. These weights are the same for all enrollment groups and beneficiary groups. The total score $T = \sum w_i S_i$, where S_i are composite scores or rating scores and $w_i = f_i$ are factor weights for CAHPS composites or ratings based on principal components analysis using National CAHPS Benchmarking Database (NCBD) data. The factor analysis is performed over ratings and composites calculated for health plans. Composite scores from the benchmark data are

$$S_{hi} = (1/n_i) \sum (q_{hj}/k_{hj}),$$

where k_{hj} is the number of people in health plan h responding to question j , q_{hj} is the number in health plan h giving a favorable response to j in composite i . Ratings are

$$S_{hi} = q_{hi}/k_{hi}$$

the proportion responding favorably. These values are adjusted for age and health status.

The weights f_i come from $F(1) = \sum f_i S_{hi}$, where $F(1)$ is the first component identified in principal components analysis. The preventive care composite receives a weight of 1/11.

F. TESTS FOR TREND

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

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

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

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

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

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 4 quarters $p = \text{Prob}(\text{abs}(T/S) > 0, n)$.

G. TRANSITION FROM CAHPS 2.0 TO 3.0

1. Background

From 1998 to 2003, the HCSDB included questions from CAHPS 2.0. In 2003, CAHPS 3.0 was introduced. That version of CAHPS included changes to the wording of a number of questions. Because decision makers in TRICARE and Health Affairs monitor scores based on CAHPS questions to track TRICARE performance over time, we needed a strategy for comparing scores before and after the transition.

The strategy we adopted was to delay introduction of CAHPS 3.0 into the HCSDB until 2004, when benchmarks based on the new questions would be available. Assuming that the changes in question wording resulted in similar changes in the benchmark data and in the HCSDB, we could track CAHPS scores over time by comparing them to the changing benchmark. The adjusted change in the TRICARE CAHPS score would be equal to the change in the TRICARE score minus the change in the benchmark score.

We found that this method worked well for most questions. However, responses to three questions appeared to shift markedly in relation to the benchmark when CAHPS 3.0 was introduced. For these three questions, we experimented with several approaches to monitoring trends. This memo describes research that identifies significant shifts in HCSDB responses relative to the benchmark. It describes how we measure the size of the shift due to the transition from CAHPS 2.0 to CAHPS 3.0 and how we will use that information to adjust CAHPS scores.

2. Test for Shift

We tested for a shift in two ways. We ran regressions using age, health status, and sex to predict HCSDB results for all reported CAHPS questions from 2001 to 2004 and using results for 2003 and 2004 only. The dependent variable for each of these regressions was the question response

defined as a dichotomous variable, which is the way the variables are defined in the Beneficiary Reports and Consumer Watch. We ran the same regressions over benchmark data from the National CAHPS benchmarking database. We specified the regressions including both a time trend and seasonal terms. Our null hypothesis was that no shift had occurred, and the criteria we used to establish a shift were highly specific. We required that a statistically significant shift be detected with the time trend over the period from 2001 to 2004 and without the trend from 2003 to 2004. We further required that the difference between the shift in the HCSDB result and the shift in the benchmark be statistically significant. Five questions including the three we had identified earlier exhibited a significant shift by these criteria. The fourth and fifth were questions that did not differ between CAHPS 2.0 and CAHPS 3.0. Since the questions had not changed, we assumed that the changes represented a real change in perceived performance. The three questions that changed were questions addressing the time spent waiting in the doctor's office, problems in finding a personal doctor or nurse, and problems with health plan paperwork.

3. Measurement of Shift

The tests described above measure a shift in the HCSDB result relative to the benchmark. These changes may be caused by the question change but may also be caused by changes in perceived performance. We performed an additional test to 1) identify whether the shift or a significant part of the shift was caused by the question and not by perceived performance and 2) the size of the shift due to the question. That test consisted of adding to the beneficiary characteristics included in the regressions described above, the 20 questions without significant response shifts relative to the benchmark. We included dummy variables when responses to those questions were missing. We estimated shifts in responses controlling for responses to other variables for both the HCSDB and benchmark data and compared the two. The HCSDB shifts differed significantly from the benchmark shift in each case.

We used the linear probability model to estimate the shift, because most scores reported based on the HCSDB are adjusted by ordinary least squares. However, we estimated the shift using logistic regression and found that the estimated shift was approximately the same size using the logit specification.

The amount of the adjustment needed is equal to the size of the estimated shift. When presenting trended numbers, we plan to add the HCSDB shift to each of the estimated CAHPS 2.0 measures from the past. The benchmark shift will be added to past benchmarks. The logic for this adjustment is that the CAHPS 3.0 question is assumed to be superior to CAHPS 2.0 as a measure of the aspect of care it is designed to address. If the backward shift means that what was formerly perceived to be a problem area is no longer, our interpretation would be that the perception of a problem was due to inaccuracy in the CAHPS 2.0-based performance measure. Conversely, a shift that indicates a past problem existed where one was not perceived before implies that the old question did not detect the problem.

H. 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, MPR produced charts and tables that are found in the reports described below. Beginning with the HCSDB in a SAS format, MPR 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.

I. REPORTS

This section lists the three types of reports produced and states the main purpose of each report: 2004 TRICARE Beneficiary Reports, the TRICARE Consumer Watch, and the Health Care Survey of DoD Beneficiaries: Annual Report. The 2004 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 four quarters of survey data.

1. 2004 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 four quarters and previous years and presents 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 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, smoking cessation 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 F. The scores are presented in relation to national benchmarks.

The four ratings of health care and health care providers are health plan, health care, primary care manager (PCM), and specialist. 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 is based on how beneficiaries compare preventive care services offered through the MHS with the Healthy People 2010 goals. Preventive care indicators include prenatal care, hypertension, mammography, and Pap smears.

Smoking cessation combines the non-smoking rate, and the rate at which smokers are counseled to quit.

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. A benchmark corresponding to the MHS population is also included in the SAS data set. Records contain scores and categorical variables showing their existence and directions of significant differences. The benchmark record contains national mean values, where available, for a comparable non-MHS population.

The data file serves as the basis for the electronic reports and quality assurance. The file for the 2004 HCSDDB is updated each quarter and referenced by the report card application. In each quarter, a separate annual and quarterly file is created. The quarterly and annual reports are coded with 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 H 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 2004 HCSDDB 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 HCSDDB in a graphical format. The exhibits present TRICARE beneficiaries' experiences with their health care and health plan and utilization rates for preventive services. Each quarter, the Consumer Watch contains a special report on a specific aspect of health care affecting TRICARE beneficiaries. The TRICARE Consumer Watch is produced on a quarterly basis for all regions and three service affiliations. In the fourth quarter, the TRICARE Consumer Watch is produced for all catchment areas.

b. 2004 TRICARE Consumer Watch Production

1. Content

The Consumer Watch contains graphs presenting three 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, 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 2010 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.

Another graph depicts current Prime enrollees' intent to disenroll from TRICARE Prime. This graph compares the percentage of retirees or family members of active duty or retirees who plan to disenroll for each region and CONUS. Each quarter, the special report section highlights a certain health care topic.

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 I.

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 and child HCSDB for 2004 and previous years.

b. Procedures for Report Production

1. Content

The report contains eight chapters:

- TRICARE Prime
- TRICARE Standard/Extra
- TRICARE for Life
- Civilian Care
- Military Treatment Facilities
- Civilian Facilities
- VA Facilities
- Issue Briefs

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 NCBDB. The benchmarks are readjusted for age and health status using the methods described in Chapter 4, 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.

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APPENDIX A

ANNOTATED QUESTIONNAIRE - QUARTER I

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Health Care Survey of DoD Beneficiaries



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SURVEY INSTRUCTIONS

Answer all the questions by checking the circle to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see 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 you have misplaced the envelope, our address is:
Office of the Assistant Secretary of Defense (Health Affairs)
c/o Survey Processing Center
PO Box 82660
Lincoln, NE 68501-2660

According to the Privacy Act of 1974 (Public Law 93-579), 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., Chapter 55, Section 572, Public Law 102-484, E.O. 9397.

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

Routine Uses: None

Disclosure: 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.



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----- SURVEY STARTS HERE -----

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

1. Are you the person whose name appears on the mailing label of this envelope?

- Yes Go to Question 2
- No Please give this questionnaire to the person addressed on the envelope.

2. By which of the following health plans are you currently covered? MARK ALL THAT APPLY.

a. Military Health Plans

- TRICARE Prime
- TRICARE Extra or Standard (CHAMPUS)
- TRICARE Plus
- TRICARE for Life

b. Other Health Plans

- Medicare
- Federal Employees Health Benefit Program (FEHBP)
- Medicaid
- A civilian HMO (such as Kaiser)
- Other civilian health insurance (such as Blue Cross)
- Uniformed Services Family Health Plan (USFHP)
- The Veterans Administration (VA)
- Not Sure

3. Currently, are you covered by Medicare Part A?

Medicare is the federal health insurance program for people aged 65 or older and for certain disabled people. Medicare Part A helps pay for inpatient hospital care.

- Yes, I am now covered by Medicare Part A
- No, I am not covered by Medicare Part A

4. Currently, are you covered by Medicare Part B?

Medicare is the federal health insurance program for people aged 65 or older and for certain disabled people. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.

- Yes, I am now covered by Medicare Part B
- No, I am not covered by Medicare Part B

5. 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.

- Yes, I am now covered by Medicare supplemental insurance
- No, I am not covered by Medicare supplemental insurance

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

- TRICARE Prime
 - TRICARE Extra or Standard (CHAMPUS)
 - TRICARE Plus
 - Medicare
 - Federal Employees Health Benefit Program (FEHBP)
 - Medicaid
 - A civilian HMO (such as Kaiser)
 - Other civilian health insurance (such as Blue Cross)
 - Uniformed Services Family Health Plans (USFHP)
 - The Veterans Administration (VA)
 - Not sure
 - Did not use any health plan in the last 12 months
- Go to Question 8**



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For the remainder of this questionnaire, the term health plan refers to the plan you indicated in Question 6.

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

- Less than 6 months
- 6 up to 12 months
- 12 up to 24 months
- 2 up to 5 years
- 5 up to 10 years
- 10 or more years

----- YOUR PERSONAL DOCTOR, OR NURSE -----

The next 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.

8. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. Do you have one person you think of as your personal doctor or nurse?

- Yes
- No Go to Question 11

9. 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
- I don't have a personal doctor or nurse.

10. Did you have the same personal doctor or nurse before you joined this health plan?

- Yes Go to Question 12
- No

11. 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?

- A big problem
- Not a problem
- A small problem

---- GETTING HEALTHCARE FROM A SPECIALIST ----

When you answer the next questions, do not include dental visits.

12. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the last 12 months, did you or a doctor or nurse think you needed to see a specialist?

- Yes
- No Go to Question 14

13. In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?

- A big problem
- A small problem
- Not a problem
- I didn't need to see a specialist in the last 12 months.

14. In the last 12 months, did you see a specialist?

- Yes
- No Go to Question 17



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15. 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
- I didn't see a specialist in the last 12 months.

16. In the last 12 months, was the specialist you saw most often the same doctor as your personal doctor?

- Yes
- No
- I don't have a personal doctor or I didn't see a specialist in the last 12 months.

----- CALLING DOCTORS' OFFICES -----

17. In the last 12 months, did you call a doctor's office or clinic during regular office hours to get help or advice for yourself?

- Yes
- No Go to Question 19

18. In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?

- Never
- Sometimes
- Usually
- Always
- I didn't call for help or advice during regular office hours in the last 12 months.

- YOUR HEALTHCARE IN THE LAST 12 MONTHS -

19. 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?

- Yes
- No Go to Question 22

20. In the last 12 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?

- Never
- Sometimes
- Usually
- Always
- I didn't need care right away for an illness, injury or condition in the last 12 months.

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

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

22. A health provider could be a general doctor, a specialist doctor, a nurse practitioner, a physician assistant, a nurse, or anyone else you would see for health care.

In the last 12 months, not counting the times you needed health care right away, did you make any appointments with a doctor or other health care provider for health care?

- Yes
- No Go to Question 25



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23. In the last 12 months, not counting times you needed health care right away, how often did you get an appointment for health care as soon as you wanted?

- Never
- Sometimes
- Usually
- Always
- I had no appointments in the last 12 months

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

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

25. In the last 12 months, how many times did you go to an emergency room to get care for yourself?

- None
- 1
- 2
- 3
- 4
- 5 to 9
- 10 or more

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

- None Go to Question 39
- 1
- 2
- 3
- 4
- 5 to 9
- 10 or more

27. In the last 12 months, did you or a doctor believe you needed any care, tests or treatment?

- Yes No Go to Question 29

28. In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?

- A big problem
- A small problem
- Not a problem
- I had no visits in the last 12 months.

29. In the last 12 months, did you need approval from your health plan for any care, tests or treatment?

- Yes No Go to Question 31

30. In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?

- A big problem
- A small problem
- Not a problem
- I had no visits in the last 12 months.

31. In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

32. In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

33. In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.



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34. In the last 12 months, how often did doctors or other health providers listen carefully to you?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

35. In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

36. In the last 12 months, how often did doctors or other health providers show respect for what you had to say?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

37. In the last 12 months, how often did doctors or other health providers spend enough time with you?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

38. 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 healthcare possible
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 Best healthcare possible
- I had no visits in the last 12 months.

39. In the last 12 months, where did you go most often for your health care? **MARK ONLY ONE ANSWER.**

- A military facility - This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
- A civilian facility - This includes: Doctor's office, Clinic, Hospital, Civilian TRICARE contractor
- Uniformed Services Family Health Plan facility (USFHP)
- Veterans Affairs (VA) clinic or hospital
- I went to none of the listed types of facilities in the last 12 months.

----- PATIENT SAFETY -----

The following questions ask about your opinion of patient safety at military hospitals, clinics and pharmacies. Patient safety means avoiding accidents or mistakes that harm patients. Please indicate how much you agree or disagree with with of the statements below.

40. The people who work in military hospitals use the best possible methods to ensure patient safety.

- Agree strongly
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat
- Disagree strongly



41. When I have a surgical or diagnostic procedure in a military hospital, I am confident that I will not be accidentally injured or infected.

- Agree strongly
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat
- Disagree strongly

42. When I am at a military hospital, I am confident I will get the right drugs and dosages, and I will not get a dangerous combination of drugs.

- Agree strongly
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat
- Disagree strongly

43. Doctors, nurses and pharmacists at military hospitals get the support they need to keep patients safe.

- Agree strongly
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat
- Disagree strongly

44. When I go to a military pharmacy, I am confident I will get the right drug and dosage, and I will not get a dangerous combination of drugs.

- Agree strongly
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat
- Disagree strongly

45. The people who work in military pharmacies use the best possible methods to ensure patient safety.

- Agree strongly
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat
- Disagree strongly

46. When I have a test, such as an x-ray or blood test, at a military facility, I am confident that the test will be correctly performed and the results correctly analyzed and reported.

- Agree strongly
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat
- Disagree strongly

47. When I see a doctor or nurse at a military hospital or clinic, I am confident that I will be examined carefully and thoroughly.

- Agree strongly
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat
- Disagree strongly

48. In the last 12 months, do you think safety at military hospitals, clinics and pharmacies has gotten better or gotten worse?

- Gotten better
- Stayed about the same
- Gotten worse



----- TRICARE'S CIVILIAN NETWORK -----

The following questions ask about your experiences with the TRICARE civilian provider network. TRICARE, including TRICARE Prime and Extra, is the health care system of the Department of Defense that provides care for active duty and retired military personnel and their dependents. TRICARE includes the hospitals, clinics and pharmacies of the three services, supplemented by a civilian network.

The TRICARE civilian provider network is made up of the doctors, clinics, hospitals and other health care providers who are part of DoD's preferred provider pool. The next six questions refer to health services you received from the civilian network.

49. In the past 12 months, how much of your health care did you receive from the TRICARE civilian provider network?

- All of my healthcare
 - Most of my healthcare
 - Some of my healthcare
 - None of my healthcare
 - I did not need healthcare in the past 12 months
- Go to Question 55**

50. In the past 12 months, how much of a problem was it to get the health care you wanted from the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to get healthcare from the civilian network

51. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant.

In the past 12 months, how much of a problem was it to find a conveniently located personal doctor or nurse from the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to find a personal doctor from the civilian network

52. In the past 12 months, how much of a problem was it to find a conveniently located lab or x-ray facility in the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to find a lab or x-ray facility in the civilian network

53. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the past 12 months, how much of a problem was it to find a conveniently located specialist from the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to find a specialist in the civilian network.

54. In the past 12 months, did you learn that a doctor whom you wanted to see had left the TRICARE civilian provider network?

- Yes
- No
- I did not want to see any network doctors



----- 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 6.

55. 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?

- Yes
- No **Go to Question 59**
- Don't know **Go to Question 59**

56. In the last 12 months, how often did your health plan handle your claims in a reasonable time?

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

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

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

58. In the last 12 months, before you went for care, how often did your health plan make it clear how much you would have to pay?

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

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

- Yes
- No **Go to Question 61**

60. In the last 12 months, how much of a problem, if any, was it to find or understand this information?

- A big problem
- A small problem
- Not a problem
- I didn't look for information from my health plan in the last 12 months

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

- Yes
- No **Go to Question 63**

62. In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?

- A big problem
- A small problem
- Not a problem
- I didn't call my health plan's customer service in the last 12 months.

63. In the last 12 months, have you called or written your health plan with a complaint or problem?

- Yes
- No **Go to Question 67**

64. How long did it take for the health plan to resolve your complaint?

- Same day
- 2-7 days
- 8-14 days
- 15-21 days
- More than 21 days
- I am still waiting for it to be settled. **Go to Question 66**
- I haven't called or written with a complaint or problem in the last 12 months.



65. Was your complaint or problem settled to your satisfaction?

- Yes **Go to Question 67**
- No **Go to Question 66**
- I haven't called or written with a complaint or problem in the last 12 months.

66. How long have you been waiting for your health plan to resolve your complaint?

- 1-7 days
- 8-14 days
- 15-21 days
- More than 21 days
- I haven't called or written with a complaint or problem in the last 12 months.

67. In the last 12 months, did you have to fill out any paperwork for your health plan?

- Yes
- No **Go to Question 69**

68. In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?

- A big problem
- A small problem
- Not a problem
- I didn't have any experiences with paperwork for my health plan in the last 12 months.

69. 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

70. If you are currently enrolled in TRICARE Prime, how likely are you to disenroll from TRICARE Prime for a different type of health plan in the next 12 months?

- Very unlikely
- Unlikely
- Neither likely nor unlikely
- Likely
- Very likely
- Not sure
- I am not currently enrolled in TRICARE Prime

----- PREVENTATIVE CARE -----

Preventative care is medical care you receive that is intended to maintain your good health or prevent a future medical problem. A physical or a cholesterol screening are examples of preventative care.

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

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

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

- Yes, it is too high
- No, it is not too high
- Don't know

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

- Less than 12 months ago
- 1 to 2 years ago
- More than 2 but less than 5 years ago
- 5 or more years ago
- Never had a cholesterol screening

74. When did you last have a flu shot?

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



75. Have you ever smoked at least 100 cigarettes in your entire life?

- Yes
- No **Go to Question 81**
- Don't know **Go to Question 81**

76. Do you now smoke everyday, some days or not at all?

- Every day **Go to Question 78**
- Some days **Go to Question 78**
- Not at all **Go to Question 77**
- Don't know **Go to Question 81**

77. How long has it been since you quit smoking cigarettes?

- Less than 12 months **Go to Question 78**
- 12 months or more **Go to Question 81**
- Don't know **Go to Question 81**

78. In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider in your plan?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months.

79. On how many visits was medication recommended or discussed to assist you with quitting smoking (for example: nicotine gum, patch, nasal spray, inhaler, prescription medication)?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months.

80. On how many visits did your doctor or health provider recommend or discuss methods and strategies (other than medication) to assist you with quitting smoking?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months.

81. Are you male or female?

- Male **Go to Question 82**
- Female **Go to Question 83**

82. When was the last time you had a prostate gland examination or blood test for prostate disease?

- 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 prostate gland examination

Go to Question 90

83. 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 test

84. Are you under age 40?

- Yes **Go to Question 87**
- No

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

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



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86. When was the last time you had a breast exam by a health care professional?

- 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 breast exam

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

- Yes, I am currently pregnant **Go to Question 88**
- No, I am not currently pregnant, but have been pregnant in the past 12 months **Go to Question 89**
- No, I am not currently pregnant, and have not been pregnant in the past 12 months **Go to Question 90**

88. In what trimester is your pregnancy?

- First trimester
- Second trimester
- Third trimester

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

- First trimester
- Second trimester
- Third trimester
- Did not receive prenatal care

----- ABOUT YOU -----

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

- Excellent
- Very Good
- Good
- Fair
- Poor

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

- Yes
- No

92. Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

- | | | | | |
|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="radio"/> 0 | <input type="radio"/> 7 | <input type="radio"/> 14 | <input type="radio"/> 21 | <input type="radio"/> 28 |
| <input type="radio"/> 1 | <input type="radio"/> 8 | <input type="radio"/> 15 | <input type="radio"/> 22 | <input type="radio"/> 29 |
| <input type="radio"/> 2 | <input type="radio"/> 9 | <input type="radio"/> 16 | <input type="radio"/> 23 | <input type="radio"/> 30 |
| <input type="radio"/> 3 | <input type="radio"/> 10 | <input type="radio"/> 17 | <input type="radio"/> 24 | |
| <input type="radio"/> 4 | <input type="radio"/> 11 | <input type="radio"/> 18 | <input type="radio"/> 25 | |
| <input type="radio"/> 5 | <input type="radio"/> 12 | <input type="radio"/> 19 | <input type="radio"/> 26 | |
| <input type="radio"/> 6 | <input type="radio"/> 13 | <input type="radio"/> 20 | <input type="radio"/> 27 | |

93. Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

- | | | | | |
|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="radio"/> 0 | <input type="radio"/> 7 | <input type="radio"/> 14 | <input type="radio"/> 21 | <input type="radio"/> 28 |
| <input type="radio"/> 1 | <input type="radio"/> 8 | <input type="radio"/> 15 | <input type="radio"/> 22 | <input type="radio"/> 29 |
| <input type="radio"/> 2 | <input type="radio"/> 9 | <input type="radio"/> 16 | <input type="radio"/> 23 | <input type="radio"/> 30 |
| <input type="radio"/> 3 | <input type="radio"/> 10 | <input type="radio"/> 17 | <input type="radio"/> 24 | |
| <input type="radio"/> 4 | <input type="radio"/> 11 | <input type="radio"/> 18 | <input type="radio"/> 25 | |
| <input type="radio"/> 5 | <input type="radio"/> 12 | <input type="radio"/> 19 | <input type="radio"/> 26 | |
| <input type="radio"/> 6 | <input type="radio"/> 13 | <input type="radio"/> 20 | <input type="radio"/> 27 | |

94. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

- | | | | | |
|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="radio"/> 0 | <input type="radio"/> 7 | <input type="radio"/> 14 | <input type="radio"/> 21 | <input type="radio"/> 28 |
| <input type="radio"/> 1 | <input type="radio"/> 8 | <input type="radio"/> 15 | <input type="radio"/> 22 | <input type="radio"/> 29 |
| <input type="radio"/> 2 | <input type="radio"/> 9 | <input type="radio"/> 16 | <input type="radio"/> 23 | <input type="radio"/> 30 |
| <input type="radio"/> 3 | <input type="radio"/> 10 | <input type="radio"/> 17 | <input type="radio"/> 24 | |
| <input type="radio"/> 4 | <input type="radio"/> 11 | <input type="radio"/> 18 | <input type="radio"/> 25 | |
| <input type="radio"/> 5 | <input type="radio"/> 12 | <input type="radio"/> 19 | <input type="radio"/> 26 | |
| <input type="radio"/> 6 | <input type="radio"/> 13 | <input type="radio"/> 20 | <input type="radio"/> 27 | |

95. During the past 30 days, for about how many days did pain make it hard for you to do your usual activities, such as self-care, work, or recreation?

- | | | | | |
|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="radio"/> 0 | <input type="radio"/> 7 | <input type="radio"/> 14 | <input type="radio"/> 21 | <input type="radio"/> 28 |
| <input type="radio"/> 1 | <input type="radio"/> 8 | <input type="radio"/> 15 | <input type="radio"/> 22 | <input type="radio"/> 29 |
| <input type="radio"/> 2 | <input type="radio"/> 9 | <input type="radio"/> 16 | <input type="radio"/> 23 | <input type="radio"/> 30 |
| <input type="radio"/> 3 | <input type="radio"/> 10 | <input type="radio"/> 17 | <input type="radio"/> 24 | |
| <input type="radio"/> 4 | <input type="radio"/> 11 | <input type="radio"/> 18 | <input type="radio"/> 25 | |
| <input type="radio"/> 5 | <input type="radio"/> 12 | <input type="radio"/> 19 | <input type="radio"/> 26 | |
| <input type="radio"/> 6 | <input type="radio"/> 13 | <input type="radio"/> 20 | <input type="radio"/> 27 | |



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96. During the past 30 days, for about how many days have you felt sad, blue, or depressed?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

97. During the past 30 days, for about how many days have you felt worried, tense or anxious?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

98. During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

99. During the past 30 days, for about how many days have you felt very healthy and full of energy?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

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

- 8th grade or less
- Some high school, but did not graduate
- High school graduate or GED
- Some college or 2-year degree
- 4-year college graduate
- More than 4-year college degree

101. Are you of Hispanic or Latino origin or descent? (Mark "NO" if not Spanish/Hispanic/Latino.)

- No, not Spanish, Hispanic, or Latino
- Yes, Mexican, Mexican American, Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, other Spanish, Hispanic, or Latino

102. What is your race? (Mark ONE OR MORE races to indicate what you consider yourself to be.)

- White
- Black or African American
- American Indian or Alaska Native
- Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

103. What is your age now?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

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 envelope is missing, please send to: National Research Corporation, Survey Processing Center, PO BOX 82660, Lincoln, NE 68501-2660



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APPENDIX A

ANNOTATED QUESTIONNAIRE - QUARTER II

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Health Care Survey of DoD Beneficiaries



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SURVEY INSTRUCTIONS

Answer all the questions by checking the circle to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see 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 you have misplaced the envelope, our address is:
Office of the Assistant Secretary of Defense (Health Affairs)

c/o Survey Processing Center
PO Box 82660
Lincoln, NE 68501-2660

According to the Privacy Act of 1974 (Public Law 93-579), 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., Chapter 55, Section 572, Public Law 102-484, E.O. 9397.

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

Routine Uses: None

Disclosure: 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.



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----- SURVEY STARTS HERE -----

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

1. Are you the person whose name appears on the mailing label of this envelope?

- Yes Go to Question 2
- No Please give this questionnaire to the person addressed on the envelope.

2. By which of the following health plans are you currently covered? MARK ALL THAT APPLY.

a. Military Health Plans

- TRICARE Prime
- TRICARE Extra or Standard (CHAMPUS)
- TRICARE Plus
- TRICARE for Life

b. Other Health Plans

- Medicare
- Federal Employees Health Benefit Program (FEHBP)
- Medicaid
- A civilian HMO (such as Kaiser)
- Other civilian health insurance (such as Blue Cross)
- Uniformed Services Family Health Plan (USFHP)
- The Veterans Administration (VA)
- Not Sure

3. Currently, are you covered by Medicare Part A?

Medicare is the federal health insurance program for people aged 65 or older and for certain disabled people. Medicare Part A helps pay for inpatient hospital care.

- Yes, I am now covered by Medicare Part A
- No, I am not covered by Medicare Part A

4. Currently, are you covered by Medicare Part B?

Medicare is the federal health insurance program for people aged 65 or older and for certain disabled people. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.

- Yes, I am now covered by Medicare Part B
- No, I am not covered by Medicare Part B

5. 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.

- Yes, I am now covered by Medicare supplemental insurance
- No, I am not covered by Medicare supplemental insurance

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

- TRICARE Prime
- TRICARE Extra or Standard (CHAMPUS)
- TRICARE Plus
- Medicare
- Federal Employees Health Benefit Program (FEHBP)
- Medicaid
- A civilian HMO (such as Kaiser)
- Other civilian health insurance (such as Blue Cross)
- Uniformed Services Family Health Plans (USFHP)
- The Veterans Administration (VA)
- Not sure
- Did not use any health plan in the last 12 months
→ Go to Question 8



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For the remainder of this questionnaire, the term **health plan** refers to the plan you indicated in Question 6.

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

- Less than 6 months
- 6 up to 12 months
- 12 up to 24 months
- 2 up to 5 years
- 5 up to 10 years
- 10 or more years

----- YOUR PERSONAL DOCTOR, OR NURSE -----

The next 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.

8. A **personal doctor or nurse** is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. Do you have one person you think of as your personal doctor or nurse?

- Yes
- No → Go to Question 15

9. Is this person a **general doctor**, a **specialist doctor**, a **physician assistant**, or a **nurse**?

- General doctor (Family practice or internal medicine)
- Specialist doctor
- Physician assistant
- Nurse
- I don't have a personal doctor or nurse

10. How many months or years have you been going to your personal doctor or nurse?

- Less than 6 months
- At least 6 months but less than 1 year
- At least 1 year but less than 2 years
- At least 2 years but less than 5 years
- 5 years or more
- I don't have a personal doctor or nurse

11. Do you have a physical or medical condition that seriously interferes with your ability to work, attend school, or manage your day-to-day activities?

- Yes
- No → Go to Question 13

12. Does your personal doctor or nurse understand how any health problems you have affect your day-to-day life?

- Yes
- No
- I don't have any health problems or I don't have a personal doctor or nurse.

13. 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
- I don't have a personal doctor or nurse.

14. Did you have the same personal doctor or nurse before you joined this health plan?

- Yes → Go to Question 16
- No

15. 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?

- A big problem
- A small problem
- Not a problem



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--- GETTING HEALTH CARE FROM A SPECIALIST ---

When you answer the next questions, do not include dental visits.

16. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the last 12 months, did you or a doctor or nurse think you needed to see a specialist?

- Yes
- No → Go to Question 18

17. In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?

- A big problem
- A small problem
- Not a problem
- I didn't need to see a specialist in the last 12 months.

18. In the last 12 months, did you see a specialist?

- Yes
- No → Go to Question 22

19. In the last 12 months, how many times did you go to specialists for care for yourself?

- None → Go to Question 22
- 1
- 2
- 3
- 4
- 5 to 9
- 10 or more

20. 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
- I didn't see a specialist in the last 12 months.

21. In the last 12 months, was the specialist you saw most often the same doctor as your personal doctor?

- Yes
- No
- I don't have a personal doctor or I didn't see a specialist in the last 12 months.

----- CALLING DOCTORS' OFFICES -----

22. In the last 12 months, did you call a doctor's office or clinic during regular office hours to get help or advice for yourself?

- Yes
- No → Go to Question 24

23. In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?

- Never
- Sometimes
- Usually
- Always
- I didn't call for help or advice during regular office hours in the last 12 months.



- YOUR HEALTHCARE IN THE LAST 12 MONTHS -

24. 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?

- Yes
- No → Go to Question 27

25. In the last 12 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?

- Never
- Sometimes
- Usually
- Always
- I didn't need care right away for an illness, injury or condition in the last 12 months.

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

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

27. A health provider could be a general doctor, a specialist doctor, a nurse practitioner, a physician assistant, a nurse, or anyone else you would see for health care.

In the last 12 months, not counting the times you needed health care right away, did you make any appointments with a doctor or other health care provider for health care?

- Yes
- No → Go to Question 30

28. In the last 12 months, not counting times you needed health care right away, how often did you get an appointment for health care as soon as you wanted?

- Never
- Sometimes
- Usually
- Always
- I had no appointments in the last 12 months

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

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

30. In the last 12 months, how many times did you go to an emergency room to get care for yourself?

- None
- 1
- 2
- 3
- 4
- 5 to 9
- 10 or more

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

- None → Go to Question 47
- 1
- 2
- 3
- 4
- 5 to 9
- 10 or more

32. In the last 12 months, did you or a doctor believe you needed any care, tests or treatment?

- Yes
- No → Go to Question 34



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33. In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?

- A big problem
- A small problem
- Not a problem
- I had no visits in the last 12 months.

34. In the last 12 months, did you need approval from your health plan for any care, tests or treatment?

- Yes
- No → Go to Question 36

35. In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?

- A big problem
- A small problem
- Not a problem
- I had no visits in the last 12 months.

36. In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

37. In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

38. In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

39. In the last 12 months, how often did doctors or other health providers listen carefully to you?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

40. In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

41. In the last 12 months, how often did doctors or other health providers show respect for what you had to say?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

42. In the last 12 months, how often did doctors or other health providers spend enough time with you?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

43. We want to know how you, your doctors, and other health providers make decisions about your health care.

In the last 12 months, were any decisions made about your health care?

- Yes
- No → Go to Question 46



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44. In the last 12 months, how often were you involved as much as you wanted in these decisions about your health care?

- Never
- Sometimes
- Usually
- Always
- No decisions were made about my health care in the last 12 months.

45. In the last 12 months, how much of a problem, if any, was it to get your doctors or other health providers to agree with you on the best way to manage your health conditions or problems?

- A big problem
- A small problem
- Not a problem
- No decisions were made about my health care in the last 12 months

46. 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 healthcare possible
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 Best healthcare possible
- I had no visits in the last 12 months.

47. In the last 12 months, where did you go most often for your health care? **MARK ONLY ONE ANSWER.**

- A military facility - This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
- A civilian facility - This includes: Doctor's office, Clinic, Hospital, Civilian TRICARE contractor
- Uniformed Services Family Health Plan facility (USFHP)
- Veterans Affairs (VA) clinic or hospital
- I went to none of the listed types of facilities in the last 12 months.

48. In the last 12 months, did you have a health problem for which you needed special medical equipment, such as a cane, wheelchair, or oxygen equipment?

- Yes
- No → Go to Question 50

49. In the last 12 months, how much of a problem, if any, was it to get the special medical equipment you needed through your health plan?

- A big problem
- A small problem
- Not a problem
- I didn't need to get any special medical equipment in the last 12 months.

50. In the last 12 months, did you have any health problems that needed special therapy, such as physical, occupational, or speech therapy?

- Yes
- No → Go to Question 52

51. In the last 12 months, how much of a problem, if any, was it to get the special therapy you needed through your health plan?

- A big problem
- A small problem
- Not a problem
- I didn't need special therapy in the last 12 months



52. Home health care or assistance means home nursing, help with bathing or dressing, and help with basic household tasks.

In the last 12 months, did you need someone to come into your home to give you home health care or assistance?

- Yes
- No → Go to Question 54

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

- A big problem
- A small problem
- Not a problem
- I didn't need home health care or assistance in the last 12 months

----- TRICARE'S CIVILIAN NETWORK -----

The following questions ask about your experiences with the TRICARE civilian provider network. TRICARE, including TRICARE Prime and Extra, is the health care system of the Department of Defense that provides care for active duty and retired military personnel and their dependents. TRICARE includes the hospitals, clinics and pharmacies of the three services, supplemented by a civilian network.

The TRICARE civilian provider network is made up of the doctors, clinics, hospitals and other health care providers who are part of DoD's preferred provider pool. The next six questions refer to health services you received from the civilian network.

54. In the past 12 months, how much of your health care did you receive from the TRICARE civilian provider network?

- All of my healthcare
- Most of my healthcare
- Some of my healthcare
- None of my healthcare
- I did not need healthcare in the past 12 months
→ Go to Question 60

55. In the past 12 months, how much of a problem was it to get the health care you wanted from the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to get healthcare from the civilian network

56. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant.

In the past 12 months, how much of a problem was it to find a conveniently located personal doctor or nurse from the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to find a personal doctor from the civilian network

57. In the past 12 months, how much of a problem was it to find a conveniently located lab or x-ray facility in the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to find a lab or x-ray facility in the civilian network

58. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the past 12 months, how much of a problem was it to find a conveniently located specialist from the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to find a specialist in the civilian network.



59. In the past 12 months, did you learn that a doctor whom you wanted to see had left the TRICARE civilian provider network?

- Yes
- No
- I did not want to see any network doctors

----- 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 5.

60. 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?

- Yes
- No → Go to Question 64
- Don't know → Go to Question 64

61. In the last 12 months, how often did your health plan handle your claims in a reasonable time?

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

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

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

63. In the last 12 months, before you went for care, how often did your health plan make it clear how much you would have to pay?

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

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

- Yes
- No → Go to Question 66

65. In the last 12 months, how much of a problem, if any, was it to find or understand this information?

- A big problem
- A small problem
- Not a problem
- I didn't look for information from my health plan in the last 12 months

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

- Yes
- No → Go to Question 68

67. In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?

- A big problem
- A small problem
- Not a problem
- I didn't call my health plan's customer service in the last 12 months.

68. In the last 12 months, have you called or written your health plan with a complaint or problem?

- Yes
- No → Go to Question 72



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69. How long did it take for the health plan to resolve your complaint?

- Same day
- 2-7 days
- 8-14 days
- 15-21 days
- More than 21 days
- I am still waiting for it to be settled.
→ Go to Question 71
- I haven't called or written with a complaint or problem in the last 12 months.

70. Was your complaint or problem settled to your satisfaction?

- Yes → Go to Question 72
- No → Go to Question 71
- I haven't called or written with a complaint or problem in the last 12 months.

71. How long have you been waiting for your health plan to resolve your complaint?

- 1-7 days
- 8-14 days
- 15-21 days
- More than 21 days
- I haven't called or written with a complaint or problem in the last 12 months.

72. In the last 12 months, did you have to fill out any paperwork for your health plan?

- Yes
- No → Go to Question 74

73. In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?

- A big problem
- A small problem
- Not a problem
- I didn't have any experiences with paperwork for my health plan in the last 12 months.

74. 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

75. If you are currently enrolled in TRICARE Prime, how likely are you to disenroll from TRICARE Prime for a different type of health plan in the next 12 months?

- Very unlikely
- Unlikely
- Neither likely nor unlikely
- Likely
- Very likely
- Not sure
- I am not currently enrolled in TRICARE Prime

----- 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 a cholesterol screening are examples of preventive care.

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

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

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

- Yes, it is too high
- No, it is not too high
- Don't know



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

- Less than 12 months ago
- 1 to 2 years ago
- More than 2 but less than 5 years ago
- 5 or more years ago
- Never had a cholesterol screening

79. When did you last have a flu shot?

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

80. Have you ever smoked at least 100 cigarettes in your entire life?

- Yes
- No → Go to Question 86
- Don't know → Go to Question 86

81. Do you now smoke everyday, some days or not at all?

- Every day → Go to Question 83
- Some days → Go to Question 83
- Not at all → Go to Question 82
- Don't know → Go to Question 86

82. How long has it been since you quit smoking cigarettes?

- Less than 12 months → Go to Question 83
- 12 months or more → Go to Question 86
- Don't know → Go to Question 86

83. In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider in your plan?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months.

84. On how many visits was medication recommended or discussed to assist you with quitting smoking (for example: nicotine gum, patch, nasal spray, inhaler, prescription medication)?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months.

85. On how many visits did your doctor or health provider recommend or discuss methods and strategies (other than medication) to assist you with quitting smoking?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months.

86. Are you male or female?

- Male → Go to Question 87
- Female → Go to Question 88

87. When was the last time you had a prostate gland examination or blood test for prostate disease?

- 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 prostate gland examination

Go to Question 95

88. 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 test



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89. Are you under age 40?

- Yes → Go to Question 92
- No

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

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

91. When was the last time you had a breast exam by a health care professional?

- 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 breast exam

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

- Yes, I am currently pregnant
→ Go to Question 93
- No, I am not currently pregnant, but have been pregnant in the past 12 months
→ Go to Question 94
- No, I am not currently pregnant, and have not been pregnant in the past 12 months
→ Go to Question 95

93. In what trimester is your pregnancy?

- First trimester
- Second trimester
- Third trimester

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

- First trimester
- Second trimester
- Third trimester
- Did not receive prenatal care

----- ABOUT YOU -----

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

- Excellent
- Very Good
- Good
- Fair
- Poor

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

- Yes
- No

97. Because of any impairment or health problem, do you need the help of other persons with your personal care needs, such as eating, dressing, or getting around the house?

- Yes
- No

98. Because of any impairment or health problem, do you need help with your routine needs, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes?

- Yes
- No

99. Do you have a physical or medical condition that seriously interferes with your independence, participation in the community, or quality of life?

- Yes
- No



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100. We want to know your rating of how well your health plan has done in providing the equipment, services, and help you need.

Using any number from 0 to 10 where 0 is the worst your plan could do and 10 is the best your plan could do, what number would you use to rate your health plan now?

- 0 Worst your health plan could do
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 Best your health plan could do

101. Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

102. Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

103. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

104. During the past 30 days, for about how many days did pain make it hard for you to do your usual activities, such as self-care, work, or recreation?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

105. During the past 30 days, for about how many days have you felt sad, blue, or depressed?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

106. During the past 30 days, for about how many days have you felt worried, tense or anxious?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27



107. During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

108. During the past 30 days, for about how many days have you felt very healthy and full of energy?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

109. In the last 12 months, have you been a patient in a hospital overnight or longer?

- Yes
- No

110. Do you now have any physical or medical conditions that have lasted for at least 3 months? [Women: DO NOT include pregnancy.]

- Yes
- No → Go to Question 113

111. In the last 12 months, have you seen a doctor or other health provider more than twice for any of these conditions?

- Yes
- No
- I have no conditions that have lasted 3 months.

112. Have you been taking prescription medicine for at least 3 months for any of these conditions?

- Yes
- No
- I have no conditions that have lasted 3 months.

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

- 8th grade or less
- Some high school, but did not graduate
- High school graduate or GED
- Some college or 2-year degree
- 4-year college graduate
- More than 4-year college degree

114. Are you of Hispanic or Latino origin or descent? (Mark "NO" if not Spanish/Hispanic/Latino.)

- No, not Spanish, Hispanic, or Latino
- Yes, Mexican, Mexican American, Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, other Spanish, Hispanic, or Latino

115. What is your race? (Mark ONE OR MORE races to indicate what you consider yourself to be.)

- White
- Black or African American
- American Indian or Alaska Native
- Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

116. What is your age now?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

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 envelope is missing, please send to: National Research Corporation, Survey Processing Center, PO BOX 82660, Lincoln, NE 68501-2660



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APPENDIX A

ANNOTATED QUESTIONNAIRE - QUARTER III

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Health Care Survey of DoD Beneficiaries



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SURVEY INSTRUCTIONS

Answer all the questions by checking the circle to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see 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 you have misplaced the envelope, our address is:

Office of the Assistant Secretary of Defense (Health Affairs)

c/o Survey Processing Center

PO Box 82660

Lincoln, NE 68501-2660

According to the Privacy Act of 1974 (Public Law 93-579), 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., Chapter 55, Section 572, Public Law 102-484, E.O. 9397.

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

Routine Uses: None

Disclosure: 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.



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----- SURVEY STARTS HERE -----

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

1. Are you the person whose name appears on the mailing label of this envelope?
 - Yes Go to Question 2
 - No Please give this questionnaire to the person addressed on the envelope.

2. By which of the following health plans are you currently covered? MARK ALL THAT APPLY.
 - a. Military Health Plans
 - TRICARE Prime
 - TRICARE Extra or Standard (CHAMPUS)
 - TRICARE Plus
 - TRICARE for Life

 - b. Other Health Plans
 - Medicare
 - Federal Employees Health Benefit Program (FEHBP)
 - Medicaid
 - A civilian HMO (such as Kaiser)
 - Other civilian health insurance (such as Blue Cross)
 - Uniformed Services Family Health Plan (USFHP)
 - The Veterans Administration (VA)
 - Not Sure

3. Currently, are you covered by Medicare Part A? Medicare is the federal health insurance program for people aged 65 or older and for certain disabled people. Medicare Part A helps pay for inpatient hospital care.
 - Yes, I am now covered by Medicare Part A
 - No, I am not covered by Medicare Part A

4. Currently, are you covered by Medicare Part B? Medicare is the federal health insurance program for people aged 65 or older and for certain disabled people. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.
 - Yes, I am now covered by Medicare Part B
 - No, I am not covered by Medicare Part B

5. 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.
 - Yes, I am now covered by Medicare supplemental insurance
 - No, I am not covered by Medicare supplemental insurance

6. Which health plan did you use for all or most of your health care in the last 12 months? MARK ONLY ONE.
 - TRICARE Prime
 - TRICARE Extra or Standard (CHAMPUS)
 - TRICARE Plus
 - Medicare
 - Federal Employees Health Benefit Program (FEHBP)
 - Medicaid
 - A civilian HMO (such as Kaiser)
 - Other civilian health insurance (such as Blue Cross)
 - Uniformed Services Family Health Plans (USFHP)
 - The Veterans Administration (VA)
 - Not sure
 - Did not use any health plan in the last 12 months
→ Go to Question 8

For the remainder of this questionnaire, the term health plan refers to the plan you indicated in Question 6.

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

- Less than 6 months
- 6 up to 12 months
- 12 up to 24 months
- 2 up to 5 years
- 5 up to 10 years
- 10 or more years

----- YOUR PERSONAL DOCTOR, OR NURSE -----

The next 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.

8. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. Do you have one person you think of as your personal doctor or nurse?

- Yes
- No → Go to Question 11

9. 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
- I don't have a personal doctor or nurse.

10. Did you have the same personal doctor or nurse before you joined this health plan?

- Yes → Go to Question 12
- No

11. 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?

- A big problem
- A small problem
- Not a problem

--- GETTING HEALTH CARE FROM A SPECIALIST ---

When you answer the next questions, do not include dental visits.

12. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the last 12 months, did you or a doctor or nurse think you needed to see a specialist?

- Yes
- No → Go to Question 14

13. In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?

- A big problem
- A small problem
- Not a problem
- I didn't need to see a specialist in the last 12 months.

14. In the last 12 months, did you see a specialist?

- Yes
- No → Go to Question 17



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15. 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
- I didn't see a specialist in the last 12 months.

16. In the last 12 months, was the specialist you saw most often the same doctor as your personal doctor?

- Yes
- No
- I don't have a personal doctor or I didn't see a specialist in the last 12 months.

----- CALLING DOCTORS' OFFICES -----

17. In the last 12 months, did you call a doctor's office or clinic during regular office hours to get help or advice for yourself?

- Yes
- No → Go to Question 19

18. In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?

- Never
- Sometimes
- Usually
- Always
- I didn't call for help or advice during regular office hours in the last 12 months.

- YOUR HEALTHCARE IN THE LAST 12 MONTHS -

19. 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?

- Yes
- No → Go to Question 22

20. In the last 12 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?

- Never
- Sometimes
- Usually
- Always
- I didn't need care right away for an illness, injury or condition in the last 12 months.

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

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

22. A health provider could be a general doctor, a specialist doctor, a nurse practitioner, a physician assistant, a nurse, or anyone else you would see for health care.

In the last 12 months, not counting the times you needed health care right away, did you make any appointments with a doctor or other health care provider for health care?

- Yes
- No → Go to Question 25

23. In the last 12 months, not counting times you needed health care right away, how often did you get an appointment for health care as soon as you wanted?

- Never
- Sometimes
- Usually
- Always
- I had no appointments in the last 12 months

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

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

25. In the last 12 months, how many times did you go to an emergency room to get care for yourself?

- None
- 1
- 2
- 3
- 4
- 5 to 9
- 10 or more

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

- None → Go to Question 39
- 1
- 2
- 3
- 4
- 5 to 9
- 10 or more

27. In the last 12 months, did you or a doctor believe you needed any care, tests or treatment?

- Yes
- No → Go to Question 29

28. In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?

- A big problem
- A small problem
- Not a problem
- I had no visits in the last 12 months.

29. In the last 12 months, did you need approval from your health plan for any care, tests or treatment?

- Yes
- No → Go to Question 31

30. In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?

- A big problem
- A small problem
- Not a problem
- I had no visits in the last 12 months.

31. In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

32. In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

33. In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.



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34. In the last 12 months, how often did doctors or other health providers listen carefully to you?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

35. In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

36. In the last 12 months, how often did doctors or other health providers show respect for what you had to say?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

37. In the last 12 months, how often did doctors or other health providers spend enough time with you?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

38. 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 healthcare possible
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 Best healthcare possible
- I had no visits in the last 12 months.

39. In the last 12 months, where did you go most often for your health care? MARK ONLY ONE ANSWER.

- A military facility - This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
- A civilian facility - This includes: Doctor's office, Clinic, Hospital, Civilian TRICARE contractor
- Uniformed Services Family Health Plan facility (USFHP)
- Veterans Affairs (VA) clinic or hospital
- I went to none of the listed types of facilities in the last 12 months.

----- REFERRALS TO SPECIALISTS -----

The following questions ask about your experiences with getting referrals to specialists through TRICARE Prime. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors and others who specialize in one area of health care. Beneficiaries enrolled in TRICARE Prime must get a referral from their primary care manager (PCM) before seeing a specialist.

40. Are you enrolled in TRICARE Prime?

- Yes
- No → Go to Question 55

41. Are you enrolled to a military PCM or civilian PCM?

- Military
- Civilian
- I don't have a PCM → Go to Question 55
- Don't Know → Go to Question 55

42. In the last 12 months, have you been referred to a specialist by your PCM?

- Yes
- No → Go to Question 55

43. In the last 12 months, when you needed to see a specialist, how did you make an appointment? MARK ALL THAT APPLY

- Called the appointment center
- Called an MTF
- Called the doctor's office
- Asked my PCM to make the appointment
- Other

44. In the last 12 months, how much of a problem was it to make an appointment to see a specialist?

- Not a problem
- A small problem
- A big problem

45. In the last 12 months, were you referred to any civilian specialists?

- Yes
- No → Go to Question 50

46. In the last 12 months, what is the longest you waited for an appointment to see a civilian specialist?

- 1 week or less
- More than 1 week but not more than 2 weeks
- More than 2 weeks but not more than 4 weeks
- More than 4 weeks

47. In the last 12 months, what is the longest time you spent traveling (round-trip) to see a civilian specialist?

- 1 hour or less
- More than 1 hour but not more than 2 hours
- More than 2 hours but not more than 4 hours
- More than 4 hours but not more than 8 hours
- More than 8 hours

48. In the past 12 months, how did your PCM most often learn about the care you get from civilian specialists?

- From my medical record
- From me
- My PCM calls or writes the specialist
- The specialist calls or writes my PCM
- My PCM does not keep track of my care from civilian specialists
- Don't Know

49. In the past 12 months, how often did your PCM seem to know enough about the care you get from civilian specialists?

- Always
- Usually
- Sometimes
- Never

50. In the last 12 months, were you referred to a specialist at an MTF?

- Yes
- No → Go to Question 55

51. In the last 12 months, what is the longest you waited for an appointment to see a specialist at an MTF?

- 1 week or less
- More than 1 week but not more than 2 weeks
- More than 2 weeks but not more than 4 weeks
- More than 4 weeks

52. In the last 12 months, what is the longest time you spent traveling (round-trip) to see a specialist at an MTF?

- 1 hour or less
- More than 1 hour but not more than 2 hours
- More than 2 hours but not more than 4 hours
- More than 4 hours but not more than 8 hours
- More than 8 hours



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53. In the past 12 months, how did your PCM most often learn about the care you get from specialists at MTFs?

- From my medical records
- From me
- My PCM calls or writes the specialist
- The specialist calls or writes my PCM
- My PCM does not keep track of my care from specialists at MTFs
- Don't know

54. In the past 12 months, how often did your PCM seem to know enough about the care you get from specialists at MTFs?

- Always
- Usually
- Sometimes
- Never

----- TRICARE'S CIVILIAN NETWORK -----

The following questions ask about your experiences with the TRICARE civilian provider network.

TRICARE, including TRICARE Prime and Extra, is the health care system of the Department of Defense that provides care for active duty and retired military personnel and their dependents. TRICARE includes the hospitals, clinics and pharmacies of the three services, supplemented by a civilian network.

The TRICARE civilian provider network is made up of the doctors, clinics, hospitals and other health care providers who are part of DoD's preferred provider pool. The next six questions refer to health services you received from the civilian network.

55. In the past 12 months, how much of your health care did you receive from the TRICARE civilian provider network?

- All of my healthcare
- Most of my healthcare
- Some of my healthcare
- None of my healthcare
- I did not need healthcare in the past 12 months
→ Go to Question 61

56. In the past 12 months, how much of a problem was it to get the health care you wanted from the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to get healthcare from the civilian network

57. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant.

In the past 12 months, how much of a problem was it to find a conveniently located personal doctor or nurse from the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to find a personal doctor from the civilian network

58. In the past 12 months, how much of a problem was it to find a conveniently located lab or x-ray facility in the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to find a lab or x-ray facility in the civilian network

59. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the past 12 months, how much of a problem was it to find a conveniently located specialist from the TRICARE civilian provider network?

- A big problem
- A small problem
- Not a problem
- I did not try to find a specialist in the civilian network.

60. In the past 12 months, did you learn that a doctor whom you wanted to see had left the TRICARE civilian provider network?

- Yes
- No
- I did not want to see any network doctors

----- 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 6.

61. 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?

- Yes
- No → Go to Question 65
- Don't know → Go to Question 65

62. In the last 12 months, how often did your health plan handle your claims in a reasonable time?

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

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

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

64. In the last 12 months, before you went for care, how often did your health plan make it clear how much you would have to pay?

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

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

- Yes
- No → Go to Question 67

66. In the last 12 months, how much of a problem, if any, was it to find or understand this information?

- A big problem
- A small problem
- Not a problem
- I didn't look for information from my health plan in the last 12 months

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

- Yes
- No → Go to Question 69

68. In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?

- A big problem
- A small problem
- Not a problem
- I didn't call my health plan's customer service in the last 12 months.

69. In the last 12 months, have you called or written your health plan with a complaint or problem?

- Yes
- No → Go to Question 73



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70. How long did it take for the health plan to resolve your complaint?

- Same day
- 2-7 days
- 8-14 days
- 15-21 days
- More than 21 days
- I am still waiting for it to be settled.
→ Go to Question 72
- I haven't called or written with a complaint or problem in the last 12 months.

71. Was your complaint or problem settled to your satisfaction?

- Yes → Go to Question 73
- No → Go to Question 72
- I haven't called or written with a complaint or problem in the last 12 months.

72. How long have you been waiting for your health plan to resolve your complaint?

- 1-7 days
- 8-14 days
- 15-21 days
- More than 21 days
- I haven't called or written with a complaint or problem in the last 12 months.

73. In the last 12 months, did you have to fill out any paperwork for your health plan?

- Yes
- No → Go to Question 75

74. In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?

- A big problem
- A small problem
- Not a problem
- I didn't have any experiences with paperwork for my health plan in the last 12 months.

75. 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

76. If you are currently enrolled in TRICARE Prime, how likely are you to disenroll from TRICARE Prime for a different type of health plan in the next 12 months?

- Very unlikely
- Unlikely
- Neither likely nor unlikely
- Likely
- Very likely
- Not sure
- I am not currently enrolled in TRICARE Prime

----- 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 a cholesterol screening are examples of preventive care.

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

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

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

- Yes, it is too high
- No, it is not too high
- Don't know

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

- Less than 12 months ago
- 1 to 2 years ago
- More than 2 but less than 5 years ago
- 5 or more years ago
- Never had a cholesterol screening

80. When did you last have a flu shot?

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

81. Have you ever smoked at least 100 cigarettes in your entire life?

- Yes
- No → Go to Question 87
- Don't know → Go to Question 87

82. Do you now smoke everyday, some days or not at all?

- Every day → Go to Question 84
- Some days → Go to Question 84
- Not at all → Go to Question 83
- Don't know → Go to Question 87

83. How long has it been since you quit smoking cigarettes?

- Less than 12 months → Go to Question 84
- 12 months or more → Go to Question 87
- Don't know → Go to Question 87

84. In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider in your plan?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months.

85. On how many visits was medication recommended or discussed to assist you with quitting smoking (for example: nicotine gum, patch, nasal spray, inhaler, prescription medication)?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months.

86. On how many visits did your doctor or health provider recommend or discuss methods and strategies (other than medication) to assist you with quitting smoking?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months.

87. Are you male or female?

- Male → Go to Question 88
- Female → Go to Question 89

88. When was the last time you had a prostate gland examination or blood test for prostate disease?

- 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 prostate gland examination

Go to Question 96

89. 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 test



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90. Are you under age 40?

- Yes → Go to Question 93
- No

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

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

92. When was the last time you had a breast exam by a health care professional?

- 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 breast exam

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

- Yes, I am currently pregnant
→ Go to Question 94
- No, I am not currently pregnant, but have been pregnant in the past 12 months
→ Go to Question 95
- No, I am not currently pregnant, and have not been pregnant in the past 12 months
→ Go to Question 96

94. In what trimester is your pregnancy?

- First trimester
- Second trimester
- Third trimester

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

- First trimester
- Second trimester
- Third trimester
- Did not receive prenatal care

----- ABOUT YOU -----

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

- Excellent
- Very Good
- Good
- Fair
- Poor

97. How tall are you without your shoes on? Write the number on the line and then fill in the bubble below.

a. Feet _____

- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <input type="radio"/> |

b. Inches _____

- | | | | | | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| <input type="radio"/> |

98. How much do you weigh without your shoes on?
Please write the number of pounds on the line below.

_____ pounds

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

- Yes
- No

100. Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

- | | | | | |
|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="radio"/> 0 | <input type="radio"/> 7 | <input type="radio"/> 14 | <input type="radio"/> 21 | <input type="radio"/> 28 |
| <input type="radio"/> 1 | <input type="radio"/> 8 | <input type="radio"/> 15 | <input type="radio"/> 22 | <input type="radio"/> 29 |
| <input type="radio"/> 2 | <input type="radio"/> 9 | <input type="radio"/> 16 | <input type="radio"/> 23 | <input type="radio"/> 30 |
| <input type="radio"/> 3 | <input type="radio"/> 10 | <input type="radio"/> 17 | <input type="radio"/> 24 | |
| <input type="radio"/> 4 | <input type="radio"/> 11 | <input type="radio"/> 18 | <input type="radio"/> 25 | |
| <input type="radio"/> 5 | <input type="radio"/> 12 | <input type="radio"/> 19 | <input type="radio"/> 26 | |
| <input type="radio"/> 6 | <input type="radio"/> 13 | <input type="radio"/> 20 | <input type="radio"/> 27 | |

101. Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

102. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

103. During the past 30 days, for about how many days did pain make it hard for you to do your usual activities, such as self-care, work, or recreation?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

104. During the past 30 days, for about how many days have you felt sad, blue, or depressed?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

105. During the past 30 days, for about how many days have you felt worried, tense or anxious?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

106. During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

107. During the past 30 days, for about how many days have you felt very healthy and full of energy?

- 0 7 14 21 28
- 1 8 15 22 29
- 2 9 16 23 30
- 3 10 17 24
- 4 11 18 25
- 5 12 19 26
- 6 13 20 27

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

- 8th grade or less
- Some high school, but did not graduate
- High school graduate or GED
- Some college or 2-year degree
- 4-year college graduate
- More than 4-year college degree

109. Are you of Hispanic or Latino origin or descent? (Mark "NO" if not Spanish/Hispanic/Latino.)

- No, not Spanish, Hispanic, or Latino
- Yes, Mexican, Mexican American, Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, other Spanish, Hispanic, or Latino



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110. What is your race? (Mark ONE OR MORE races to indicate what you consider yourself to be.)

- White
- Black or African American
- American Indian or Alaska Native
- Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

111. What is your age now?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

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 envelope is missing, please send to: National Research Corporation, Survey Processing Center, PO BOX 82660, Lincoln, NE 68501-2660

APPENDIX A

ANNOTATED QUESTIONNAIRE - QUARTER IV

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Health Care Survey of DoD Beneficiaries



OCTOBER 2004

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SURVEY INSTRUCTIONS

Answer all 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 1*

No

Please return the completed questionnaire in the enclosed postage-paid envelope within seven days. If you have misplaced the envelope, our address is:

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

According to the Privacy Act of 1974 (Public Law 93-579), 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., Chapter 55, Section 572, Public Law 102-484, E.O. 9397.

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: 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.

SURVEY STARTS HERE

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

1. Are you the person whose name appears on the mailing label of this envelope?

- Yes → Go to Question 2
- No → Please give this questionnaire to the person addressed on the envelope.

2. By which of the following health plans are you currently covered? **MARK ALL THAT APPLY.**

a. Military Health Plans

- TRICARE Prime
- TRICARE Extra or Standard (CHAMPUS)
- TRICARE Plus
- TRICARE for Life

b. Other Health Plans

- Medicare
- Federal Employees Health Benefit Program (FEHBP)
- Medicaid
- A civilian HMO (such as Kaiser)
- Other civilian health insurance (such as Blue Cross)
- Uniformed Services Family Health Plan (USFHP)
- The Veterans Administration (VA)
- Not sure

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

- Yes, I am now covered by Medicare Part A
- No, I am not covered by Medicare Part A

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

- Yes, I am now covered by Medicare Part B
- No, I am not covered by Medicare Part B

5. 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.

- Yes, I am now covered by Medicare supplemental insurance
- No, I am not covered by Medicare supplemental insurance

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

- TRICARE Prime
- TRICARE Extra or Standard (CHAMPUS)
- TRICARE Plus
- Medicare
- Federal Employees Health Benefit Program (FEHBP)
- Medicaid
- A civilian HMO (such as Kaiser)
- Other civilian health insurance (such as Blue Cross)
- Uniformed Services Family Health Plan (USFHP)
- The Veterans Administration (VA)
- Not sure
- Did not use any health plan in the last 12 months → Go to Question 8

For the remainder of this questionnaire, the term health plan refers to the plan you indicated in Question 6.

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

- Less than 6 months
- 6 up to 12 months
- 12 up to 24 months
- 2 up to 5 years
- 5 up to 10 years
- 10 or more years

YOUR PERSONAL DOCTOR, OR NURSE

The next 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.

8. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. Do you have one person you think of as your personal doctor or nurse?

- Yes
- No → Go to Question 11

9. 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
- I don't have a personal doctor or nurse.

10. Did you have the same personal doctor or nurse before you joined this health plan?

- Yes → Go to Question 12
- No

11. 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?

- A big problem
- A small problem
- Not a problem

GETTING HEALTH CARE FROM A SPECIALIST

When you answer the next questions, do not include dental visits.

12. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the last 12 months, did you or a doctor think you needed to see a specialist?

- Yes
- No → Go to Question 14

13. In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?

- A big problem
- A small problem
- Not a problem
- I didn't need to see a specialist in the last 12 months.

14. In the last 12 months, did you see a specialist?

- Yes
- No → Go to Question 17

15. 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
- I didn't see a specialist in the last 12 months.

16. In the last 12 months, was the specialist you saw most often the same doctor as your personal doctor?

- Yes
- No
- I don't have a personal doctor or I didn't see a specialist in the last 12 months.

CALLING DOCTORS' OFFICES

17. In the last 12 months, did you call a doctor's office or clinic during regular office hours to get help or advice for yourself?

- Yes
- No → Go to Question 19

18. In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?

- Never
- Sometimes
- Usually
- Always
- I didn't call for help or advice during regular office hours in the last 12 months.

YOUR HEALTH CARE IN THE LAST 12 MONTHS

19. 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?

- Yes
- No → Go to Question 22

20. In the last 12 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?

- Never
- Sometimes
- Usually
- Always
- I didn't need care right away for an illness, injury or condition in the last 12 months.

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

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

22. A health provider could be a general doctor, a specialist doctor, a nurse practitioner, a physician assistant, a nurse, or anyone else you would see for health care.

In the last 12 months, not counting the times you needed health care right away, did you make any appointments with a doctor or other health care provider for health care?

- Yes
- No → Go to Question 25

23. In the last 12 months, not counting times you needed health care right away, how often did you get an appointment for health care as soon as you wanted?

- Never
- Sometimes
- Usually
- Always
- I had no appointments in the last 12 months.

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

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

25. In the last 12 months, how many times did you go to an emergency room to get care for yourself?

- None
- 1
- 2
- 3
- 4
- 5 to 9
- 10 or more

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

- None → Go to Question 39
- 1
- 2
- 3
- 4
- 5 to 9
- 10 or more

27. In the last 12 months, did you or a doctor believe you needed any care, tests, or treatment?

- Yes
- No → Go to Question 29

28. In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?

- A big problem
- A small problem
- Not a problem
- I had no visits in the last 12 months.

29. In the last 12 months, did you need approval from your health plan for any care, tests, or treatment?

- Yes
- No → Go to Question 31

30. In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?

- A big problem
- A small problem
- Not a problem
- I had no visits in the last 12 months.

31. In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

32. In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

33. In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

34. In the last 12 months, how often did doctors or other health providers listen carefully to you?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

35. In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

36. In the last 12 months, how often did doctors or other health providers show respect for what you had to say?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

37. In the last 12 months, how often did doctors or other health providers spend enough time with you?

- Never
- Sometimes
- Usually
- Always
- I had no visits in the last 12 months.

38. 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
- I had no visits in the last 12 months.

39. In the last 12 months, where did you go most often for your health care? **MARK ONLY ONE ANSWER**

- A military facility – This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
- A civilian facility – This includes: Doctor's office, Clinic, Hospital, Civilian TRICARE Contractor
- Uniformed Services Family Health Plan facility (USFHP)
- Veterans Affairs (VA) clinic or hospital
- I went to none of the listed types of facilities in the last 12 months.

TRICARE'S CIVILIAN NETWORK

The following questions ask about your experiences with the TRICARE civilian provider network. TRICARE, including TRICARE Prime and Extra, is the health care system of the Department of Defense that provides care for active duty and retired military personnel and their dependents. TRICARE includes the hospitals, clinics and pharmacies of the three services, supplemented by a civilian network.

The TRICARE civilian provider network is made up of the doctors, clinics, hospitals and other health care providers who are part of DoD's preferred provider pool. The next six questions refer to health services you received from the civilian network.

40. In the past 12 months, how much of your health care did you receive from the TRICARE civilian provider network?
- All of my health care
 - Most of my health care
 - Some of my health care
 - None of my health care
 - I did not need health care in the past 12 months → Go to Question 46
41. In the past 12 months, how much of a problem was it to get the health care you wanted from the TRICARE civilian provider network?
- A big problem
 - A small problem
 - Not a problem
 - I did not try to get health care from the civilian network.
42. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant.
- In the past 12 months, how much of a problem was it to find a conveniently located personal doctor or nurse from the TRICARE civilian provider network?
- A big problem
 - A small problem
 - Not a problem
 - I did not try to find a personal doctor from the civilian network.
43. In past 12 months, how much of a problem was it to find a conveniently located lab or x-ray facility in the TRICARE civilian provider network?
- A big problem
 - A small problem
 - Not a problem
 - I did not try to find a lab or x-ray facility in the civilian network.
44. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.
- In the past 12 months, how much of a problem was it to find a conveniently located specialist from the TRICARE civilian provider network?
- A big problem
 - A small problem
 - Not a problem
 - I did not try to find a specialist in the civilian network.
45. In the past 12 months, did you learn that a doctor whom you wanted to see had left the TRICARE civilian provider network?
- Yes
 - No
 - I did not want to see any network doctors

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 6.

46. 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?

- Yes
- No → Go to Question 50
- Don't know → Go to Question 50

47. In the last 12 months, how often did your health plan handle your claims in a reasonable time?

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

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

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

49. In the last 12 months, before you went for care, how often did your health plan make it clear how much you would have to pay?

- Never
- Sometimes
- Usually
- Always
- Don't know
- No claims were sent for me in the last 12 months.

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

- Yes
- No → Go to Question 52

51. In the last 12 months, how much of a problem, if any, was it to find or understand this information?

- A big problem
- A small problem
- Not a problem
- I didn't look for information from my health plan in the last 12 months.

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

- Yes
- No → Go to Question 54

53. In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?

- A big problem
- A small problem
- Not a problem
- I didn't call my health plan's customer service in the last 12 months.

54. In the last 12 months, have you called or written your health plan with a complaint or problem?

- Yes
- No → Go to Question 58

55. How long did it take for the health plan to resolve your complaint?

- Same day
- 2-7 days
- 8-14 days
- 15-21 days
- More than 21 days
- I am still waiting for it to be settled. → Go to Question 57
- I haven't called or written with a complaint or problem in the last 12 months.

56. Was your complaint or problem settled to your satisfaction?
- Yes → Go to Question 58
 - No → Go to Question 57
 - I haven't called or written with a complaint or problem in the last 12 months.
57. How long have you been waiting for your health plan to resolve your complaint?
- 1-7 days
 - 8-14 days
 - 15-21 days
 - More than 21 days
 - I haven't called or written with a complaint or problem in the last 12 months.
58. In the last 12 months, did you have to fill out any paperwork for your health plan?
- Yes
 - No → Go to Question 60
59. In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?
- A big problem
 - A small problem
 - Not a problem
 - I didn't have any experiences with paperwork for my health plan 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?
- 0 Worst health plan possible
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10 Best health plan possible

61. If you are currently enrolled in TRICARE Prime, how likely are you to disenroll from TRICARE Prime for a different type of health plan in the next 12 months?
- Very unlikely
 - Unlikely
 - Neither likely nor unlikely
 - Likely
 - Very likely
 - Not sure
 - I am not currently enrolled in TRICARE Prime

RESERVISTS

The following questions concern health care coverage provided to reservists (National Guard and Reserves) and their families.

62. Are you a member of the National Guard or Reserve or in the family of someone who is?
- I am both a reservist and the family member of a reservist → Go to Question 63
 - I am a reservist but not the family member of a reservist → Go to Question 71
 - I am the family member of a reservist but not a reservist → Go to Question 63
 - I am not a reservist and not the family member of a reservist → Go to Question 78
63. Is your reservist family member currently mobilized?
- Yes, my reservist family member is currently mobilized → Go to Question 64
 - No, my reservist family member had been mobilized but was demobilized within the past 6 months → Go to Question 71
 - No, my reservist family member is not currently mobilized and was not demobilized within the past 6 months → Go to Question 71

64. Before the reservist in your family was mobilized, were you covered by civilian health insurance?
- Yes, through my own policy → Go to Question 66
 - Yes, through the policy of the reservist in my family → Go to Question 65
 - Yes, through the policy of a non-reservist in my family → Go to Question 66
 - No, I had no civilian coverage → Go to Question 66
65. Does the employer of the reservist in your family now pay all or part of the premium for your civilian health insurance?
- Yes, pays all
 - No
 - Yes, pays part
66. Which of the following describes your current health care coverage?
- I use only TRICARE
 - I use both TRICARE and civilian coverage
 - I use only civilian coverage → Go to Question 75
 - Don't Know → Go to Question 75
67. How much of a problem was it to get information about your TRICARE benefits when the reservist in your family was mobilized?
- A big problem
 - A small problem
 - Not a problem
 - I did not try to get information about TRICARE
68. Is your personal doctor or nurse a member of TRICARE's civilian network?
- Yes
 - No
 - I do not have a personal doctor or nurse
69. Since the reservist in your family was mobilized, how difficult is it to see the personal doctor you want to see?
- It is now more difficult
 - It is now less difficult
 - It is about the same
 - I do not have a personal doctor

70. Since the reservist in your family was mobilized, how difficult is it to see the specialists you want to see?
- It is now more difficult
 - It is now less difficult
 - It is about the same
 - I have not needed to see any specialists
- Go to question 75
71. Are you a currently mobilized member of the National Guard or Reserve?
- Yes, I am currently mobilized → Go to Question 72
 - No, I had been mobilized but was demobilized in the past 6 months → Go to Question 78
 - No, I am not currently mobilized and was not demobilized in the past 6 months → Go to Question 78
 - No, I am not a member of the National Guard or Reserves → Go to Question 78
72. Before your current mobilization, were you covered by civilian health insurance?
- Yes, through my own policy → Go to Question 73
 - Yes, through the policy of a family member → Go to Question 75
 - No → Go to Question 75
73. Have you kept your civilian insurance coverage?
- Yes
 - No
74. Does your employer now pay all or part of the premium for your civilian health insurance?
- Yes, pays all
 - Yes, pays part
 - No

75. For which operation are you or the reservist in your family currently mobilized?
- Operation Noble Eagle
 - Operation Enduring Freedom
 - Operation Iraqi Freedom
 - Another Operation
 - I am not a currently mobilized reservist and no one in my family is → Go to Question 78

76. When were you or the reservist in your family mobilized for this operation?
- Less than 6 months ago
 - At least 6 months ago but less than 12 months ago
 - Twelve months ago or more

77. How long did the initial mobilization orders state the mobilization would last?
- Less than 6 months
 - At least 6 months but less than 12 months
 - Twelve months or more

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 a cholesterol screening are examples of preventive care.

78. When did you last have a blood pressure reading?
- Less than 12 months ago
 - 1 to 2 years ago
 - More than 2 years ago
79. Do you know if your blood pressure is too high?
- Yes, it is too high
 - No, it is not too high
 - Don't know

80. When did you last have a cholesterol screening, that is, a test to determine the level of cholesterol in your blood?
- Less than 12 months ago
 - 1 to 2 years ago
 - More than 2 but less than 5 years ago
 - 5 or more years ago
 - Never had a cholesterol screening

81. When did you last have a flu shot?
- Less than 12 months ago
 - 1-2 years ago
 - More than 2 years ago
 - Never had a flu shot

82. Have you ever smoked at least 100 cigarettes in your entire life?
- Yes
 - No → Go to Question 88
 - Don't know → Go to Question 88

83. Do you now smoke everyday, some days or not at all?
- Every day → Go to Question 85
 - Some days → Go to Question 85
 - Not at all → Go to Question 84
 - Don't know → Go to Question 88

84. How long has it been since you quit smoking cigarettes?
- Less than 12 months → Go to Question 85
 - 12 months or more → Go to Question 88
 - Don't know → Go to Question 88

85. In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider in your plan?
- None
 - 1 visit
 - 2 to 4 visits
 - 5 to 9 visits
 - 10 or more visits
 - I had no visits in the last 12 months.

86. On how many visits was medication recommended or discussed to assist you with quitting smoking (for example: nicotine gum, patch, nasal spray, inhaler, prescription medication)?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months

87. On how many visits did your doctor or health provider recommend or discuss methods and strategies (other than medication) to assist you with quitting smoking?

- None
- 1 visit
- 2 to 4 visits
- 5 to 9 visits
- 10 or more visits
- I had no visits in the last 12 months

88. Are you male or female?

- Male → Go to Question 89
- Female → Go to Question 90

89. When was the last time you had a prostate gland examination or blood test for prostate disease?

- 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 prostate gland examination

Go to Question 97

90. 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 test

91. Are you under age 40?

- Yes → Go to Question 94
- No

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

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

93. When was the last time you had a breast exam by a health care professional?

- 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 breast exam

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

- Yes, I am currently pregnant → Go to Question 95
- No, I am not currently pregnant, but have been pregnant in the past 12 months → Go to Question 96
- No, I am not currently pregnant, and have not been pregnant in the past 12 months → Go to Question 97

95. In what trimester is your pregnancy?

- First trimester
- Second trimester
- Third trimester

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

- First trimester
- Second trimester
- Third trimester
- Did not receive prenatal care

ABOUT YOU

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

- Excellent
- Very good
- Good
- Fair
- Poor

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

- Yes No

For each of questions 99 to 108, please write your response on the lines provided, then check the matching box in each column below. For example in question 99 if you are five feet and six inches tall, you would put a "5" on the first line and a "6" on the second line, and then check the box next to the "5" in the first column and check the box next to the "6" in the second column. For example

_____ 5 _____ Feet _____ 6 _____ Inches

- | | |
|---|---|
| <input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3
<input type="checkbox"/> 4
<input checked="" type="checkbox"/> 5
<input type="checkbox"/> 6
<input type="checkbox"/> 7 | <input type="checkbox"/> 0
<input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3
<input type="checkbox"/> 4
<input type="checkbox"/> 5
<input checked="" type="checkbox"/> 6
<input type="checkbox"/> 7
<input type="checkbox"/> 8
<input type="checkbox"/> 9
<input type="checkbox"/> 10
<input type="checkbox"/> 11 |
|---|---|

99. How tall are you without your shoes on? Please give your answer in feet and inches.

_____ Feet _____ Inches

- | | |
|--|--|
| <input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3
<input type="checkbox"/> 4
<input type="checkbox"/> 5
<input type="checkbox"/> 6
<input type="checkbox"/> 7 | <input type="checkbox"/> 0
<input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3
<input type="checkbox"/> 4
<input type="checkbox"/> 5
<input type="checkbox"/> 6
<input type="checkbox"/> 7
<input type="checkbox"/> 8
<input type="checkbox"/> 9
<input type="checkbox"/> 10
<input type="checkbox"/> 11 |
|--|--|

100. How much do you weigh without your shoes on? Please give your answer in pounds.

_____ _____ _____ Pounds

- | | | |
|--|--|--|
| <input type="checkbox"/> 0
<input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3 | <input type="checkbox"/> 0
<input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3
<input type="checkbox"/> 4
<input type="checkbox"/> 5
<input type="checkbox"/> 6
<input type="checkbox"/> 7
<input type="checkbox"/> 8
<input type="checkbox"/> 9 | <input type="checkbox"/> 0
<input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3
<input type="checkbox"/> 4
<input type="checkbox"/> 5
<input type="checkbox"/> 6
<input type="checkbox"/> 7
<input type="checkbox"/> 8
<input type="checkbox"/> 9 |
|--|--|--|

101. Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

_____ _____ Number of days

- | | |
|--|--|
| <input type="checkbox"/> 0
<input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3 | <input type="checkbox"/> 0
<input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3
<input type="checkbox"/> 4
<input type="checkbox"/> 5
<input type="checkbox"/> 6
<input type="checkbox"/> 7
<input type="checkbox"/> 8
<input type="checkbox"/> 9 |
|--|--|

102. Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

_____ Number of days

- | | |
|----------------------------|----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| | <input type="checkbox"/> 4 |
| | <input type="checkbox"/> 5 |
| | <input type="checkbox"/> 6 |
| | <input type="checkbox"/> 7 |
| | <input type="checkbox"/> 8 |
| | <input type="checkbox"/> 9 |

103. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

_____ Number of days

- | | |
|----------------------------|----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| | <input type="checkbox"/> 4 |
| | <input type="checkbox"/> 5 |
| | <input type="checkbox"/> 6 |
| | <input type="checkbox"/> 7 |
| | <input type="checkbox"/> 8 |
| | <input type="checkbox"/> 9 |

104. During the past 30 days, for about how many days did pain make it hard for you to do your usual activities, such as self-care, work, or recreation?

_____ Number of days

- | | |
|----------------------------|----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| | <input type="checkbox"/> 4 |
| | <input type="checkbox"/> 5 |
| | <input type="checkbox"/> 6 |
| | <input type="checkbox"/> 7 |
| | <input type="checkbox"/> 8 |
| | <input type="checkbox"/> 9 |

105. During the past 30 days, for about how many days have you felt sad, blue, or depressed?

_____ Number of days

- | | |
|----------------------------|----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| | <input type="checkbox"/> 4 |
| | <input type="checkbox"/> 5 |
| | <input type="checkbox"/> 6 |
| | <input type="checkbox"/> 7 |
| | <input type="checkbox"/> 8 |
| | <input type="checkbox"/> 9 |

106. During the past 30 days, for about how many days have you felt worried, tense or anxious?

_____ Number of days

- | | |
|----------------------------|----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| | <input type="checkbox"/> 4 |
| | <input type="checkbox"/> 5 |
| | <input type="checkbox"/> 6 |
| | <input type="checkbox"/> 7 |
| | <input type="checkbox"/> 8 |
| | <input type="checkbox"/> 9 |

107. During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?

_____ Number of days

- | | |
|----------------------------|----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| | <input type="checkbox"/> 4 |
| | <input type="checkbox"/> 5 |
| | <input type="checkbox"/> 6 |
| | <input type="checkbox"/> 7 |
| | <input type="checkbox"/> 8 |
| | <input type="checkbox"/> 9 |

108. During the past 30 days, for about how many days have you felt very healthy and full of energy?

- _____ _____ Number of days
- | | |
|----------------------------|----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| | <input type="checkbox"/> 4 |
| | <input type="checkbox"/> 5 |
| | <input type="checkbox"/> 6 |
| | <input type="checkbox"/> 7 |
| | <input type="checkbox"/> 8 |
| | <input type="checkbox"/> 9 |

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

- 8th grade or less
- Some high school, but did not graduate
- High school graduate or GED
- Some college or 2-year degree
- 4-year college graduate
- More than 4-year college degree

110. Are you of Hispanic or Latino origin or descent? (Mark "NO" if not Spanish/Hispanic/Latino.)

- No, not Spanish, Hispanic, or Latino
- Yes, Mexican, Mexican American, Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, other Spanish, Hispanic, or Latino

111. What is your race? (Mark ONE OR MORE races to indicate what you consider yourself to be.)

- White
- Black or African American
- American Indian or Alaska Native
- Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian or Chamorro)

112. What is your age now?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

If you have any suggestions or comments that you would like to add, please neatly print your comments in question 113 on the lines provided.

113. SUGGESTIONS AND COMMENTS:

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:

**Synovate
PO Box 5030
Chicago, IL 60680**

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APPENDIX B
SURVEY FIELDING LETTERS

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Sample Reminder/Thank You Postcard, Quarter I

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS/TRICARE MANAGEMENT ACTIVITY
SURVEY PROCESSING CENTER
C/O NATIONAL RESEARCH CORPORATION
PO BOX 82660
LINCOLN, NE 68501-2660

PRESORTED
1ST CLASS
U.S. POSTAGE
PAID
LINCOLN, NE
PERMIT #1116

#BWNHDJZ

** 0153733-A12345 **



RADIOLOGY CHRISTOPHER JOHNSON I
1245 Q ST STE 400
LINCOLN, NE 68508-1430

WE NEED YOUR HELP!

HELLO!

Recently, we mailed you the *Health Care Survey of DoD Beneficiaries*, a DoD-sponsored survey of all military beneficiaries. Since we have not heard from you, we would like to remind you to take advantage of this opportunity to share your opinions about your health care experiences by completing the survey.

Taking part in this survey is voluntary. You are among only a few military beneficiaries randomly selected to participate. As an eligible military beneficiary, your benefits under TRICARE include both civilian care and care you receive within our military facilities. Even if you did not receive your health care from a military facility, please still complete the survey. All your contact information and what you have to say is private.

If you did not receive the survey or if you need another copy, please call 1-800-866-1821 (within the U.S.) or call collect at 1-402-475-5003 (outside the U.S.). All calls to this number are free.

THANK YOU!

Richard D. Guerin, Ph.D.
Director, Health Program Analysis and Evaluation

Sample Notification Letter, Quarter II



TRICARE MANAGEMENT ACTIVITY
HEALTH PROGRAM ANALYSIS AND EVALUATION

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE HEALTH AFFAIRS



March 3, 2004

#BWNHDJZ
** 0060421-A12345 **
|||||
RADIOLOGY CHRISTOPHER JOHNSON I
1245 Q ST STE 400
LINCOLN, NE 68508-1430

Dear Radiology Christopher Johnson I:

We need your help! The Department of Defense (DoD) is requesting your cooperation in completing a worldwide survey of all DoD health care beneficiaries aimed at understanding and improving your health care experiences. In a few weeks, you will receive the *Health Care Survey of Department of Defense Beneficiaries* in the mail that includes questions about the health care services you have received in the past 12 months. Your views are important to us and your opinions count. By completing the survey, you will provide important information that will help us improve the health care services for the entire DoD health care community. Please take advantage of this opportunity to share your opinions by participating in the survey.

Taking part in this survey is voluntary. You are among only a few beneficiaries randomly selected to participate. As an eligible military beneficiary, your benefits under TRICARE include both civilian care and care you receive within our military facilities. **Even if you do not receive health care from a military facility, please still complete the survey.** All the information from the survey is private.

If your address above is incorrect, please telephone the Survey Operations Center at 1-800-866-1821 (within the U.S.) or call collect at 1-402-475-5003 (outside the U.S.) between the hours of 9:00 AM and 7:00 PM EST to give your correct address. You also can send this letter via facsimile with your correct address to 1-800-733-5751. All calls to these numbers are free.

Thank you for your service to our country, and thank you in advance for your help!

Sincerely,

Richard D. Guerin, Ph.D.
Director
Health Program Analysis and Evaluation

Sample Reminder/Thank You Postcard, Quarter II

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS/TRICARE MANAGEMENT ACTIVITY
SURVEY PROCESSING CENTER
C/O NATIONAL RESEARCH CORPORATION
PO BOX 92660
LINCOLN, NE 68501-2660

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LINCOLN, NE
PERMIT #1116

#BWNHDJZ

** 0153733-A12345 **



PVT CHRISTOPHER JOHNSON I
1245 Q ST STE 400
LINCOLN, NE 68508-1430

WE NEED YOUR HELP!

HELLO!

Recently, we mailed you the *Health Care Survey of DoD Beneficiaries*, a DoD-sponsored survey of all TRICARE members. You are among only a few randomly selected to receive this survey and her have not heard from you yet! As an eligible military beneficiary, your benefits include both civilian care and care you receive within our military facilities. Even if you did not receive your health care from a military facility, please complete the survey.

Taking part in this survey is voluntary and the information you provide us is kept private. The end of the survey period is June 1, 2004 so return your copy today!

If you did not receive the survey or if you need another copy, please call 1-800-866-1821 (within the U.S.) or call collect at 1-402-475-5003 (outside the U.S.). All calls to this number are free.

THANK YOU!

Richard D. Guerin, Ph.D.
Director, Health Program Analysis and Evaluation

Sample Notification Letter, Quarter III



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE HEALTH AFFAIRS

TRICARE MANAGEMENT ACTIVITY
HEALTH PROGRAM ANALYSIS AND EVALUATION

June 3, 2004

DIRECT PRODUCT TYPE
** 0060421-A12345 **
|||||
PVT CHRISTOPHER JOHNSON I
1245 Q ST STE 400
LINCOLN, NE 68508-1430

Dear PVT Christopher Johnson I:

We need your help! The Department of Defense (DoD) is requesting your cooperation in completing a worldwide survey of all DoD health care beneficiaries aimed at understanding and improving your health care experiences. In a few weeks, we will mail you the *Health Care Survey of Department of Defense Beneficiaries* that includes questions about the health care services you have received in the past 12 months. Your views are important to us and your opinions count. By completing the survey, you will provide important information that will help us improve the health care services for the entire DoD health care community. Please take advantage of this opportunity to share your opinions by participating in the survey.

Taking part in this survey is voluntary. You are among only a few beneficiaries randomly selected to participate. As an eligible military beneficiary, your benefits under TRICARE include both civilian care and care you receive within our military facilities. **Even if you do not receive health care from a military facility, please still complete the survey.** All the information from the survey is private.

If your address above is incorrect, please telephone the Survey Operations Center at 1-800-866-1821 (within the U.S.) or call collect at 1-402-475-5003 (outside the U.S.) between the hours of 9:00 AM and 7:00 PM EST to give your correct address. You also can send this letter via facsimile with your correct address to 1-800-733-5751. All calls to these numbers are free.

Thank you for your service to our country, and thank you in advance for your help!

Sincerely,

Richard D. Guerin, Ph.D.
Director
Health Program Analysis and Evaluation

Sample Reminder/Thank You Postcard, Quarter III

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS/TRICARE MANAGEMENT ACTIVITY
SURVEY PROCESSING CENTER
C/O NATIONAL RESEARCH CORPORATION
PO BOX 92660
LINCOLN, NE 68501-2660

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1ST CLASS
U.S. POSTAGE
PAID
LINCOLN, NE
PERMIT #1116

DIRECT PRODUCT TYPE

** 0153733-A12345 **



PVT CHRISTOPHER JOHNSON I

1245 Q ST STE 400

LINCOLN, NE 68508-1430

WE NEED YOUR HELP!

HELLO!

Recently, we mailed you the *Health Care Survey of DoD Beneficiaries*, a DoD-sponsored survey of all TRICARE members. You are among only a few randomly selected to receive this survey and her have not heard from you yet! As an eligible military beneficiary, your benefits include both civilian care and care you receive within our military facilities. Even if you did not receive your health care from a military facility, please complete the survey.

Taking part in this survey is voluntary and the information you provide us is kept private. The end of the survey period is September 1, 2004 so return your copy today!

If you did not receive the survey or if you need another copy, please call 1-800-866-1821 (within the U.S.) or call collect at 1-402-475-5003 (outside the U.S.). All calls to this number are free.

THANK YOU!

Richard D. Guerin, Ph.D.
Director, Health Program Analysis and Evaluation

Sample First Survey Cover Letter, Quarter IV



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE HEALTH AFFAIRS

TRICARE MANAGEMENT ACTIVITY
HEALTH PROGRAM ANALYSIS AND EVALUATION DIRECTORATE

October 15, 2004

00123459
DAVID STONE
222 S RIVERSIDE CT
CHICAGO, IL 60606-5809

Dear David Stone:

We need your help! The Department of Defense (DoD) needs your cooperation in completing this survey. There are over 8.5 million military personnel and their families worldwide. You are among only a few who were randomly selected to receive this survey. Your responses will provide important information that will help us improve the health care services for the entire DoD health care community. Please take advantage of this opportunity.

The enclosed survey asks about your experiences receiving health care services in the past 12 months. This survey is also available on the Web. Access the web version by using this address: www.synovate.net/dodben-adt and the password 111111 is assigned for your exclusive use. Return the completed survey by mail in the enclosed postage-paid envelope or via the web site to avoid a reminder and additional survey. As an eligible military beneficiary, your benefits include both civilian care and care you receive within our military facilities. **Even if you did not receive your health care from a military facility, we still ask that you complete the survey.**

Remember to answer either the mail survey enclosed OR access the Web survey and submit it electronically. **Do not answer both.** Bear in mind that on November 1, 2004 a reminder will be mailed to you if we have not received your completed survey by then. If we still don't hear from you, we will send you another survey on November 15, 2004. The Web survey will only be available until December 15, 2004.

Your feedback is important to help us improve our services and to provide you with the best possible health care. Although we made every attempt to ensure that our information is correct, we apologize if you received this mailing in error. If you have received this in error, if the address above is incorrect, or if you have questions about the survey, please contact us by using the pre-addressed envelope provided or by calling the Synovate Survey Processing Center at 1-877-236-2390 (within the U.S.) anytime, since this number accepts calls 24 hours a day, or email us at dod-survey@synovate.net. If you call you will be asked to provide your name, address, and the 8-digit number above your address on this cover letter. You also can send this letter via facsimile to 1-800-409-7681 (within the U.S.). All calls to these numbers are toll free.

Taking part in this survey is voluntary. Your contact information and how you respond is kept private. Thank you for your service to our country. Your experience as a military beneficiary needs to be heard. Thank you for your help.

A handwritten signature in black ink that reads "Richard D. Guerin".

Richard D. Guerin, Ph.D.
Director
Health Program Analysis and Evaluation Directorate

Sample Reminder/Thank You Postcard, Quarter IV

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS/TRICARE MANAGEMENT ACTIVITY
SURVEY PROCESSING CENTER
C/O SYNOVATE
PO BOX 0000
CHICAGO, IL 60600



PRESORTED

00123456
DAVID STONE
222 S RIVERSIDE CT
CHICAGO, IL 60606-5809



WE NEED YOUR HELP!

HELLO!

FROM

Recently, we mailed you the Health Care Survey of DoD Beneficiaries, a DoD-sponsored survey of all members. You are among only a few randomly selected to receive this survey and we have not heard from you yet! As an eligible military beneficiary, your benefits include both civilian care and care you receive within our military facilities. Even if you did not receive your health care from a military facility, please complete the survey.

Taking part in this survey is voluntary and the information you provide us is kept private. The end of the survey period is December 16, 2004 so return your copy today!

If you did not receive the survey or if you need another copy, please call toll free 1-877-226-3300 (within the U.S.) or email us at dod-survey@synovate.net.

THANK YOU!

Richard D. Guerry, Ph.D.
Director, Health Program Analysis and Evaluation Directorate

Sample Second Survey Cover Letter, Quarter IV



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE HEALTH AFFAIRS

TRICARE MANAGEMENT ACTIVITY
HEALTH PROGRAM ANALYSIS AND EVALUATION DIRECTORATE

November 29, 2004

00123459
DAVID STONE
222 S RIVERSIDE CT
CHICAGO, IL 60606-5809

Dear David Stone:

We need your help! The Department of Defense (DoD) is requesting your cooperation in completing a world-wide survey of all DoD health care beneficiaries aimed at understanding and improving your health care experiences. Since we have not heard from you we would like to follow up with you about the letter and survey we recently sent you. We hope that you will take advantage of this opportunity to share your health care experiences by participating in the survey. By completing the enclosed **Health Care Survey of DoD Beneficiaries**, you will provide important information that will help us improve the health care services for the entire DoD health care community.

Enclosed is a survey that asks your opinions about the health care services you have received in the past 12 months. You may also complete the questionnaire on-line by connecting to www.synovate.net/dodben-adt. Your personal password is 111111. As an eligible military beneficiary, your benefits under TRICARE include both civilian care and care you receive within our military facilities. **Even if you did not receive your health care services from a military facility, please still complete the survey.** Your views are important to us and your opinions count.

Taking part in this survey is voluntary. You are among only a few beneficiaries who were randomly selected to participate. All your contact information and what you have to say is private.

If the address above is incorrect, please telephone the Synovate Survey Processing Center at 1-877-236-2390 (within the U.S.) anytime, since this number accepts calls 24 hours a day, or email us at dod-survey@synovate.net. If you contact us please provide your name, address, and the 8-digit number above your address on this cover letter. You also can send this letter via facsimile with your correct address to 1-800-409-7681 (within the U.S.). All calls to these numbers are toll free.

Thank you for your service to your country. Your experience as a military beneficiary needs to be heard. Please take the time to respond.

A handwritten signature in cursive script that reads "Michael R. Peterson".

Michael R. Peterson, DVM, MPH, DrPH
Director
Health Program Analysis and Evaluation Directorate

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APPENDIX C
CODING SCHEME AND CODING TABLES

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2004 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	Description
Numeric	Numeric	
.	-9	No response
.A	-8	Multiple response error
.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 ‘.’, multiple responses ‘.A’, and incomplete grids ‘.I’ are encoded prior to implementation of the Coding Scheme Notes (see below).

**Coding Table for Note 1:
H04006, H04007**

N1	H04006 is:	H04007 is:	H04006 is coded as:	H04007 is coded as:	*
1	1-11, health plan, -5, not sure	Marked, missing, or multiple response	Stands as original value	Stands as original value	
2	-6, no usage in past 12 months	Marked or multiple 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, missing, or multiple response	Stands as original value	Stands as original value	
5	Multiple response	Marked or multiple response	Stands as original value	Stands as original value	
6	Multiple response	Missing response	-6: Did not use any health plan in the last 12 months	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

**Coding Table for Note 2A:
H04008, H04009, H04010, H04011**

N2A	H04008 is:	H04009 Is:	H04010 Is:	H04011 Is:	H04008 is coded as:	H04009 is coded as:	H04010 is coded as:	H04011 is coded as:	*
1	1: yes, missing, or multiple response	-6: Don't have a personal Dr	Any Value	Any Value	2: no	.C, question should be skipped	.N, valid skip if missing; .C, question should be skipped	Stands as original value	B F
2	1: yes	0-10, missing, or multiple response	1: yes	1-3, or multiple response	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped	F
3	1: yes	0-10, missing, or multiple response	1: yes, missing or multiple response	1-3, or multiple response	Stands as original value	Stands as original value	2: no	Stands as original value	B
4	1: yes	0-10, missing, or multiple response	1: yes	missing	Stands as original value	Stands as original value	Stands as original value	.N, valid skip if missing	F
5	1: yes	0-10, missing, or multiple response	2: no	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
6	1: yes	0-10, missing, or multiple response	missing	missing	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
7	1: yes	0-10, missing, or multiple response	Multiple response	missing	Stands as original value	Stands as original value	1: yes	.N, valid skip if missing	B F
8	2: no, missing, or multiple response	0-10, or multiple response	1: yes, missing or multiple response	1-3, or multiple response	1: yes	Stands as original value	2: no	Stands as original value	B
9	2: no, missing, or multiple response	missing	1: yes, or multiple response	1-3, or multiple response	1: yes	Stands as original value	2: no	Stands as original value	B

Coding Table for Note 2A continued:

N2A	H04008 is:	H04009 Is:	H04010 Is:	H04011 Is:	H04008 is coded as:	H04009 is coded as:	H04010 is coded as:	H04011 is coded as:	*
10	2: no, missing, or multiple response	-6: Don't have a personal Dr	Any value	Any value	2: no	.C, question should be skipped	.N, valid skip if missing; .C, question should be skipped	Stands as original value	B F
11	2: no, missing, or multiple response	Any value	1: yes	missing	1: yes	., missing; if skipped; otherwise, Stands as original value	Stands as original value	.N, valid skip if missing	B F
12	2: no, missing, or multiple response	Any value	2: no	Any value	1: yes	., missing; if skipped; otherwise, Stands as original value	Stands as original value	Stands as original value	B F
13	2: no, missing, or multiple response	0-10, missing, or multiple response	missing	missing	1: yes	Stands as original value	Stands as original value	Stands as original value	B
14	2: no	-6: Don't have a personal Dr, or missing	Missing response	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped	.N, valid skip	Stands as original value	B F
15	Missing response	Missing response	Missing response	1-3, or multiple response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
16	Missing response	Missing response	Missing response	Missing response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
17	Multiple response	Missing response	Missing response	Any value	2: no	.N, valid skip	.N, valid skip	Stands as original value	B F

* Indication of backward coding (B) or forward coding (F).

**Coding Table for Note 4:
H04012, H04013**

N4	H04012 is:	H04013 is:	H04012 is coded as:	H04013 is coded as:	*
1	1: yes	1, 2, 3, missing, or multiple response	Stands as original value	Stands as original value	
2	1: yes, missing, or multiple response	-6: didn't need to see a specialist	2: No	.C question should be skipped	B F
3	2: no, missing, or multiple response	1, 2, 3, multiple response	1: yes	Stands as original value	B
4	2: no	Missing, or -6: didn't need to see a specialist	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	
6	Multiple response	Missing response	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

**Coding Table for Note 5:
H04014, H04015, H04016**

N5	H04014 is:	H04015, H04016 Are:	H04014 is coded as:	H04015, H04016 Are coded as:	*
1	1: yes	"All are blank" or at least one is "marked"	Stands as original value	Stand as original value	
2	1: yes, missing, or multiple response	"Blank or NA"	2:no	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2: no, missing, or multiple response	At least one is "marked"	1: yes	Stand as original value	B
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 response	"All are blank"	Stands as original value	Stand as original value	
6	Multiple response	"All are blank"	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 5:
H04015 and H0416 are all missing.

Definition of "blank or NA" in Coding Table for Note 5:
H04015 and H04016 are either not applicable (-6), or a combination of not applicable (-6) and missing.

Definition of "marked" in Coding Table for Note 5:
Any pattern of marks outside the definitions "all are blank" and "blank or NA."

**Coding Table for Note 6:
H04017, H04018**

N6	H04017 is:	H04018 is:	H04017 is coded as:	H04018 is coded as:	*
1	1: yes	1-4: how often, missing, or multiple response	Stands as original value	Stands as original value	
2	1: yes, missing, or multiple response	-6: no calls	2: no	.C, question should be skipped	B F
3	2: no, missing or multiple response	1-4: how often, multiple response	1: yes	Stands as original value	B
4	2: no	-6: no calls or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	
6	Multiple response	Missing response	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

**Coding Table for Note 7:
H04019, H04020, H04021**

N7	H04019 is:	H04020 & H04021 are:	H04019 is coded as:	H04020 & H04021 are coded as:	*
1	1: yes	“All are blank” or at least one is “marked”	Stands as original value	Stand as original value	
2	1: yes, missing, or multiple response	“Blank or NA”	2:no	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2: no, missing, or multiple response	At least one is “marked”	1: yes	Stand as original value	B
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 response	“All are blank”	Stands as original value	Stand as original value	
6	Multiple response	“All are blank”	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of “all are blank” in Coding Table for Note 7:
Responses to H04020 and H04021 are both missing.

Definition of “blank or NA” in Coding Table for Note 7:
Responses to H04020 and H04021 are either all not applicable (-6) or a combination of not applicable (-6) and missing.

Definition of “marked” in Coding Table for Note 7:
Any pattern of marks outside the definitions “all are blank” and “blank or NA”

**Coding Table for Note 8:
H04022, H04023, H04024**

N8	H04022 is:	H04023 & H04024 are:	H04022 is coded as:	H04023 & H04024 are coded as:	*
1	1: yes	“All are blank” or at least one is “marked”	Stands as original value	Stand as original value	
2	1: yes, missing, or multiple response	“Blank or NA”	2:no	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2: no, missing, or multiple response	At least one is “marked”	1: yes	Stand as original value	B
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 response	“All are blank”	Stands as original value	Stand as original value	
6	Multiple response	“All are blank”	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of “all are blank” in Coding Table for Note 8:
Responses to H04023 and H04024 are both missing.

Definition of “blank or NA” in Coding Table for Note 8:
Responses to H04023 and H04024 are either all not applicable (-6) or a combination of not applicable (-6) and missing.

Definition of “marked” in Coding Table for Note 8:
Any pattern of marks outside the definitions “all are blank” and “blank or NA”

**Coding Table for Note 9:
H04026, H04027-H04038**

N9	H04026 is:	H04027-H04038 are:	H04026 is coded as:	H04027-H04038 are coded as:	*
1	1: None	At least one is “marked”, “All are blank”, or “blank or NA”	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
2	2-7, missing, or multiple response	“Blank or NA”	1: None	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2-7	At least one is “marked” or “all are blank”	Stands as original value	Stand as original value	
4	Missing response	“All are blank”	Stands as original value	Stand as original value	
5	Multiple response	“All are blank”	1: None	.N, valid skip	B F
6	Missing or Multiple Response	At least one is “Marked”	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 H04027-H04038 are all missing.

Definition of “Blank or NA” in Coding Table for Note 9:

All of the following are true: H04027-H04038 are a combination of not applicable (-6) or missing.

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:
H04027, H04028**

N10	H04027 is:	H04028 is:	H04027 is coded as:	H04028 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	1-3: how much of a problem, missing, or multiple response	Stands as original value	Stands as original value	
3	1: yes, missing, or multiple response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing or multiple response	1-3: how much of a problem, multiple response	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	
7	Multiple response	Missing response	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

**Coding Table for Note 11:
H04029, H04030**

N11	H04029 is:	H04030 is:	H04029 is coded as:	H04030 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	1-3: how much of a problem, missing, or multiple response	Stands as original value	Stands as original value	
3	1: yes, missing, or multiple response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing or multiple response	1-3: how much of a problem, multiple response	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	
7	Multiple response	Missing response	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

**Coding Table for Note 11E:
S04R01 S04R02 S04R03 S04R04A-S04R04E S04R05-S04R15**

N11E	S04R01 is:	S04R02, S04R03, S04R04A-S04R04E, S04R05-S04R15 Are:	S04R01 is coded as:	S04R02, S04R03, S04R04A- S04R04E, S04R05-S04R15 are coded as:	*
1	1: yes	At least one is “marked” or “all are blank”	Stands as original value	Stand as original value	
2	1: yes, missing, or multiple response	“Blank or NA”	2: no	.N, valid skip if missing; .C, question should be skipped	B F
3	2: no, missing, or multiple response	At least one is marked	1: yes	Stand as original value	B
4	2: no	“Blank or NA” or “all are blank”	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	All are blank	Stands as original value	Stands as original value	
6	Multiple response	All are blank	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of “all are blank” in Coding Table for Note 11E:

Responses to S04R02, S04R03, S04R04A-S04R04E, S04R05-S04R15 are all missing.

Definition of “blank or NA” in Coding Table for Note 11E:

All of the following are true: S04R02, S04R03, S04R04A-S04R04E, S04R05-S04R15 are a combination of not applicable (-6) or missing.

Definition of “marked” in Coding Table for Note 11E:

Any pattern of marks outside the definitions “all are blank” and “blank or NA”

**Coding Table for Note 11F:
S04R02 S04R03 S04R04A-S04R04E S04R05-S04R15**

N11F	S04R02 is:	S04R03, S04R04A- S04R04E, S04R05- S04R15 Are:	S04R02 is coded as:	S04R03, S04R04A-S04R04E, S04R05-S04R15 are coded as:	*
1	.N, valid skip, or .C, question should be skipped	Any Value	Stands as original value	Stands as original value	
2	1: Military, 2: Civilian	At least one is “marked” or “all are blank”	Stands as original value	Stand as original value	
3	1: Military, 2: Civilian, missing, or multiple response	“Blank or NA”	3: Don’t have PCM	.N, valid skip if missing; .C, question should be skipped	B F
4	3:Don’t have PCM, 4:Don’t know, missing, or multiple response	At least one is marked	Stands as original value	Stand as original value	
5	3:Don’t have PCM, 4:Don’t know	“Blank or NA” or “all are blank”	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	All are blank	Stands as original value	Stands as original value	
7	Multiple response	All are blank	4: Don’t know	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of “all are blank” in Coding Table for Note 11F:
Responses to S04R03, S04R04A-S04R04E, S04R05-S04R15 are all missing.

Definition of “blank or NA” in Coding Table for Note 11F:
All of the following are true: S04R03, S04R04A-S04R04E, S04R05-S04R15 are a combination of not applicable (-6) or missing.

Definition of “marked” in Coding Table for Note 11F:
Any pattern of marks outside the definitions “all are blank” and “blank or NA”

**Coding Table for Note 11G:
S04R03 S04R04A-S04R04E S04R05-S04R15**

N11G	S04R03 is:	S04R04A-S04R04E, S04R05-S04R15 Are:	S04R03 is coded as:	S04R04A-S04R04E, S04R05- S04R15 are 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	At least one is “marked” or “all are blank”	Stands as original value	Stand as original value	
3	1: yes, missing, or multiple response	“Blank or NA”	2: no	.N, valid skip if missing; .C, question should be skipped	B F
4	2: no, missing, or multiple response	At least one is marked	1: yes	Stand as original value	B
5	2: no	“Blank or NA” or “all are blank”	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	All are blank	Stands as original value	Stands as original value	
7	Multiple response	All are blank	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of “all are blank” in Coding Table for Note 11G:
Responses to S04R04A-S04R04E, S04R05-S04R15 are all missing.

Definition of “blank or NA” in Coding Table for Note 11G:
All of the following are true: S04R04A-S04R04E, S04R05-S04R15 are a combination of not applicable (-6) or missing.

Definition of “marked” in Coding Table for Note 11G:
Any pattern of marks outside the definitions “all are blank” and “blank or NA”

**Coding Table for Note 11H:
S04R06 S04R07-S04R10**

N11H	S04R06 is:	S04R07-S04R10 Are:	S04R06 is coded as:	S04R07-S04R10 are 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	At least one is “marked” or “all are blank”	Stands as original value	Stand as original value	
3	1: yes, missing, or multiple response	“Blank or NA”	2: no	.N, valid skip if missing; .C, question should be skipped	B F
4	2: no, missing, or multiple response	At least one is marked	1: yes	Stand as original value	B
5	2: no	“Blank or NA” or “all are blank”	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	All are blank	Stands as original value	Stands as original value	
7	Multiple response	All are blank	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of “all are blank” in Coding Table for Note 11H:
Responses to S04R07-S04R10 are all missing.

Definition of “blank or NA” in Coding Table for Note 11H:
All of the following are true: S04R07-S04R10 are not applicable (-6) or missing.

Definition of “marked” in Coding Table for Note 11H:
Any pattern of marks outside the definitions “all are blank” and “blank or NA”

**Coding Table for Note 11I:
S04R11 S04R12-S04R15**

N11I	S04R11 is:	S04R12-S04R15 Are:	S04R11 is coded as:	S04R12-S04R15 are 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	At least one is “marked” or “all are blank”	Stands as original value	Stand as original value	
3	1: yes, missing, or multiple response	“Blank or NA”	2: no	.N, valid skip if missing; .C, question should be skipped	B F
4	2: no, missing, or multiple response	At least one is marked	1: yes	Stand as original value	B
5	2: no	“Blank or NA” or “all are blank”	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	All are blank	Stands as original value	Stands as original value	
7	Multiple response	All are blank	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of “all are blank” in Coding Table for Note 11I:
Responses to S04R12-S04R15 are all missing.

Definition of “blank or NA” in Coding Table for Note 11I:
All of the following are true: S04R12-S04R15 are not applicable (-6) or missing.

Definition of “marked” in Coding Table for Note 11I:
Any pattern of marks outside the definitions “all are blank” and “blank or NA”

**Coding Table for Note 12:
S04V01, S04V02, S04V04-S04V07**

N12	S04V01 is:	S04V02, S04V04-S04V07 Are:	S04V01 is coded as:	S04V02, S04V04-S04V07 Are coded as:	*
1	1,2,3,4: some or no healthcare	“All are blank” or at least one is “marked”	Stands as original value	Stand as original value	
2	1,2,3: at least some healthcare, missing, or multiple response	“Blank or NA”	-6: didn’t need healthcare in past 12 months	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	4: no healthcare	“Blank or NA”	Stands as original value	Stands as original value	
4	-6: didn’t need healthcare in past 12 months	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	“All are blank”	Stands as original value	Stands as original value	
6	Multiple response	“All are blank”	-6, didn’t need healthcare in past 12 months	.N, valid skip	B F
7	Missing or Multiple response	At least one is “marked”	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 12:
S04V02, S04V04-S04V07 are all missing.

Definition of “blank or NA” in Coding Table for Note 12:
S04V02, S04V04-S04V07 are either not applicable (-6), or a combination of not applicable (-6) and missing.

Definition of “marked” in Coding Table for Note 12:
Any pattern of marks outside the definitions “all are blank” and “blank or NA.”

**Coding Table for Note 13:
H04040, H04041-H04043**

N13	H04040 is:	H04041-H04043 are:	H04040 is coded as:	H04041-H04043 are coded as:	*
1	1: yes	At least one is “marked”, “all are blank” or “blank or don’t know”	Stands as original value	Stand as original value	
2	1: yes, -5: don’t know, missing, or multiple response	“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, missing, or multiple response	At least one is “marked” or “blank or don’t know”	1: yes	Stand as original value	B
4	2: no	“Blank or NA” 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, Missing response	“All are blank”	Stands as original value	Stand as original value	
6	Multiple response	“All are blank”	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of “all are blank” in Coding Table for Note 13:
Responses to H04041-H04043 are all missing.

Definition of “blank or NA” in Coding Table for Note 13:
Responses to H04041-H04043 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 13:
Responses to H04041-H04043 are either all don’t know (-5) or a combination of missing and don’t know (-5).

Definition of “marked” in Coding Table for Note 14:
Any pattern of marks outside the definitions “all are blank,” “blank or NA,” or “blank or don’t know.”

**Table for Note 14:
H04044, H04045**

N14	H04044 is:	H04045 is:	H04044 is coded as:	H04045 is coded as:	*
1	1: yes	1, 2, 3, missing, or multiple response	Stands as original value	Stands as original value	
2	1: yes, missing, or multiple response	-6: didn't look for information in health plan	2: No	.C question should be skipped	B F
3	2: no, missing, or multiple response	1, 2, 3, multiple response	1: yes	Stands as original value	B
4	2: no	Missing, or -6: didn't look for information in health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	
6	Multiple response	Missing response	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

**Coding Table for Note 15:
H04046, H04047**

N15	H04046 is:	H04047 is:	H04046 is coded as:	H04047 is coded as:	*
1	1: yes	1, 2, 3, missing, or multiple response	Stands as original value	Stands as original value	
2	1: yes, missing, or multiple response	-6: didn't call health plan	2: No	.C question should be skipped	B F
3	2: no, missing, or multiple response	1, 2, 3, multiple response	1: yes	Stands as original value	B
4	2: no	Missing, or -6: didn't call health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	
6	Multiple response	Missing response	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

**Coding Table for Note 16:
H04048, H04049-H04051**

N16	H04048 is:	H04049-H04051 are:	H04048 is coded as:	H04049-H04051 are coded as:	*
1	1: yes	At least one is “marked” or “all are blank”	Stands as original value	Stand as original value	
2	1: yes, missing, or multiple response	“Blank or NA”	2: no	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2: no, missing, or multiple response	At least one is “marked”	1: yes	Stand as original value	B
4	2: no	“Blank or NA” or “all are blank”	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	“All are blank”	Stands as original value	Stand as original value	
6	Multiple response	“All are blank”	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

Definition of “all are blank” in Coding Table for Note 16:
Responses to H04049-H04051 are both missing.

Definition of “blank or NA” in Coding Table for Note 16:
Responses to H04049-H04051 are either all not applicable (-6) or a combination of not applicable (-6) and missing.

Definition of “marked” in Coding Table for Note 16:
Any pattern of marks outside the definitions “all are blank” and “blank or NA”

**Coding Table for Note 17:
H04049, H04050, H04051**

N17	H04049 is:	H04050 is:	H04051 is:	H04049 is coded as:	H04050 is coded as:	H04051 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	1-5	1: Yes	Any value	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
3	1-5	2: No, -6: no complaint	Any value	Stands as original value	Stands as original value	Stands as original value	
4	1-5	Missing, or multiple response	Marked or multiple response	Stands as original value	2: no	Stands as original value	F
5	1-5	Missing, or multiple response	Missing	Stands as original value	1: Yes	.N, valid skip if missing	F
6	6: still waiting	Marked or multiple response, or missing	Any Value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	F
7	Missing response, -6: no complaint	Marked, missing, or multiple response	Any Value	Stands as original value	Stands as original value	Stands as original value	
8	Multiple response	Marked or multiple response, 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 18:
H04052, H04053**

N18	H04052 is:	H04053 is:	H04052 is coded as:	H04053 is coded as:	*
1	1: yes	1, 2, 3, missing, or multiple response	Stands as original value	Stands as original value	
2	1: yes, missing, or multiple response	-6: didn't have any experience	2: No	.C question should be skipped	B F
3	2: no, missing, or multiple response	1, 2, 3, multiple response	1: yes	Stands as original value	B
4	2: no	Missing, or -6: didn't have any experience	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	
6	Multiple response	Missing response	2: no	.N, valid skip	B F

* Indication of backward coding (B) or forward coding (F).

**Coding Table for Note 19:
H04060--H04065**

N19	H04060 Is:	H04061 is:	H04062 is:	H04063- H04065 are:	H04060 is coded as:	H04061 is coded as:	H04062 is coded as:	H04063- H04065 are coded as:	*
1	1: ever smoked	3 or 4: still smoke	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	F
2	1: ever smoked	2: quit	2: quit >1 year ago or -5: don't know	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped	F
3	1: ever smoked	2: quit	3: quit <1 year ago, missing, or multiple response	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
4	1: ever smoked	-5: don't know, missing, or multiple response	2: quit >1 year ago	Any value	Stands as original value	2: quit	Stands as original value	.C, question should be skipped	F B
5	1: ever smoked	-5: don't know, missing, or multiple response	3: quit <1 year ago	Any value	Stands as original value	2: quit	Stands as original value	Stands as original value	B
6	1: ever smoked	-5: don't know, missing, or multiple response	-5: don't know, missing, or multiple response	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
7	2: never, -5: don't know, missing, or multiple response	3 or 4: still smoke	Any value	Any value	1: ever smoked	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	B F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 19 continued:

N19	H04060 Is:	H04061 is:	H04062 is:	H04063- H04065 is:	H04060 is coded as:	H04061 is coded as:	H04062 is coded as:	H04063- H04065 is coded as:	*
8	2: never or -5: don't know	2: quit, -5: don't know, multiple response, or Missing response	Any value	Any value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped	F
9	Missing or multiple response	2: quit	Missing or multiple response	2-5: some visits	1: ever smoked	Stands as original value	3: quit <1 year ago	Stands as original value	B
10	Missing or multiple response	2: quit, missing, or multiple response	3: quit <1 year ago	2-5: some visits	1: ever smoked	Stands as original value	Stands as original value	Stands as original value	B
11	Missing or multiple response	2: quit, missing, or multiple response	3: quit <1 year ago	1: none, -6: no visits, missing, or multiple response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
12	Missing or multiple response	2: quit, missing, or multiple response	2: quit >1 year ago, -5: don't know	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped	F
13	Missing or multiple response	2: quit, missing, or multiple response	Missing or multiple response	1: none, -6: no visits, missing, or multiple response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
14	Missing or multiple response	Missing, or multiple response	Missing or multiple response	2-5: some visits	1: ever smoked	Stands as original value	Stands as original value	Stands as original value	B
15	Missing or multiple response	-5: don't know	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 20:

Note 20 (Part a)

H04066, SEX, XSEX, H04067-H04074

N20A	H04066 is :	SEX is:	H04067 is:	H04068--H04074 are:	XSEX is coded as:
1	Missing or multiple response	F	Marked	Any marked	2, female
2	Missing or multiple response	F	Missing or multiple response	All missing or multiple response	2, female
3	Missing or multiple response	M	Marked	Any marked	1, male
4	Missing or multiple response	M	Missing or multiple response	All missing or multiple response	1, male
5	Missing or multiple response	Any value	Marked	All missing or multiple response	1, male
6	Missing or multiple response	Any value	Missing or multiple response	Any marked	2, female
7	Missing or multiple response	Z	Marked	Any marked	., missing value
8	Missing or multiple response	Z	Missing or multiple response	All missing or multiple response	., missing value
19	Missing or multiple response	Missing	Missing or multiple response	All missing or multiple response	., missing value
9	1, male	Any value	Marked	All missing or multiple response	1, male
10	1, male	F	Missing or multiple response	Any marked	2, female
11	1, male	M or Z	Missing or multiple response	Any marked	1, male
12	1, male	Any value	Marked	Any marked	1, male
13	1, male	Any value	Missing or multiple response	All missing or multiple response	1, male
14	2, female	Any value	Missing or multiple response	Any marked	2, female
15	2, female	M	Marked	All missing or multiple response	1, male
16	2, female	F or Z	Marked	All missing or multiple response	2, female
17	2, female	Any value	Marked	Any marked	2, female
18	2, female	Any value	Missing or multiple response	All missing or multiple response	2, female

SEX 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.

XSEX is the recoded gender variable after taking into account the self-reported response (H04066), any responses to gender-specific questions, and the gender of the sample beneficiary from DEERS.

Note 20 (Part B):
XSEXA, H04067

N20B	XSEXA is:	H04067 is:	H04067 is coded as:	*
1	1: Male	Marked, missing, or multiple response	Stands as original value	
2	2: Female	Marked or multiple response	.C, question should be skipped	F
3	2: Female	Missing response	.N, valid skip	F
4	Missing	Any response	Missing value	F

* Indication of backward coding (B) or forward coding (F).

Note 20 (Part C):
XSEXA, H04068 - H04074

N20C	XSEXA is:	H04068--H04074 are:	H04068 --H04074 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”	Stands 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 20c:
All variables H04068 --H04074 are missing.

Definition of “marked” in Coding Table for Note 20c:
Any pattern of marks outside the definition “all are blank.”

Coding Table for Note 21
XSEXA, AGE, H04069, H04070, H04071

N21	XSEXA is:	AGE is:	H04069 is:	H04070 & H04071 are:	H04069 is coded as:	H04070 & H04071 are coded as:	*
1	1: Male	Any value	.C, question should be skipped, or .N, valid skip	C, question should be skipped, or .N, valid skip	Stands as original value	Stands as original value	
2	2: Female	Any value	2: 40 or over	Marked, missing, or multiple response	Stands as original value	Stand as original value	
3	2: Female	Any value	1: under 40	Marked, missing or multiple response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	2: Female	Any value	Multiple response	Either question is Marked or multiple response	2: > 40	Stand as original value	B
5	2: Female	Any value	Multiple response	Both Missing	1: < 40	.N, valid skip	B F
6	2: Female	Any value	Missing	Either question is Marked or multiple response	2: > 40	Stand as original value	B
7	2: Female	< 40	Missing	Both Missing	1: < 40	.N, valid skip	F B
8	2: Female	>=40	Missing	Both Missing	1: < 40	.N, valid skip	F B
9	2: Female	Missing	Missing	Both Missing	Stands as original value	Stand as original value	
10	Missing	Any value	Missing	Missing	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

AGE 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 22:
XSEXA, H04072, H04073, H04074**

N22	XSEXA is:	H04072 is:	H04073 is:	H04074 are:	H04072 is coded as:	H04073 is coded as:	H04074 are coded as:	*
1	1: Male	.C, question should be skipped, or .N, valid skip	.C, question should be skipped, or .N, valid skip	.C, question should be skipped, or .N, valid skip	Stands as original value	Stands as original value	Stands as original value	
2	2: Female	1: pregnant now	Marked, missing, or multiple response	Marked, missing, or multiple response	Stands as original value	Stands as original value	Stands as original value	
3	2: female	2: pregnant in last 12 months	Marked, missing or multiple response	Marked, missing or multiple response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	F
4	2: Female	3: not pregnant in past 12 months	Marked, missing, or multiple response	Marked, missing, or multiple response	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
5	2: Female	Missing or multiple response	Marked, or multiple response	Marked, missing or multiple response	1: pregnant now	Stands as original value	Stands as original value	B
6	2: Female	Missing response	Missing response	Marked, missing or multiple response	Stands as original value	Stands as original value	Stands as original value	
7	2: Female	Multiple response	Missing response	Marked, missing or multiple response	3: not pregnant in past 12 months	.N, valid skip	.N, valid skip if missing; .C, question should be skipped if marked	B F
8	Missing	Missing or multiple response	Marked, missing or multiple response	Marked, missing or multiple response	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

APPENDIX D

**MAPPING THE MILITARY TREATMENT FACILITY (MTF) TO THE
CATCHMENT AREA AND REGION**

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CACSMPL	DMISID	CATCHMENT AREA	#SAMPLE FROM DMISID
0001	0001	REDSTONE ARSENAL	655
0001	0074	COLUMBUS AFB	404
0001	0416	MOBILE	109
0003	0003	FT. RUCKER	1107
0004	0004	MAXWELL AFB	1288
0005	0005	FT. WAINWRIGHT	831
0005	0130	KODIAK	81
0005	0203	EIELSON AFB	426
0005	0204	FT. RICHARDSON	223
0005	0417	KETCHIKAN	31
0005	7044	JUNEAU	20
0005	7047	SITKA	22
0006	0006	ELMENDORF AFB	1462
0008	0008	FT. HUACHUCA	1280
0009	0009	LUKE AFB	1755
0010	0010	DAVIS MONTHAN AFB	1323
0013	0013	LITTLE ROCK AFB	1467
0014	0014	TRAVIS AFB	1902
0014	0015	BEALE AFB	216
0014	0418	ALAMEDA	74
0014	0419	PETALUMA	56
0014	7083	HUMBOLDT BAY	4
0019	0018	VANDENBERG AFB	530
0019	0019	EDWARDS AFB	519
0019	0248	LOS ANGELES AFS	424
0024	0024	CAMP PENDLETON	2163
0024	0026	PORT HUENEME	187
0024	0208	CAMP PENDLETON	95
0024	0209	BARSTOW	12
0024	0210	CAMP PENDLETON	38
0024	0269	YUMA	78
0024	1657	CAMP PENDLETON	48
0024	1659	CAMP PENDLETON	20
0024	6216	CAMP PENDLETON	84
0028	0028	LEMOORE	1010
0028	0319	FALLON	156
0029	0029	SAN DIEGO	1917
0029	0230	SAN DIEGO	30
0029	0231	CORONADO	127
0029	0232	SAN DIEGO	76
0029	0233	CORONADO	48
0029	0239	EL CENTRO	5
0029	0407	SAN DIEGO	99
0029	0414	SAN DIEGO	4
0029	0701	SAN DIEGO	143
0029	6207	SAN DIEGO	109
0029	6215	SAN DIEGO	99
0029	7046	SAN PEDRO	3
0030	0030	TWENTYNINE PALMS	1418
0030	0212	CHINA LAKE	112
0032	0032	FT. CARSON	1047
0032	1526	PUEBLO	3
0032	7293	FT. CARSON	441
0032	7300	FT. CARSON	309
0033	0033	USAF ACADEMY	1264
0036	0036	DOVER AFB	1336

CACSMPL	DMISID	CATCHMENT AREA	#SAMPLE FROM DMISID
0037	0037	WASHINGTON DC	1524
0037	0256	PENTAGON	430
0037	0420	WASHINGTON DC	40
0037	7298	ARLINGTON ANNEX	58
0038	0038	PENSACOLA	1328
0038	0107	MILLINGTON	129
0038	0260	PENSACOLA	80
0038	0261	MILTON	88
0038	0262	PENSACOLA	57
0038	0265	PANAMA CITY	29
0038	0297	NEW ORLEANS	44
0038	0316	GULFPORT	56
0038	0317	MERIDIAN	61
0038	0422	CLEARWATER	33
0038	0436	NEW ORLEANS	79
0038	0513	PENSACOLA	31
0038	0654	PASCAGOULA	39
0038	1990	NEW ORLEANS	60
0039	0039	JACKSONVILLE	1754
0039	0050	MOODY AFB	198
0039	0266	JACKSONVILLE	121
0039	0275	ALBANY	33
0039	0276	ATHENS	13
0039	0277	ATLANTA	30
0039	0337	KINGS BAY	113
0039	0405	MAYPORT	183
0039	0421	AIR STATION MIAMI	13
0039	0517	KEY WEST	69
0039	7048	MIAMI BEACH	11
0042	0042	EGLIN AFB	1348
0043	0043	TYNDALL AFB	1268
0045	0045	MACDILL AFB	2026
0046	0046	PATRICK AFB	1081
0047	0047	FT. GORDON	890
0047	0273	FT. MCPHERSON	269
0047	1550	FT. GORDON	121
0047	7197	FT. GORDON	271
0047	7239	FT GORDON	96
0047	8924	FT. BUCHANAN	107
0048	0048	FT. BENNING	1654
0048	1316	FT. BENNING	254
0048	1551	FT. BENNING	242
0048	1552	FT. BENNING	58
0049	0049	FT. STEWART	1485
0049	0272	HUNTER AB	334
0049	1562	FT. STEWART	173
0049	1563	FT. STEWART	183
0049	1564	FT. STEWART	211
0051	0051	ROBINS AFB	1386
0052	0052	FT. SHAFTER	1567
0052	0437	SCHOFIELD BARRACKS	219
0052	0534	SCHOFIELD BARRACKS	451
0052	7043	HONOLULU	37
0053	0053	MOUNTAIN HOME AFB	1359
0055	0055	SCOTT AFB	1618
0056	0056	GREAT LAKES	1843
0056	1660	GREAT LAKES	34

CACSMPL	DMISID	CATCHMENT AREA	#SAMPLE FROM DMISID
0056	1959	GREAT LAKES	97
0057	0057	FT. RILEY	1071
0057	7289	FORT RILEY	718
0058	0058	FT. LEAVENWORTH	631
0058	0076	WHITEMAN AFB	632
0058	7297	KANSAS CITY	122
0059	0059	MCCONNELL AFB	1006
0059	0338	VANCE AFB	375
0060	0060	FT. CAMPBELL	1249
0060	1506	FT. CAMPBELL	231
0060	7307	FT CAMPBELL	834
0061	0061	FT. KNOX	1596
0061	0290	ROCK ISLAND ARSENAL	7
0061	0313	SELFREDGE AB	55
0061	1237	FT. MCCOY	265
0062	0062	BARKSDALE AFB	1442
0064	0064	FT. POLK	1348
0064	0423	NEW ORLEANS	44
0066	0066	ANDREWS AFB	1409
0066	0068	PATUXENT RIVER	234
0066	0413	BOLLING AFB	338
0067	0067	BETHESDA	1650
0067	0301	INDIAN HEAD	35
0067	0322	COLTS NECK	40
0067	0347	HATBORO	68
0067	0348	MECHANICSBURG	10
0067	0386	DAHLGREN	66
0067	0401	LAKEHURST	12
0067	0404	BMC SUGAR GROVE	5
0067	0424	BALTIMORE	17
0067	0522	ANDREWS AFB	25
0067	0703	WASHINGTON DC	111
0067	7278	SOUTH COLTS NECK	1
0069	0069	FT. MEADE	695
0069	0306	ANNAPOLIS	177
0069	0308	ABERDEEN PROVING GROUND	217
0069	0309	FT. DETRICK	168
0069	0352	CARLISLE BARRACKS	232
0069	0525	ANNAPOLIS	250
0069	0545	EDGEWOOD	14
0073	0073	KEESLER AFB	1467
0075	0075	FT. LEONARD WOOD	1504
0078	0078	OFFUTT AFB	1345
0079	0079	NELLIS AFB	1428
0083	0083	KIRTLAND AFB	830
0083	0085	CANNON AFB	499
0086	0081	FT. MONMOUTH	196
0086	0086	WEST POINT	1185
0086	1815	WEST POINT	226
0086	7154	FT. DIX	251
0089	0089	FT. BRAGG	1255
0089	0335	POPE AFB	202
0089	0430	ELIZABETH CITY	14
0089	7143	FT. BRAGG	570
0089	7286	FT. BRAGG-NC	282
0089	7294	FORT BRAGG	559
0090	0090	SEYMOUR JOHNSON AFB	1388

CACSMPL	DMISID	CATCHMENT AREA	#SAMPLE FROM DMISID
0091	0091	CAMP LEJEUNE	2346
0091	0333	CAMP LEJEUNE	8
0091	1662	CAMP LEJEUNE	12
0091	1663	CAMP LEJEUNE	24
0091	1664	CAMP LEJEUNE	5
0091	1992	CAMP LEJEUNE	59
0092	0092	CHERRY POINT	1221
0095	0095	WRIGHT-PATTERSON AFB	1243
0096	0093	GRAND FORKS AFB	332
0096	0094	MINOT AFB	457
0096	0096	TINKER AFB	1049
0098	0097	ALTUS AFB	143
0098	0098	FT. SILL	1443
0101	0101	SHAW AFB	1211
0103	0103	CHARLESTON	940
0103	0356	CHARLESTON AFB	376
0103	0511	GOOSE CREEK	445
0104	0104	BEAUFORT	1217
0104	0358	PARRIS ISLAND	128
0104	0360	BEAUFORT	36
0105	0105	FT. JACKSON	1396
0108	0084	HOLLOMAN AFB	317
0108	0108	FT. BLISS	930
0108	0327	WHITE SANDS MISSILE RANGE	37
0108	1617	FT. BLISS	721
0109	0109	FT. SAM HOUSTON	1672
0109	0363	BROOKS CITY-BASE	54
0110	0110	FT. HOOD	1137
0110	1592	FT. HOOD	531
0110	1597	FT. HOOD	90
0110	1599	FT. HOOD	83
0110	1601	FT. HOOD	189
0110	6014	FT HOOD	473
0110	7236	FORT HOOD	484
0112	0112	DYESS AFB	1017
0112	0364	GOODFELLOW AFB	447
0113	0113	SHEPPARD AFB	1339
0117	0114	LAUGHLIN AFB	92
0117	0117	LACKLAND AFB	1618
0118	0118	CORPUS CHRISTI	681
0118	0369	KINGSVILLE	163
0118	0370	FORT WORTH	327
0118	0656	INGLESIDE	246
0119	0077	MALMSTROM AFB	532
0119	0119	HILL AFB	903
0120	0120	LANGLEY AFB	1486
0120	0432	PORTSMOUTH	56
0120	0433	YORKTOWN	16
0121	0121	FT. EUSTIS	1267
0121	0122	FT. LEE	327
0121	0372	FT. MONROE	62
0121	0464	FT. STORY	24
0123	0123	FT. BELVOIR	1468
0123	0390	FT. MYER	188
0123	6200	FAIRFAX	204
0123	6201	WOODBIDGE	282
0124	0124	PORTSMOUTH	1865

CACSMPL	DMISID	CATCHMENT AREA	#SAMPLE FROM DMISID
0124	0378	NORFOLK	181
0124	0380	PORTSMOUTH	3
0124	0381	YORKTOWN	21
0124	0382	VIRGINIA BEACH	37
0124	0387	VIRGINIA BEACH	229
0124	0508	NORFOLK	236
0124	0519	CHESAPEAKE	20
0124	6214	NORFOLK	83
0124	6221	TRICARE OUTPATIENT CHESAPEAKE	61
0125	0125	FT. LEWIS	1688
0125	0247	MONTEREY	194
0125	0395	MCCHORD AFB	229
0125	0431	ASTORIA	14
0125	0434	PORT ANGELES	9
0125	1646	FT. LEWIS	280
0125	1649	FT. LEWIS	174
0126	0126	BREMERTON	1148
0126	0398	BREMERTON	20
0126	0435	SEATTLE	55
0126	1656	SILVERDALE	153
0126	7138	EVERETT	122
0127	0127	OAK HARBOR	1285
0128	0128	FAIRCHILD AFB	1226
0128	7045	NORTH BEND	52
0129	0106	ELLSWORTH AFB	628
0129	0129	F.E. WARREN AFB	569
0129	7200	BUCKLEY AFB	354
0131	0131	FT. IRWIN	1514
0131	0206	YUMA PROVING GROUND	34
0252	0252	PETERSON AFB	1377
0280	0280	PEARL HARBOR	1073
0280	0284	WAHIAWA	39
0280	0285	KANEOHE	295
0280	1987	CAMP H.M. SMITH	83
0287	0287	HICKAM AFB	1530
0321	0310	HANSCOM AFB	1170
0321	0425	CAPE COD	212
0321	0426	BOSTON	194
0326	0326	MCGUIRE AFB	1542
0326	0428	CAPE MAY	85
0330	0330	FT. DRUM	351
0330	7113	FT. DRUM	1459
0366	0366	RANDOLPH AFB	1173
0385	0385	QUANTICO	1123
0385	1670	QUANTICO	84
0385	1671	QUANTICO	241
0606	0606	HEIDELBERG	499
0606	1003	MANNHEIM	272
0606	1135	FRIEDBERG	170
0606	1144	BABENHAUSEN	77
0606	1145	BUEDINGEN	59
0606	7152	SANDHOFEN	72
0606	8987	HEIDELBERG	241
0606	8995	HANAU	279
0606	8996	BUTZBACH	121
0606	8998	DARMSTADT	221
0607	0607	LANDSTUHL	470

CACSMPL	DMISID	CATCHMENT AREA	#SAMPLE FROM DMISID
0607	0611	VICENZA	253
0607	0614	SHAPE	121
0607	1126	LUDWIGSBURG	510
0607	1128	KAISERSLAUTERN	150
0607	1147	WIESBADEN	372
0607	1154	LIVORNO	25
0607	8977	BRUSSELS	32
0607	8992	DEXHEIM	82
0609	0609	WUERZBURG	318
0609	0808	AVIANO AB	345
0609	1013	BAMBERG	198
0609	1014	ILLESHEIM	60
0609	1015	KATTERBACH	174
0609	1016	GRAFENWOEHR	70
0609	1017	VILSECK	246
0609	1019	HOHENFELS/AMBERG	117
0609	1124	SCHWEINFURT	345
0609	1127	KITZINGEN	216
0609	1235	GIEBELSTADT	89
0612	0612	SEOUL	394
0612	1156	CAMP STANLEY	157
0612	1157	TONGDUCHON	570
0612	1158	MUNSAN	167
0612	8903	PYONGTAEK	271
0612	8907	TAEGU	102
0612	8910	PUSAN	35
0612	8912	UIJONGBU	184
0612	8913	KOREA	83
0612	8916	SEOUL	393
0612	8917	WONGJU	49
0612	8921	CHUN CHON	44
0616	0615	GUANTANAMO BAY	72
0616	0616	CEIBA	521
0616	5197	BASE SAN JUAN	40
0616	7042	BORINQUEN	24
0617	0617	NAPLES	258
0617	0618	ROTA	291
0617	0623	KEFLAVIK	186
0617	0624	NAS SIGONELLA	300
0617	0629	LAJES FLD	92
0617	0635	INCIRLIK AB	165
0617	0825	IZMIR	6
0617	0855	LA MADDALENA	76
0617	0858	SOUDA BAY	40
0617	0874	GAETA	88
0617	1153	CAPODICHINO	142
0617	1170	BAHRAIN	153
0620	0615	GUANTANAMO BAY	46
0620	0620	AGANA	692
0620	0802	ANDERSEN AFB	431
0620	0871	NAVSTA	260
0620	0872	NAVCAMS WESTPAC	2
0620	5197	BASE SAN JUAN	22
0620	7042	BORINQUEN	21
0621	0621	OKINAWA	518
0621	0861	FUTENMA	226
0621	0862	CAMP FOSTER	417

CACSMPL	DMISID	CATCHMENT AREA	#SAMPLE FROM DMISID
0621	1269	OKINAWA	210
0621	7032	OKINAWA	172
0621	7033	OKINAWA	221
0621	7107	OKINAWA	87
0622	0622	YOKOSUKA	1429
0622	0625	MCAS IWAKUNI	278
0622	0852	SASEBO	329
0622	0853	ATSUGI	371
0622	7288	BRANCH MEDICAL ANNEX HARIO SASEBO J	9
0622	8938	YOKOHAMA	7
0622	8939	CHINHAE	12
0633	0633	RAF LAKENHEATH	1173
0633	0653	RAF CROUGHTON	87
0633	0814	RAF UPWOOD	147
0633	1179	RAF ST MAWGAN NEWQUA	43
0633	7234	MENWITH HILL MEDICAL CENTER	59
0633	7235	426TH ABS MED AID STATION	7
0633	8931	LONDON	104
0638	0637	KUNSAN AB	496
0638	0638	OSAN AB	1288
0640	0610	CAMP ZAMA	178
0640	0639	MISAWA	776
0640	0640	YOKOTA AB	726
0804	0804	KADENA AB	1734
0805	0799	GEILENKIRCHEN AB	359
0805	0805	SPANGDAHLEM AB	1337
0806	0800	RHEIN MAIN AB	148
0806	0806	RAMSTEIN AB	1551
0806	8982	BAD AIBLING	39
6223	0034	NEW LONDON	112
6223	0035	GROTON	470
6223	0100	NEWPORT	481
6223	0299	BRUNSWICK	407
6223	0321	PORTSMOUTH	174
6223	0328	BALLSTON SPA	223
7139	7139	HURLBURT FIELD	1720
9901	0781	OUT OF CATCHMENT-North	31
9901	0782	OUT OF CATCHMENT-North	153
9901	0783	OUT OF CATCHMENT-North	29
9901	0789	OUT OF CATCHMENT-North	27
9901	0907	CONNECTICUT	207
9901	0908	DELAWARE	87
9901	0914	ILLINOIS	257
9901	0915	INDIANA	380
9901	0918	KENTUCKY	166
9901	0920	MAINE	233
9901	0921	MARYLAND	146
9901	0922	MASSACHUSETTS	300
9901	0923	MICHIGAN	455
9901	0930	NEW HAMPSHIRE	143
9901	0931	NEW JERSEY	348
9901	0933	NEW YORK	616
9901	0934	NORTH CAROLINA	607
9901	0936	OHIO	464
9901	0939	PENNSYLVANIA	765
9901	0940	RHODE ISLAND	94

CACSMPL	DMISID	CATCHMENT AREA	#SAMPLE FROM DMISID
9901	0946	VERMONT	57
9901	0950	WISCONSIN	257
9901	0995	NORTHERN VIRGINIA	82
9901	0996	SOUTHERN VIRGINIA	308
9902	0787	OUT OF CATCHMENT-South	4
9902	0901	ALABAMA	549
9902	0904	ARKANSAS	315
9902	0911	GEORGIA	767
9902	0925	MISSISSIPPI	243
9902	0937	OKLAHOMA	339
9902	0941	SOUTH CAROLINA	224
9902	0943	TENNESSEE	530
9902	0987	EASTERN FLORIDA	905
9902	0988	WESTERN FLORIDA	109
9902	0989	EASTERN LOUISIANA	189
9902	0990	WESTERN LOUISIANA	177
9902	0993	EASTERN TEXAS	1287
9903	0784	OUT OF CATCHMENT-West	398
9903	0785	OUT OF CATCHMENT-West	296
9903	0786	OUT OF CATCHMENT-West	73
9903	0788	OUT OF CATCHMENT-West	186
9903	0902	ALASKA	44
9903	0906	COLORADO	354
9903	0912	HAWAII	33
9903	0917	KANSAS	273
9903	0924	MINNESOTA	342
9903	0927	MONTANA	126
9903	0928	NEBRASKA	72
9903	0929	NEVADA	102
9903	0932	NEW MEXICO	229
9903	0935	NORTH DAKOTA	70
9903	0938	OREGON	358
9903	0942	SOUTH DAKOTA	106
9903	0945	UTAH	258
9903	0948	WASHINGTON	481
9903	0951	WYOMING	76
9903	0973	NORTHERN IDAHO	30
9903	0974	SOUTHERN IDAHO	140
9903	0985	NORTHERN CALIFORNIA	624
9903	0986	SOUTHERN CALIFORNIA	875
9903	7919	OUT OF CATCHMENT-West	14
9904	0953	PUERTO RICO	1190
9904	0957	GERMANY	247
9904	0958	GREECE	25
9904	0959	ICELAND	1
9904	0960	ITALY	101
9904	0961	JAPAN	80
9904	0963	PHILIPPINES	18
9904	0964	PORTUGAL	4
9904	0965	KOREA	34
9904	0966	SPAIN	32
9904	0967	TURKEY	21
9904	0968	UNITED KINGDOM	66
9904	0969	CANADA	23
9904	0970	OTHER CARIBBEAN	16
9904	0971	CENTRAL AMERICA	96
9904	0972	SOUTH AMERICA	47

CACSMPL	DMISID	CATCHMENT AREA	#SAMPLE FROM DMISID
9904	0975	OUT OF CATCHMENT-Overseas	46
9904	0976	AFRICA	25
9904	0977	MIDEAST	77
9904	0978	SOUTHEAST ASIA	31
9904	0979	BELGIUM	36
9904	0982	OTHER EUROPE	93
9904	0983	OTHER PACIFIC	184
9904	0999	UNKNOWN LOCATION	4493
9904	6919	REGION 19	152

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APPENDIX E
RESPONSE RATE TABLES

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TABLE E.1

RESPONSE RATES BY REGION – QUARTER III, 2004

	RR Unweighted Response Rate	RR _w Weighted Response Rate
Northeast	31.6	48.9
Mid-Atlantic	27.3	39.0
Southeast	32.5	50.1
Gulfsouth	35.4	51.5
Heartland	31.8	47.7
Southwest	30.1	45.7
Central 7	33.5	49.7
Central 8	32.5	47.6
Southern California	25.4	40.2
Golden Gate	36.7	54.8
Northwest	31.1	44.2
Hawaii	26.8	32.8
Europe	15.8	15.6
Western Pacific Command	15.9	16.0
TRICARE Latin America	28.3	36.1
Alaska	28.3	32.2

TABLE E.2

RESPONSE RATES BY SEX – QUARTER III, 2004

	Q2 2004	
	RR Unweighted Response Rate	RR _w Weighted Response Rate
Male	25.0	42.5
Female	33.9	47.1

TABLE E.3

RESPONSE RATES BY CONUS/OCONUS INDICATOR – QUARTER III, 2004

	Q2 2004	
	RR Unweighted Response Rate	RR _w Weighted Response Rate
Not in Conus	16.5	17.6
In Conus	31.2	46.5

TABLE E.4

RESPONSE RATES BY BENEFICIARY CATEGORY – QUARTER III, 2004

	RR Unweighted Response Rate	RR _w Weighted Response Rate
Active Duty and Guard/Reserve	17.0	16.1
Dependent of Active Duty & Guard/Reserve	25.4	27.0
Retiree/Depend of Retir/Surviv/Other <65	47.7	50.1
Retiree/Depend of Retir/Surviv/Other 65+	72.4	75.0

TABLE E.5

RESPONSE RATES BY CATCHMENT AREA - QUARTER III, 2004

CACSMPL	Catchment Area	RR Unweighted Response Rate	RR _w Weighted Response Rate
0001	Redstone Ars/Ft McClellan	37.6	44.1
0003	Ft. Rucker	39.1	51.8
0004	Maxwell AFB	40.1	46.8
0005	Ft Wainwright	23.4	23.7
0006	Elmendorf AFB/Ft Wainwright	33.6	36.7
0008	Ft. Huachuca	27.2	34.3
0009	Luke AFB	38.6	52.7
0010	Davis-Monthan AFB	33.7	40.6
0013	Little Rock AFB	24.8	31.5
0014	Travis AFB	31.5	45.6
0019	Edwards AFB	26.7	31.8
0024	NH Camp Pendleton/Ft Irwin	23.9	35.1
0028	NH LeMoore	34.6	40.2
0029	NMC San Diego	27.6	38.8

CACSMPL	Catchment Area	RR Unweighted Response Rate	RRw Weighted Response Rate
0030	NH 29-Palms	22.2	23.9
0032	Evans ACH-Ft. Carson	24.6	35.4
0033	USAF Acad. Hospital	44.7	55.3
0036	Dover AFB	30.2	34.9
0037	Washington DC/Pentagon	35.5	43.7
0038	NH Pensacola	31.4	45.0
0039	NH Jacksonville/Key West	32.6	44.0
0042	Eglin AFB	35.4	46.4
0043	Tyndall AFB	29.4	37.1
0045	MacDill AFB	40.8	57.8
0046	Patrick AFB	39.4	46.3
0047	Ft. Gordon	31.9	41.2
0048	Ft. Benning	22.4	32.5
0049	Ft. Stewart	22.0	27.4
0051	Robins AFB	28.5	34.7
0052	Tripler AMC(??)	23.5	30.9
0053	Mountain Home AFB	27.9	33.0
0055	Scott AFB	36.4	48.3
0056	NH Great Lakes	25.3	34.6
0057	Ft. Riley	24.4	27.7
0058	Ft. Leavenworth	34.0	39.9
0059	McConnell AFB	29.6	34.9
0060	Ft. Campbell	22.5	29.6
0061	Ft. Knox	25.7	32.5
0062	Barksdale AFB	28.4	37.0
0064	Ft. Polk	30.0	33.2
0066	Andrews AFB	29.9	38.4
0067	NNMC Bethesda	33.8	44.4
0069	Ft. Meade	29.5	34.7
0073	Keesler AFB	32.3	44.7
0075	Ft. Leonard Wood	26.6	33.1
0078	Offutt AFB	41.8	48.2
0079	Nellis AFB	41.0	50.5
0083	Kirtland AFB	27.5	34.5
0086	West Point	26.6	38.7
0089	Ft. Bragg	23.0	31.8

CACSMPL	Catchment Area	RR Unweighted Response Rate	RRw Weighted Response Rate
0090	Seymour Johnson AFB	29.4	33.4
0091	NH Camp Lejeune	18.3	20.6
0092	NH Cherry Point	28.6	32.7
0095	Wright Patterson AFB	41.2	48.3
0096	Tinker AFB	27.1	32.5
0098	Ft. Sill	24.1	30.7
0101	Shaw AFB	33.8	39.1
0103	NH Charleston	30.0	40.5
0104	NH Beaufort	30.0	33.8
0105	Ft. Jackson	31.3	41.9
0108	Ft. Bliss	25.6	37.5
0109	Brooke AMC-Ft. Sam Houston	37.4	52.1
0110	Ft. Hood	20.9	29.6
0112	Dyess AFB	31.5	39.7
0113	Sheppard AFB	29.6	32.9
0117	Lackland AFB/Laughlin AFB/	30.6	41.5
0118	NH Corpus Christi	27.9	33.6
0119	Hill AFB	27.4	33.8
0120	Langley AFB	33.0	40.2
0121	Ft. Eustis	28.6	38.1
0123	Ft. Belvoir	43.6	54.1
0124	NMC Portsmouth	26.3	33.6
0125	Madigan AMC-Ft. Lewis	27.3	38.7
0126	NH Bremerton	30.7	37.9
0127	NH Oak Harbor	29.7	33.5
0128	Fairchild AFB	31.3	38.9
0129	F.E. Warren AFB	29.0	32.7
0131	Ft. Irwin	15.3	17.1
0252	Peterson AFB	32.5	35.2
0280	Pearl Harbor	27.1	28.9
0287	NMCL Pearl Harbor/Hickam	30.9	32.6
0321	NACC Portsmouth New Hamp.	29.0	31.5
0326	McGuire AFB/Ft. Dix	22.6	24.9
0330	Ft. Drum	16.4	17.7
0366	Randolph AFB	38.2	47.1
0385	NMCL Quantico	24.6	29.9

CACSMPL	Catchment Area	RR Unweighted Response Rate	RR _w Weighted Response Rate
0606	Landstuhl AMC/other German	12.2	13.4
0607	Landstuhl	14.4	15.0
0609	Wuerzburg	13.6	13.5
0612	Seoul	13.5	13.0
0617	Naples	16.8	17.1
0620	Agana	21.5	24.6
0621	Okinawa	12.0	12.1
0622	NH Yokosuka/other Asian	16.8	17.0
0633	RAF Lakenheath/other Europe	13.2	13.7
0638	Kunsan AB/Osan AB	13.8	14.9
0640	Yokota AB	22.9	22.3
0804	Kadena AFB	13.7	14.7
0805	Spangdahlem AB	21.2	21.3
0806	Spangdahlem/Ramstein AFB	20.8	21.8
6223	New London/Ballston SPA	25.8	29.7
7139	Hurlburt Field	30.6	32.8
9901	Out/Area-Reg 1	46.8	57.9
9902	Out/Area-Reg 2	48.5	59.0
9903	Out/Area-Reg 3	48.0	57.0
9904	Out/Area-Reg 4	19.5	26.0

TABLE E.6

RESPONSE RATES BY FACILITY SERVICE CODE – QUARTER III, 2004

	RR Unweighted Response Rate	RR _w Weighted Response Rate
Army	24.9	33.9
Navy	24.7	33.5
Air Force	29.9	40.9

NOTE: Only Army, Navy and Air Force are reported

TABLE E.7
RESPONSE RATES BY TNEX REGION – QUARTER III, 2004

	RR Unweighted Response Rate	RR _w Weighted Response Rate
North	30.4	45.5
South	32.3	48.8
West	30.8	45.2
Overseas	16.5	17.6

TABLE E.8
RESPONSE RATES BY COMBINED GEOGRAPHIC AREA – QUARTER III, 2004

Region	CACSMPL	Catchment Area	RR Unweighted Response Rate	RR _w Weighted Response Rate
Northeast Region 1	0036	Dover AFB	30.2	34.9
	0037	Washington DC/Pentagon	35.5	43.7
	0066	Andrews AFB	29.9	38.4
	0067	NNMC Bethesda	33.8	44.4
	0069	Ft. Meade	29.5	34.7
	0086	West Point	26.6	38.7
	0123	Ft. Belvoir	43.6	54.1
	0321	NACC Portsmouth New Hamp.	29.0	31.5
	0326	McGuire AFB/Ft. Dix	22.6	24.9
	0330	Ft. Drum	16.4	17.7
	0385	NMCL Quantico	24.6	29.9
	6223	NEWPROT	25.8	29.7
	9901	Out/Area-Reg 1	46.3	57.3
Mid-Atlantic Region 2	0089	Ft. Bragg	23.0	31.8
	0090	Seymour Johnson AFB	29.4	33.4
	0091	NH Camp Lejeune	18.3	20.6
	0092	NH Cherry Point	28.6	32.7
	0120	Langley AFB	33.0	40.2
	0121	Ft. Eustis	28.6	38.1
	0124	NMC Portsmouth	26.3	33.6
	9901	Out/Area-Reg 1	51.1	62.5

Region	CACSMPL	Catchment Area	RR Unweighted Response Rate	RR _w Weighted Response Rate
Southeast Region 3	0039	NH Jacksonville/Key West	32.6	44.0
	0045	MacDill AFB	40.8	57.8
	0046	Patrick AFB	39.4	46.3
	0047	Ft. Gordon	31.9	41.2
	0048	Ft. Benning	22.4	32.5
	0049	Ft. Stewart	22.0	27.4
	0051	Robins AFB	28.5	34.7
	0101	Shaw AFB	33.8	39.1
	0103	NH Charleston	30.0	40.5
	0104	NH Beaufort	30.0	33.8
	0105	Ft. Jackson	31.3	41.9
	9902	Out/Area-Reg 2	52.5	62.8
Gulfsouth Region 4	0001	Redstone Ars/Ft McClellan	37.6	44.1
	0003	Ft. Rucker	39.1	51.8
	0004	Maxwell AFB	40.1	46.8
	0038	NH Pensacola	31.4	45.0
	0042	Eglin AFB	35.4	46.4
	0043	Tyndall AFB	29.4	37.1
	0073	Keesler AFB	32.3	44.7
	7139	Hurlburt Field	30.6	32.8
	9902	Out/Area-Reg 2	45.9	57.5
Heartland Region 5	0055	Scott AFB	36.4	48.3
	0056	NH Great Lakes	25.3	34.6
	0060	Ft. Campbell	22.5	29.6
	0061	Ft. Knox	25.7	32.5
	0095	Wright Patterson AFB	41.2	48.3
	9901	Out/Area-Reg 1	45.4	56.5

Region	CACSMPL	Catchment Area	RR Unweighted Response Rate	RR _w Weighted Response Rate
Southwest Region 6	0013	Little Rock AFB	24.8	31.5
	0062	Barksdale AFB	28.4	37.0
	0064	Ft. Polk	30.0	33.2
	0096	Tinker AFB	27.1	32.5
	0098	Ft. Sill	24.1	30.7
	0109	Brooke AMC-Ft. Sam Houston	37.4	52.1
	0110	Ft. Hood	20.9	29.6
	0112	Dyess AFB	31.5	39.7
	0113	Sheppard AFB	29.6	32.9
	0117	Lackland AFB/Laughlin AFB/	30.6	41.5
	0118	NH Corpus Christi	27.9	33.6
	0366	Randolph AFB	38.2	47.1
	9902	Out/Area-Reg 2	46.6	56.2
Central 7 Region 7	0008	Ft. Huachuca	27.2	34.3
	0009	Luke AFB	38.6	52.7
	0010	Davis-Monthan AFB	33.7	40.6
	0079	Nellis AFB	41.0	50.5
	0083	Kirtland AFB	27.5	34.5
	0108	Ft. Bliss	25.6	37.5
	9903	Out/Area-Reg 3	52.2	61.0
	Central 8 Region 8	0032	Evans ACH-Ft. Carson	24.6
0033		USAF Acad. Hospital	44.7	55.3
0053		Mountain Home AFB	27.9	33.0
0057		Ft. Riley	24.4	27.7
0058		Ft. Leavenworth	34.0	39.9
0059		McConnell AFB	29.6	34.9
0075		Ft. Leonard Wood	26.6	33.1
0078		Offutt AFB	41.8	48.2
0119		Hill AFB	27.4	33.8
0129		F.E. Warren AFB	29.0	32.7
0252		Peterson AFB	32.5	35.2
9903		Out/Area-Reg 3	46.5	55.8

Region	CACSMPL	Catchment Area	RR Unweighted Response Rate	RR _w Weighted Response Rate
Southern California Region 9	0019	Edwards AFB	26.7	31.8
	0024	NH Camp Pendleton/Ft Irwin	23.9	35.1
	0029	NMC San Diego	27.6	38.8
	0030	NH 29-Palms	22.2	23.9
	0131	Ft. Irwin	15.3	17.1
	9903	Out/Area-Reg 3	44.9	52.7
Golden Gate Region 10	0014	Travis AFB	31.5	45.6
	0028	NH LeMoore	34.6	40.2
	9903	Out/Area-Reg 3	59.5	66.4
Northwest Region 11	0125	Madigan AMC-Ft. Lewis	27.3	38.7
	0126	NH Bremerton	30.7	37.9
	0127	NH Oak Harbor	29.7	33.5
	0128	Fairchild AFB	31.3	38.9
	9903	Out/Area-Reg 3	44.6	54.1
Hawaii Region 12	0052	Tripler AMC	23.5	30.9
	0280	Pearl Harbor	27.1	28.9
	0287	NMCL Pearl Harbor/Hickam	30.9	32.6
	9903	Out/Area-Reg 3	50.0	57.0
Europe Region 13	0606	Landstuhl AMC/other German	12.2	13.4
	0607	Landstuhl	14.4	15.0
	0609	Wuerzburg	13.6	13.5
	0617	Naples	16.8	17.1
	0633	RAF Lakenheath/other Europe	13.2	13.7
	0805	Spangdahlem AB	21.2	21.3
	0806	Spangdahlem/Ramstein AFB	20.8	21.8
	9904	Out/Area-Reg 4	15.0	17.8

Region	CACSMPL	Catchment Area	RR Unweighted Response Rate	RR _w Weighted Response Rate
Western Pacific Command Region 14	0612	Seoul	13.5	13.0
	0620	Agana	21.5	24.6
	0621	Okinawa	12.0	12.1
	0622	NH Yokosuka/other Asian	16.8	17.0
	0638	Kunsan AB/Osan AB	13.8	14.9
	0640	Yokota AB	22.9	22.3
	0804	Kadena AFB	13.7	14.7
	9904	Out/Area-Reg 4	10.0	14.2
TRICARE Latin America Region 15	9904	Out/Area-Reg 4	28.3	36.1
Alaska Region 16	0005	Ft Wainwright	23.4	23.7
	0006	Elmendorf AFB/Ft Wainwright	33.6	36.7
	9903	Out/Area-Reg 3	37.5	53.2

TABLE E.9
RESPONSE RATES BY BENEFICIARY CATEGORY AND SEX – QUARTER III, 2004

Beneficiary Category	Sex	RR Unweighted Response Rate	RR _w Weighted Response Rate
Active Duty and Guard/Reserve	Male	16.4	15.5
	Female	19.9	19.4
Dependent of Active Duty & Guard/Reserve	Male	14.7	16.3
	Female	26.9	28.3
Retiree/Depend of Retir/Surviv/Other <65	Male	48.7	51.3
	Female	46.8	49.0
Retiree/Depend of Retir/Surviv/Other 65+	Male	75.6	77.8
	Female	69.2	72.1

TABLE E.10

RESPONSE RATES BY BENEFICIARY CATEGORY AND SERVICE– QUARTER III, 2004

		RR Unweighted Response Rate	RR _W Weighted Response Rate
Active Duty and Guard/Reserve	Army	14.9	14.9
	Navy	17.1	16.6
	Marine Corps	11.0	10.3
	Air Force	20.1	19.8
	Coast Guard	19.9	19.2
Dependent of Active Duty & Guard/Reserve	Army	23.0	24.5
	Navy	24.5	27.9
	Marine Corps	24.6	25.1
	Air Force	28.8	29.7
	Coast Guard	26.8	36.8
Retiree/Depend of Retir/Surviv/Other <65	Army	47.6	49.8
	Navy	47.4	49.8
	Marine Corps	42.5	45.6
	Air Force	48.9	51.4
	Coast Guard	48.1	51.6
Retiree/Depend of Retir/Surviv/Other 65+	Army	71.5	74.0
	Navy	72.8	75.9
	Marine Corps	75.8	78.3
	Air Force	72.7	74.9
	Coast Guard	63.6	71.1

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APPENDIX F

TECHNICAL DESCRIPTION OF THE 2004 TRICARE BENEFICIARY REPORTS

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The beneficiary reports will 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, courteous and helpful office staff, how well doctors communicate, customer service, claims processing, rating of the health plan, health care, personal doctor, and specialist, and preventive care standards. These scores are made up of three different types, described in TABLE F.1: CAHPS composites, ratings, and TMA standard composites. A trend page compares composites and ratings with values from previous quarters, calculate a quarterly trend, and test the trend for statistical significance in the quarterly version. In the annual version, results from 3 years are presented.

TABLE F.1

CONTENT OF THE 2004 TRICARE BENEFICIARY REPORTS

CAHPS COMPOSITES
<p>The CAHPS composites group together survey responses to a set of related HCSDDB 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 doctors' offices, their experience with customer service representatives, and their experience with claims processing. Scores will be presented in relation to national benchmarks.</p>
SATISFACTION RATINGS
<p>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, will be presented relative to national benchmarks.</p>
TMA STANDARD COMPOSITES
<p>Two TMA standard composite scores are reported. One score is based on how the preventive care that beneficiaries received compares with Healthy People 2010 standards. Preventive care indicators to be combined are prenatal care, hypertension screening, mammography, cholesterol screening and Pap smears. Another composite combines a non-smoking rate and the rate at which smokers are counseled to quit.</p>

TABLE F.2 lists the questions and response choices for the CAHPS composites in the beneficiary reports. Question numbers refer to the CAHPS 3.0 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 will be 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, PCM, and specialist. These ratings are measures of overall beneficiary satisfaction. Questions about these aspects of care ask 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 mean will be multiplied by 100 so that the score will be presented on a scale of 0 to 100.

In 2004, HCSDB questions are taken from CAHPS version 3.0 instead of CAHPS version 2.0. The new CAHPS questions are presented just as the old ones were. Trend pages include scores from 2004, 2003, and 2002, calculated using questions both CAHPS versions. Both CAHPS 2.0 and 3.0 benchmarks are provided for comparison. When new scores are not comparable to the old, previous values are adjusted to account for the shift.

TABLE F.2

CAHPS 3.0 QUESTIONS AND RESPONSE CHOICES
EXPRESSED AS COMPOSITE SCORES AND RATINGS

ADULT QUESTIONNAIRE CAHPS 3.0	GETTING NEEDED CARE	RESPONSE CHOICE
Q7	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?	A big problem A small problem Not a problem
Q9	In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?	A big problem A small problem Not a problem
Q22	In the last 12 months, how much of a problem, if any, was it to get the care, tests, or treatment you or your doctor believed necessary?	A big problem A small problem Not a problem
Q24	In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?	A big problem A small problem Not a problem
GETTING CARE QUICKLY		
Q14	In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?	Never Sometimes Usually Always
Q18	In the last 12 months, not counting the times you needed health care right away, how often did you get an appointment for healthcare as soon as you wanted?	Never Sometimes Usually Always
Q16	In the last 12 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?	Never Sometimes Usually Always
Q25	In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?	Never Sometimes Usually Always

ADULT QUESTIONNAIRE CAHPS 3.0	COURTEOUS AND HELPFUL OFFICE STAFF	RESPONSE CHOICE
Q26	In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?	Never Sometimes Usually Always
Q27	In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?	Never Sometimes Usually Always
HOW WELL DOCTORS COMMUNICATE		
Q28	In the last 12 months, how often did doctors or other health providers listen carefully to you?	Never Sometimes Usually Always
Q29	In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?	Never Sometimes Usually Always
Q30	In the last 12 months, how often did doctors or other health providers show respect for what you had to say?	Never Sometimes Usually Always
Q31	In the last 12 months, how often did doctors or other health providers spend enough time with you?	Never Sometimes Usually Always
CUSTOMER SERVICE		
Q34	In the last 12 months, did you look for any information about how your health plan works in written material or on the internet? In the last 12 months, how much of a problem, if any, was it to find or understand this information?	A big problem A small problem Not a problem
Q36	In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?	A big problem A small problem Not a problem
Q38	In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?	A big problem A small problem Not a problem

ADULT SUPPLEMENTAL QUESTIONNAIRE CAHPS 3.0	CLAIMS PROCESSING	RESPONSE CHOICE
CP2	In the last 12 months, how often did your health plan handle your claims in a reasonable time?	Never Sometimes Usually Always Don't Know
CP3	In the last 12 months, how often did your health plan handle your claims correctly?	Never Sometimes Usually Always Don't Know
RATING OF ALL HEALTH CARE		
Q32	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
RATING OF HEALTH PLAN		
Q39	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

ADULT QUESTIONNAIRE CAHPS 3.0	RATING OF PERSONAL DOCTOR	RESPONSE CHOICE
Q5	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	
Q11	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 measure 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 2004 HCSDB that are incorporated into the preventive care composite are presented in TABLE F.3. When individual scores in the preventive care composite are combined, the resulting composite will be weighted by the number of questions to which a normal population has responded. Therefore, the weight a particular question receives in the composite score will be based on the number of responses it "receives". The resulting proportion will be presented as a percentage.

TABLE F.3

QUESTIONS AND RESPONSE CHOICES ON PREVENTIVE CARE
EXPRESSED AS A STANDARD TMA COMPOSITE

2004 Q1 ADULT HCSDB QUESTION	COMPOSITE PREVENTIVE CARE	RESPONSE CHOICES
Q71	When did you last have a blood pressure reading?	Less than 12 months ago 1 to 2 years ago More than 2 years ago
Q72	Do you know if your blood pressure is too high?	Yes, it is too high No, it is not too high Don't know
Q73	When did you last have a cholesterol screening, that is, a test to determine the level of cholesterol in your blood?	Less than 12 months ago 1 to 2 years ago More than 2 but less than 5 years ago 5 or more years ago Never had a cholesterol screening
Q83	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
Q85	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
Q89	In which trimester did you first receive prenatal care?	First trimester Second trimester Third trimester Did not receive prenatal care

The smoking cessation composite measures the success of TMA's efforts to reduce smoking 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, and the counseled to quit rate, which is the proportion of smokers with office visits who were counseled to quit during at least one visit. The composite weights these two measures equally.

TABLE F.4

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 <u>smoked</u> at least 100 cigarettes in your entire life?	Yes No Don't know
H13	Do you now smoke every day, some days or not at all?	Every day Some days Not at all Don't know
H14	How long has it been since you <u>quit smoking</u> cigarettes?	12 months or less More than 12 months Don't know
H15	In the last 12 months, on how many visits were you <u>advised to quit</u> smoking by a doctor or other health provider in your plan?	None 1 visit 2 to 4 visits 5 to 9 visits 10 or more visits I had no visits in the last 12 months

APPENDIX G

SAS CODE FOR FILE DEVELOPMENT

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G.1 Q4_2004\PROGRAMS\WEIGHTING\MERGENRC.SAS - Combine Item Response Data from survey contractor with the MPR sampling and DEERS variables.

```

*****
*
* PROGRAM: MERGENRC.SAS
* TASK: QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE: COMBINE ITEM RESPONSE DATA FROM NRC WITH THE MPR SAMPLING AND
* DEERS VARIABLES. ALSO, CONSTRUCT XREGION AND CONUS.
* 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 constructs
* XREGION, XTNEXREG and CONUS to CONVARQ.SAS.
* 4) 10/20/2004 BY KEITH RATHBUN: Recode unknown values of
* MRTLSTAT into one group.
*
* INPUTS: 1) QnyyA.SD2 - Quarterly DOD Health Survey Data from NRC
* where n = Quarter Number
* yy = Survey Administration Year
* 3) BWT.SD7 - MPR Sampling and DEERS variables
* 4) SAMPLA02.SD2 - DEERS variables
*
* OUTPUTS: 1) MERGENRC.SD2 - Quarterly DOD Health Survey Data
* (Combined NRC, MPR, and DEERS variables)
*
*****;
LIBNAME INv6 v612 "..\..\DATA\afinal";
LIBNAME INv8 v8 "..\..\DATA\afinal";
LIBNAME OUT v612 "..\..\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 = 10012004; * mmdyyy;
%LET FIELDLBL = October 1st 2004;
%LET QUARTER = Q4 2004;
%LET NUMPD = 16; *Add 1 to number of Quarters processed each quarter;

*****
* SORT the NRC-Provided file and the original sample (BWT).
*****;
PROC SORT DATA=INv8.Q404A OUT=NRCFILE; BY MPRID; RUN;

DATA NRCFILE;
LENGTH MPRID $8;
SET NRCFILE;
RUN;

PROC SORT DATA=INv8.BWT OUT=BWT; BY MPRID; RUN;

*****
* Attach DEERS variables to the combined file that were omitted from the
* BWT file.
*****;
PROC SORT DATA=INv6.SAMPLA02 OUT=SAMPLA02
(KEEP=MPRID DAGEQY DBENCAT DCATCH DMEDELG DSPONSVC LEGDDSCD MBRRELCD
MEDTYPE MRTLSTAT PATCAT PCM RACEETHN
PNLCATCD PNBRTHTD PAYPLNCD E1-E&NUMPD);
BY MPRID;
RUN;
*****

```

```

* Attach the original sampling variables to the combined file.
*****;
DATA MERGENRC;
MERGE BWT(DROP=XREGION) NRCFILE(in=in2) SAMPLA02(in=in1);
BY MPRID;
FLAG_FIN = COMPRESS(FLAG_FIN); *Trim off the blanks;
*****;
* The following code from Don/Nancy/Esther was added to fix CACSMPL
* 2002 data for Q1. Do not remove this code.
*****;
***** Replace CACSMPL 6992 with its DCATCH *****;
IF CACSMPL = '6992' THEN GEOCELL = DCATCH;
IF CACSMPL = '6992' THEN CACSMPL = GEOCELL;
***** Replace out of area catchment areas *****;
IF CACSMPL IN ('0999') THEN CACSMPL='9999';
IF CACSMPL IN ('0934') THEN CACSMPL='9902';
ELSE IF CACSMPL IN ('0933') THEN CACSMPL='9901';
ELSE IF CACSMPL IN ('0911') THEN CACSMPL='9903';
*****;
* The following code from Don/Nancy/Esther was added to fix CACSMPL
* 2002 data for Q2.
*****;
IF CACSMPL = '0985' THEN CACSMPL = '9910';
IF CACSMPL = '0989' THEN CACSMPL = '9904';
*****;
* DROP variables that are not needed.
*****;
DROP SVCCD GEOSMPL GEOCELL EBG_COM EBSMPL
D_INSTAL;
*****;
* 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;

LABEL CACSMPL = 'CACSMPL - Catchment Area'
BWT = 'BWT - Basic Sampling Weight'
ENBGSMPL = 'ENBGSMPL - Beneficiary/Enrollment Status'
NHFF = 'NHFF - Stratum Sample Size'
SERVAREA = 'Service Area'
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 NRC and MPR files, MPRID = " MPRID;

RUN;

DATA OUT.MERGENRC;
SET MERGENRC;
BY MPRID;
*****;
* Construct MPCSMPL.
*****;
IF PAYPLNCD = 'MO' THEN
MPCSMPL = 2;

```

```

ELSE IF PAYPLNCD = 'MW' THEN
  MPCSMPL = 3;
ELSE
  MPCSMPL = 1;
*****
* Calculate FIELDAGE based on PNBRTHTD using fielding period
* starting date.
*****;
FIELDAGE = INPUT("&FIELDAGE",mmddy8.);
DOB = SUBSTR(PNBRTHTD,5,2) || SUBSTR(PNBRTHTD,7,2) || SUBSTR(PNBRTHTD,1,4);
BRTHDATE = INPUT(DOB,mmddy8.);

FIELDAGE = PUT(INT((FIELDAGE - BRTHDATE)/365.25),Z3.);
LABEL MPCSMPL = "MPCSMPL - Military Personnel Category";
LABEL FIELDAGE = "Age as of &FIELDAGE";
LABEL DCATCH = "Catchment Area";

LENGTH QUARTER $7;
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 FIELDAGE DOB BRTHDATE PNBRTHTD PAYPLNCD;

RUN;

TITLE1 "Quarterly DOD Health Survey - Combine NRC, MPR and DEERS variables (6077-300)";
TITLE2 "Program Name: MERGENRC.SAS By Keith Rathbun";
TITLE3 "Program Inputs: QnyyAFIN.SD2, BWT.SD7, SAMPLA02.SD2 -- Program Output: MERGENRC.SD2";

PROC CONTENTS; RUN;

PROC FREQ DATA=OUT.MERGENRC(DROP=MPRID PRN);
TABLES WEB FLAG_FIN DAGEQY*FIELDAGE _ALL_ /MISSING LIST;
RUN;

```

G.2.A Q1_2004\PROGRAMS\CODINGScheme\CSCHEM04Q.SAS - Implement Coding Scheme and Coding Tables for Quarter 1 CY2004.

```
*****;
* Program: Cschm04q.sas
* Written: 06/04/2001
* Author: C. Rankin
*
* Input: MERGENRC.SD2 - Merged MPR Sampling, DEERS, and NRC Response Data
* Output: CSCHEM04Q.SD2 - 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
*           5/27/2003 - Updated Variable names for Q2 2003
*           12/05/2003 - Updated Variable names for Q4 2003
*           3/25/2004 - Updated Variable names for Q1 2004
* Purpose: Apply Coding Scheme Specifications to DoD Health Care Survey
* Response Data, check for consistency in responses and skip
* patterns
* Include
* files: Cschm04q.fmt
*****;
```

```
OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;
```

```
LIBNAME LIBRARY v612 "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN v612 "..\..\DATA\AFINAL";
LIBNAME OUT v612 "..\..\DATA\AFINAL";
```

```
%LET INDATA=MERGENRC;
%LET OUTDATA=CSCHEM04Q;
%LET PERIOD=January, 2004 to December, 2004;
```

```
/* Variable names in survey -- become recoded variables */
```

```
%Let varlist1 =
```

```
H04001 H04002A H04002C H04002F H04002G H04002H H04002I H04002J
H04002K H04002L H04002M H04002N H04002O H04003 H04004 H04005
H04006 H04007 H04008 H04009 H04010
H04011 H04012 H04013 H04014
H04015 H04016 H04017 H04018 H04019 H04020 H04021
H04022 H04023 H04024 H04025 H04026 H04027 H04028 H04029
H04030 H04031 H04032 H04033 H04034 H04035
H04036 H04037 H04038
S04F01 S04F02 S04F03 S04F04 S04F05 S04F06 S04F07
S04F08 S04F09
S04V01 S04V02 S04V04 S04V05 S04V06 S04V07
H04039 H04040 H04041 H04042 H04043 H04044 H04045
H04046 H04047 H04048 H04049 H04050 H04051 H04052
H04053 H04054
H04055 H04056 H04057 H04058 H04059 H04060
H04061 H04062 H04063 H04064 H04065 H04066 H04067 H04068
H04069 H04070 H04071
H04072 H04073 H04074 H04075 H04076 H04077 H04078 H04079
H04080 H04081 H04082 H04083 H04084
SREDA
H04085
SRRACEA SRRACEB SRRACEC SRRACED SRRACEE SRAGE
;
```

```
/* _O variables are the original values from the survey response */
```

```

%Let varlist2 =
H04001_O H04002AO H04002CO H04002FO H04002GO H04002HO H04002IO H04002JO
H04002KO H04002LO H04002MO H04002NO H04002OO H04003_O H04004_O H04005_O
H04006_O H04007_O H04008_O H04009_O H04010_O
H04011_O H04012_O H04013_O H04014_O
H04015_O H04016_O H04017_O H04018_O H04019_O H04020_O H04021_O
H04022_O H04023_O H04024_O H04025_O H04026_O H04027_O H04028_O H04029_O
H04030_O H04031_O H04032_O H04033_O H04034_O H04035_O
H04036_O H04037_O H04038_O
S04F01_O S04F02_O S04F03_O S04F04_O S04F05_O S04F06_O S04F07_O
S04F08_O S04F09_O
S04V01_O S04V02_O S04V04_O S04V05_O S04V06_O S04V07_O
H04039_O H04040_O H04041_O H04042_O H04043_O H04044_O H04045_O
H04046_O H04047_O H04048_O H04049_O H04050_O H04051_O H04052_O
H04053_O H04054_O
H04055_O H04056_O H04057_O H04058_O H04059_O H04060_O
H04061_O H04062_O H04063_O H04064_O H04065_O H04066_O H04067_O
H04068_O H04069_O H04070_O H04071_O
H04072_O H04073_O H04074_O H04075_O H04076_O H04077_O H04078_O
H04079_O H04080_O H04081_O H04082_O H04083_O H04084_O
SREDA_O
H04085_O
SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O
;

```

```

TITLE "DoD 2004 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";

```

```

DATA MERGENRC;

```

```

    SET IN.MERGENRC;

```

```

*****;
* Code added by J Agufa 3/25/2004 to fix name of variable;
*****;

```

```

    RENAME H043002A = H04002A;

```

```

RUN;

```

```

DATA OUT.CSCHM04Q;

```

```

    LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
    INFORMAT &VARLIST2. 4.;
    %INCLUDE "CSCHM04Q.FMT";

```

```

/* label and format statements for original variables */

```

```

/*IF YOU DID NOT NEED TO CHANGE THE VARIABLE NAMES IN ABOVE DATAPSTP,
THIS FILE SHOULD BE IN.MERGENRC INSTEAD OF MERGENRC*/

```

```

    SET MERGENRC;

```

```

*****;
*** Recodes for invalid responses:*****;
*****;

```

```

    IF H04031=0 THEN H04031=1;

```

```

/* This is a version of the coding scheme and coding tables for the
2004 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.);
DROP SEX AGE;

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)= -8 THEN RECODE(I)=.A;
    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;
    ELSE RECODE(I)=RECODE(I);
  END;
END;
DROP I;

/* recode selected responses to be 1=marked, 2=unmarked */

ARRAY MARKED(*) H04002A H04002C H04002F H04002G H04002H H04002I H04002J
                H04002K H04002L H04002M H04002N H04002O
                SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
                ;

ARRAY INFORMAT(*) H04002AO H04002CO H04002FO H04002GO H04002HO H04002IO H04002JO
                  H04002KO H04002LO H04002MO H04002NO H04002OO
                  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 H04002A H04002C H04002F H04002G H04002H H04002I H04002J
        H04002K H04002L H04002M H04002N H04002O
        SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
        MARKED.;

*****;

/* skip coding scheme for all surveys not returned */

IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;

/** Note 1 -- H04006, H04007 health plan usage */

IF H04006 > 0 OR H04006 =.D THEN N1=1;
ELSE IF H04006=.N THEN DO;
  IF H04007 NOT=. THEN DO;
    N1=2;
    H04007=.C;
  END;
ELSE DO;
  N1=3;
  H04007=.N;
END;
END;
ELSE IF H04006=. THEN N1=4;
ELSE IF H04006=.A THEN DO;

```

```

        IF H04007 NOT=. THEN N1=5;
        ELSE DO;
            H04006=.N;
            H04007=.N;
            N1=6;
        END;
    END;

/** Note 2 -- H04008 H04009 H04010: Personal doctor or nurse **/

    IF H04008 = 1 AND (H04009 GE 0 OR H04009 IN (.,.A)) THEN N2=1;
    ELSE IF H04008 IN (1,.,.A) AND H04009=.N THEN DO;
        N2=2;
        H04008=2;
        H04009=.C;
        IF H04010=. THEN H04010=.N;
        ELSE H04010=.C;
    END;
    ELSE IF H04008 IN (2,.,.A) AND (H04009 GE 0 OR H04009=.A) THEN DO;
        H04008=1;
        N2=3;
    END;
    ELSE IF H04008=2 AND H04009 IN (.N,.) THEN DO;
        N2=4;
        IF H04009=. THEN H04009=.N;
        ELSE H04009=.C;
        IF H04010=. THEN H04010=.N;
        ELSE H04010=.C;
    END;
    ELSE IF H04008=. AND H04009=. THEN N2=5;
    ELSE IF H04008=.A AND H04009=. THEN DO;
        H04008=2;
        N2=6;
        H04009=.N;
        IF H04010=. THEN H04010=.N;
        ELSE H04010=.C;
    END;

/** Note3 -- H04010, H04011: Personal doctor or nurse **/

    IF H04010 IN (.N, .C) THEN N3=1;
    ELSE IF H04010 IN (1,.,.A) AND (H04011 GT 0 OR H04011 IN(.A)) THEN DO;
        H04010=2;
        N3=2;
    END;
    ELSE IF H04010=1 AND H04011 IN (.) THEN DO;
        H04011=.N;
        N3=3;
    END;
    ELSE IF H04010=2 AND H04011 IN (1,2,3,.,.A) THEN N3=4;
    ELSE IF H04010=. AND H04011=. THEN N3=5;
    ELSE IF H04010=.A AND H04011=. THEN DO;
        H04010=1;
        H04011=.N;
        N3=6;
    END;

/** Note 4 -- H04012, H04013: needed to see a specialist in last 12 months **/

    IF H04012=1 AND H04013 IN (1,2,3,.,.A) THEN N4=1;
    ELSE IF H04012 IN (1,.,.A) AND H04013=.N THEN DO;
        H04012=2;
        H04013=.C;
        N4=2;
    END;
    ELSE IF H04012 IN (2,.,.A) AND H04013 IN (1,2,3,.A) THEN DO;
        H04012=1;
        N4=3;
    END;

```

```

ELSE IF H04012=2 AND H04013 IN (.,.N) THEN DO;
  IF H04013=. THEN H04013=.N;
  ELSE H04013=.C;
  N4=4;
END;
ELSE IF H04012=. AND H04013=. THEN N4=5;
ELSE IF H04012=.A AND H04013=. THEN DO;
  H04012=2;
  H04013=.N;
  N4=6;
END;

/** Note 5 -- H04014, H04015,H04016: saw a specialist in last 12 months **/

ARRAY NOTE5 H04015 H04016;
N5MARK=0;
N5NMISS=0;

DO OVER NOTE5;
  IF NOTE5 NE . THEN N5NMISS+1;
  IF NOTE5 NOT IN (.N,.) THEN N5MARK+1;
END;

IF H04014=1 AND (N5NMISS=0 OR N5MARK>0) THEN N5=1;
ELSE IF H04014 IN (1,..A) AND N5NMISS>0 AND N5MARK=0 THEN DO;
  H04014=2;
  N5=2;
  DO OVER NOTE5;
    IF NOTE5=. THEN NOTE5=.N;
    ELSE NOTE5=.C;
  END;
END;
ELSE IF H04014 IN (2,..A) AND N5MARK>0 THEN DO;
  H04014=1;
  N5=3;
END;
ELSE IF H04014=2 AND (N5NMISS=0 OR (N5NMISS>0 AND N5MARK=0)) THEN DO;
  N5=4;
  DO OVER NOTE5;
    IF NOTE5=. THEN NOTE5=.N;
    ELSE NOTE5=.C;
  END;
END;
ELSE IF H04014=. AND N5NMISS=0 THEN N5=5;
ELSE IF H04014=.A AND N5NMISS=0 THEN DO;
  H04014=2;
  N5=6;
  DO OVER NOTE5;
    NOTE5=.N;
  END;
END;

DROP N5NMISS N5MARK;

/** Note 6 -- called a doctor's office: H04017, H04018 **/

IF H04017=1 AND H04018 IN (1,2,3,4,..A) THEN N6=1;
ELSE IF H04017 IN (1,..A) AND H04018=.N THEN DO;
  H04017=2;
  H04018=.C;
  N6=2;
END;
ELSE IF H04017 IN (2,..A) AND H04018 IN (1,2,3,4,.A) THEN DO;
  H04017=1;
  N6=3;
END;

ELSE IF H04017=2 AND H04018 IN (.,.N) THEN DO;
  IF H04018=. THEN H04018=.N;
  ELSE H04018=.C;
  N6=4;

```

```

END;
ELSE IF H04017=. AND H04018=. THEN N6=5;
ELSE IF H04017=.A AND H04018=. THEN DO;
  H04017=2;
  N6=6;
  H04018=.N;
END;

/** Note 7 -- H04019,H04020,H04021: illness or injury **/

ARRAY NOTE7 H04020 H04021;
N7MARK=0;
N7NMISS=0;

DO OVER NOTE7;
  IF NOTE7 NE . THEN N7NMISS+1;
  IF NOTE7 NOT IN (.N,.) THEN N7MARK+1;
END;

IF H04019=1 AND (N7NMISS=0 OR N7MARK>0) THEN N7=1;
ELSE IF H04019 IN (1,.,.A) AND N7NMISS>0 AND N7MARK=0 THEN DO;
  H04019=2;
  N7=2;
  DO OVER NOTE7;
    IF NOTE7=. THEN NOTE7=.N;
    ELSE NOTE7=.C;
  END;
END;
ELSE IF H04019 IN (2,.,.A) AND N7MARK>0 THEN DO;
  H04019=1;
  N7=3;
END;
ELSE IF H04019=2 AND (N7NMISS=0 OR (N7NMISS>0 AND N7MARK=0)) THEN DO;
  N7=4;
  DO OVER NOTE7;
    IF NOTE7=. THEN NOTE7=.N;
    ELSE NOTE7=.C;
  END;
END;
ELSE IF H04019=. AND N7NMISS=0 THEN N7=5;
ELSE IF H04019=.A AND N7NMISS=0 THEN DO;
  H04019=2;
  N7=6;
  DO OVER NOTE7;
    NOTE7=.N;
  END;
END;

DROP N7NMISS N7MARK;

/** Note 8 -- H04022,H04023,H04024: regular or routine healthcare **/

ARRAY NOTE8 H04023 H04024;
N8MARK=0;
N8NMISS=0;

DO OVER NOTE8;
  IF NOTE8 NE . THEN N8NMISS+1;
  IF NOTE8 NOT IN (.N,.) THEN N8MARK+1;
END;

IF H04022=1 AND (N8NMISS=0 OR N8MARK>0) THEN N8=1;
ELSE IF H04022 IN (1,.,.A) AND N8NMISS>0 AND N8MARK=0 THEN DO;
  H04022=2;
  N8=2;
  DO OVER NOTE8;
    IF NOTE8=. THEN NOTE8=.N;
    ELSE NOTE8=.C;
  END;
END;
ELSE IF H04022 IN (2,.,.A) AND N8MARK>0 THEN DO;
  H04022=1;

```

```

      N8=3;
    END;
  ELSE IF H04022=2 AND (N8NMISS=0 OR (N8NMISS>0 AND N8MARK=0)) THEN DO;
    N8=4;
    DO OVER NOTE8;
      IF NOTE8=. THEN NOTE8=.N;
      ELSE NOTE8=.C;
    END;
  END;
ELSE IF H04022=. AND N8NMISS=0 THEN N8=5;
ELSE IF H04022=.A AND N8NMISS=0 THEN DO;
  H04022=2;
  N8=6;
  DO OVER NOTE8;
    NOTE8=.N;
  END;
END;

DROP N8NMISS N8MARK;

/** Note 9 -- H04026, H04027-H04038: doctor's office or clinic **/

ARRAY NOTE9 H04027-H04038;

N9MARK=0;
N9NMISS=0;

DO OVER NOTE9;
  IF NOTE9 NE . THEN N9NMISS+1;
  IF NOTE9 NOT IN (.N,.) THEN N9MARK+1;
END;

IF H04026=1 THEN DO;
  N9=1;
  DO OVER NOTE9;
    IF NOTE9=. THEN NOTE9=.N;
    ELSE NOTE9=.C;
  END;
END;
ELSE IF H04026 IN (2,3,4,5,6,7,..A) AND N9NMISS>0 AND N9MARK=0 THEN DO;
  H04026=1;
  N9=2;
  DO OVER NOTE9;
    IF NOTE9=. THEN NOTE9=.N;
    ELSE NOTE9=.C;
  END;
END;
ELSE IF H04026 IN (2,3,4,5,6,7) AND (N9NMISS=0 OR N9MARK>0) THEN N9=3;
ELSE IF H04026=. AND N9NMISS=0 THEN N9=4;
ELSE IF H04026=.A AND N9NMISS=0 THEN DO;
  H04026=1;
  N9=5;
  DO OVER NOTE9;
    NOTE9=.N;
  END;
END;
ELSE IF H04026 IN (,..A) AND N9MARK>0 THEN N9=6;

DROP N9NMISS N9MARK;

/** Note 10 -- You or doctor believed you needed care, tests or treatment:
H04027, H04028 **/

IF H04027 IN (.N, .C) THEN N10=1;
ELSE IF H04027=1 AND H04028 IN (1,2,3,..A) THEN N10=2;
ELSE IF H04027 IN (1,..A) AND H04028=.N THEN DO;
  H04027=2;
  H04028=.C;
  N10=3;

```

```

END;
ELSE IF H04027 IN (2,..A) AND H04028 IN (1,2,3,..A) THEN DO;
  H04027=1;
  N10=4;
END;
ELSE IF H04027=2 AND H04028 IN (,..N) THEN DO;
  IF H04028=. THEN H04028=.N;
  ELSE H04028=.C;
  N10=5;
END;
ELSE IF H04027=. AND H04028=. THEN N10=6;
ELSE IF H04027=.A AND H04028=. THEN DO;
  H04027=2;
  N10=7;
  H04028=.N;
END;

/** Note 11 -- Needed approval from healthplan for care, tests or treatment:
    H04029, H04030 **/

IF H04029 IN (.N, .C) THEN N11=1;
ELSE IF H04029=1 AND H04030 IN (1,2,3,..A) THEN N11=2;
ELSE IF H04029 IN (1,..A) AND H04030=.N THEN DO;
  H04029=2;
  H04030=.C;
  N11=3;
END;
ELSE IF H04029 IN (2,..A) AND H04030 IN (1,2,3,..A) THEN DO;
  H04029=1;
  N11=4;
END;
ELSE IF H04029=2 AND H04030 IN (,..N) THEN DO;
  IF H04030=. THEN H04030=.N;
  ELSE H04030=.C;
  N11=5;
END;
ELSE IF H04029=. AND H04030=. THEN N11=6;
ELSE IF H04029=.A AND H04030=. THEN DO;
  H04029=2;
  N11=7;
  H04030=.N;
END;

/** Note 12 -- S04V01, S04V02 S04V04-S04V07: health care received from TRICARE civilian network **/

ARRAY NOTE12 S04V02 S04V04-S04V07;
N12MARK=0;
N12NMISS=0;

DO OVER NOTE12;
  IF NOTE12 NE . THEN N12NMISS+1;
  IF NOTE12 NOT IN (.N,..) THEN N12MARK+1;
END;

IF S04V01 IN (1,2,3,4) AND (N12NMISS=0 OR N12MARK>0) THEN N12=1;
ELSE IF S04V01 IN (1,2,3,..A) AND N12NMISS>0 AND N12MARK=0 THEN DO;
  N12=2;
  S04V01=.N;
  DO OVER NOTE12;
    IF NOTE12=. THEN NOTE12=.N;
    ELSE NOTE12=.C;
  END;
END;
ELSE IF S04V01=4 AND N12NMISS>0 AND N12MARK=0 THEN DO;
  N12=3;
END;
ELSE IF S04V01=.N AND (N12NMISS=0 OR (N12NMISS>0 AND N12MARK=0) OR N12MARK>0)
THEN DO;
  N12=4;
  DO OVER NOTE12;

```

```

        IF NOTE12=. THEN NOTE12=.N;
        ELSE NOTE12=.C;
    END;
END;
ELSE IF S04V01=. AND N12NMISS=0 THEN N12=5;
ELSE IF S04V01=.A AND N12NMISS=0 THEN DO;
    S04V01=.N;
    N12=6;
    DO OVER NOTE12;
        NOTE12=.N;
    END;
END;
ELSE IF S04V01 IN (.,.A) AND N12MARK>0 THEN N12=7;

DROP N12NMISS N12MARK;

/** Note 13 -- H04040, H04041-H04043: claims to health plan **/

    ARRAY NOTE13 H04041-H04043;
    N13MARK=0;
    N13NMISS=0;
    N13NDK=0;

DO OVER NOTE13;
    IF NOTE13 NE . THEN N13NMISS+1;
    IF NOTE13 NOT IN (.N,.) THEN N13MARK+1;
    IF NOTE13 NOT IN (.,.D) THEN N13NDK+1;
END;

IF H04040=1 AND
    (N13NMISS=0 OR (N13MARK>0 AND N13NDK>0) OR (N13NMISS>0 AND N13NDK=0))
THEN N13=1;
ELSE IF H04040 IN (1,.,.A,.D) AND N13NMISS>0 AND N13MARK=0 THEN DO;
    N13=2;
    H04040=2;
    DO OVER NOTE13;
        IF NOTE13=. THEN NOTE13=.N;
        ELSE NOTE13=.C;
    END;
END;
ELSE IF H04040 IN (2,.,.A,.D) AND
    ((N13MARK>0 AND N13NDK>0) OR (N13NMISS>0 AND N13NDK=0))
    THEN DO;
    H04040=1;
    N13=3;
END;
ELSE IF H04040 IN (2) AND (N13NMISS=0 OR (N13NMISS>0 AND N13MARK=0)) THEN DO;
    N13=4;
    DO OVER NOTE13;
        IF NOTE13=. THEN NOTE13=.N;
        ELSE NOTE13=.C;
    END;
END;
ELSE IF H04040 IN (.,.D) AND N13NMISS=0 THEN N13=5;
ELSE IF H04040=.A AND N13NMISS=0 THEN DO;
    H04040=2;
    N13=6;
    DO OVER NOTE13;
        NOTE13=.N;
    END;
END;

DROP N13NMISS N13MARK N13NDK;

/** NOTE14 -- H04044, H04045: **/

IF H04044=1 AND H04045 IN (1,2,3,.,.A) THEN N14=1;
ELSE IF H04044 IN (1,.,.A) AND H04045=.N THEN DO;
    H04044=2;

```

```

        H04045=.C;
        N14=2;
    END;
    ELSE IF H04044 IN (2,..A) AND H04045 IN (1,2,3,..A) THEN DO; /* JMA per Daisy's suggestion
3/20/03 */
        H04044=1;
        N14=3;
    END;
    ELSE IF H04044=2 AND H04045 IN (.N,..) THEN DO;
        IF H04045=. THEN H04045=.N;
        ELSE H04045=.C;
        N14=4;
    END;
    ELSE IF H04044=. AND H04045=. THEN N14=5;
    ELSE IF H04044=.A AND H04045=. THEN DO;
        H04044=2;
        H04045=.N;
        N14=6;
    END;

```

/** NOTE15 -- H04046, H04047: health plan's customer service **/

```

    IF H04046=1 AND H04047 IN (1,2,3,..A) THEN N15=1;
    ELSE IF H04046 IN (1,..A) AND H04047=.N THEN DO;
        H04046=2;
        H04047=.C;
        N15=2;
    END;
    ELSE IF H04046 IN (2,..A) AND H04047 IN (1,2,3,..A) THEN DO; /* JMA per Daisy's suggestion
3/20/03 */
        H04046=1;
        N15=3;
    END;
    ELSE IF H04046=2 AND H04047 IN (.N,..) THEN DO;
        IF H04047=. THEN H04047=.N;
        ELSE H04047=.C;
        N15=4;
    END;
    ELSE IF H04046=. AND H04047=. THEN N15=5;
    ELSE IF H04046=.A AND H04047=. THEN DO;
        H04046=2;
        H04047=.N;
        N15=6;
    END;

```

/** Note 16 -- H04048, H04049, H04050, H04051: complaint or problem **/

```

    ARRAY NOTE16 H04049-H04051;
    N16MARK=0;
    N16NMISS=0;

    DO OVER NOTE16;
        IF NOTE16 NE . THEN N16NMISS+1;
        IF NOTE16 NOT IN (.N,..) THEN N16MARK+1;
    END;

    IF H04048=1 AND (N16NMISS=0 OR N16MARK>0) THEN N16=1;
    ELSE IF H04048 IN (1,..A) AND N16NMISS>0 AND N16MARK=0 THEN DO;
        H04048=2;
        N16=2;
        DO OVER NOTE16;
            IF NOTE16=. THEN NOTE16=.N;
            ELSE NOTE16=.C;
        END;
    END;
    ELSE IF H04048 IN (2,..A) AND N16MARK>0 THEN DO;
        H04048=1;
        N16=3;
    END;
    ELSE IF H04048=2 AND (N16NMISS=0 OR (N16NMISS>0 AND N16MARK=0)) THEN DO;
        N16=4;
    END;

```

```

DO OVER NOTE16;
  IF NOTE16=. THEN NOTE16=.N;
  ELSE NOTE16=.C;
END;
END;
ELSE IF H04048=. AND N16NMISS=0 THEN N16=5;
ELSE IF H04048=.A AND N16NMISS=0 THEN DO;
  H04048=2;
  N16=6;
  DO OVER NOTE16;
    NOTE16=.N;
  END;
END;
END;

DROP N16NMISS N16MARK;

/** Note 17 -- H04049, H04050, H04051 Resolving complaint **/

IF H04049 IN (.N, .C) AND H04050 IN (.N, .C) AND H04051 IN (.N, .C) THEN N17=1;
ELSE IF H04049 IN (1, 2, 3, 4, 5) THEN DO;
  IF H04050=1 THEN DO;
    N17=2;
    IF H04051 NE . THEN H04051= .C;
    ELSE H04051= .N;
  END;
  ELSE IF H04050 IN (2, .N) THEN N17=3;
  ELSE IF H04050 IN (., .A) THEN DO;
    IF H04051 NE . THEN DO;
      H04050= 2;
      N17=4;
    END;
    ELSE DO;
      H04050= 1;
      H04051= .N;
      N17=5;
    END;
  END;
  ELSE IF H04049=6 THEN DO;
    N17=6;
    IF H04050 NE . THEN H04050= .C;
    ELSE H04050= .N;
  END;
  ELSE IF H04049 IN (., .N) THEN N17=7;
  ELSE IF H04049=.A THEN DO;
    N17=8;
  END;
END;

/** NOTE18 -- H04052, H04053: paperwork **/

IF H04052=1 AND H04053 IN (1,2,3,..A) THEN N18=1;
ELSE IF H04052 IN (1,..A) AND H04053=.N THEN DO;
  H04052=2;
  H04053=.C;
  N18=2;
END;
ELSE IF H04052 IN (2,..A) AND H04053 IN (1,2,3,..A) THEN DO;
  H04052=1;
  N18=3;
END;
ELSE IF H04052=2 AND H04053 IN (.N,..) THEN DO;
  IF H04053=. THEN H04053=.N;
  ELSE H04053=.C;
  N18=4;
END;
ELSE IF H04052=. AND H04053=. THEN N18=5;
ELSE IF H04052=.A AND H04053=. THEN DO;
  H04052=2;
  H04053=.N;
  N18=6;
END;

```

```

/** Note 19 -- smoking: H04060 - H04063 **/

ARRAY NOTE19 H04063 H04064 H04065;

IF H04060=1 and H04061 IN (3,4) THEN DO; /* still smoke */
  IF H04062 NE . THEN H04062=.C;
  ELSE H04062=.N;
  N19=1;
END;
ELSE IF H04060=1 AND H04061=2 THEN DO; /* quit */
  /* JMA March 25 2004,
  Updated because H04064 and H04065 have been added to the
  skip pattern */
  IF H04062 IN (2,.D) THEN DO; /* > 1 year ago */
    DO OVER NOTE19;
      IF NOTE19 NE . THEN NOTE19=.C;
      ELSE NOTE19 = .N;
    END;
    N19=2;
  END;
  ELSE IF H04062 IN (3,..A) THEN N19=3; /* < 1 year ago */
END;
ELSE IF H04060=1 AND H04061 IN (.D,..A) THEN DO; /* don't know */
  IF H04062=2 THEN DO; /* > 1 year ago */

  /* JMA March 25 2004,
  Updated because H04064 and H04065 have been added to the
  skip pattern */

  DO OVER NOTE19;
    IF NOTE19 NE . THEN NOTE19=.C;
    ELSE NOTE19 = .N;
  END;
  H04061=2;
  N19=4;
END;
ELSE IF H04062=3 THEN DO; /* < 1 year ago */
  H04061=2;
  N19=5;
END;
ELSE IF H04062 IN (.D,..A) THEN N19=6; /* don't know */
END;
ELSE IF H04060 IN (2,.D,..A) AND H04061 IN (3,4) THEN DO; /*never smoke*/
  H04060=1;

  IF H04062 NE . THEN H04062=.C;
  ELSE H04062=.N;

  N19=7;
END;
ELSE IF H04060 IN (2,.D) AND H04061 IN (2,.D,.A, .) THEN DO; /*never smoke*/
  /* JMA March 25 2004,
  Updated because H04064 and H04065 have been added to the
  skip pattern */

  IF H04061 NE . THEN H04061 =.C;
  ELSE H04061=.N;

  IF H04062 NE . THEN H04062 =.C;
  ELSE H04062=.N;

  DO OVER NOTE19;
    IF NOTE19 NE . THEN NOTE19=.C;
    ELSE NOTE19 = .N;
  END;

  N19=8;
END;
ELSE IF H04060 IN (.A, .) THEN DO;
  IF (H04061 IN (2) AND
  H04062 IN (.,.A) AND

```

```

      (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5))
THEN DO;
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */

  H04060=1;
  H04062=3;
  N19=9;
END;
ELSE IF H04061 IN (2,..A) THEN DO; /*MRE/blank*/
  IF H04062=3 THEN DO;
    IF (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5))
    THEN DO;
      H04060=1;
      N19=10;
    END;
    ELSE N19=11;
  END;
ELSE IF H04062 IN (2, .D) THEN DO;
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */

  DO OVER NOTE19;
    IF NOTE19 NE . THEN NOTE19=.C;
    ELSE NOTE19 = .N;
  END;
  N19=12;
END;
ELSE IF H04062 IN (,..A) THEN DO;
  IF (H04063 IN (1,.N,..A) AND H04064 IN (1,.N,..A) AND H04065 IN (1,.N,..A))
  THEN N19=13;
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */
END;
ELSE IF H04061 IN (., .A) AND H04062 IN (,..A) THEN DO;
  IF (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5))
  THEN DO;
    /* JMA March 25 2004,
       Updated because H04064 and H04065 have been added to the
       skip pattern */

    H04060=1;
    N19=14;
  END;
END;
ELSE IF H04061=.D THEN DO; /*MRE/blank*/
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */

  IF H04062 NE . THEN H04062 =.C;
  ELSE H04062=.N;

  DO OVER NOTE19;
    IF NOTE19 NE . THEN NOTE19=.C;
    ELSE NOTE19 = .N;
  END;

  N19=15;
END;
END;

```

/** Note 20 - gender H04066, SEX, H04067, H04068--H04074, XSEX */

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

```
ARRAY fmaleval H04068 H04069 H04070 H04071 H04072 H04073 H04074;
```

```
IF H04067 > 0 THEN MALE=1;      /* prostate */  
ELSE MALE = 0;
```

```
cntfemale=0;  
DO OVER fmaleval;              /* mammogram/pap smear/PREGNANT*/  
  IF fmaleval>0 THEN cntfemale=cntfemale+1;  
END;  
IF cntfemale>0 THEN FEMALE=1;  
ELSE FEMALE = 0;
```

```
IF H04066=. OR H04066=.A THEN DO;  
  IF (SEX='F' AND MALE AND FEMALE) THEN DO;  
    N20a=1;  
    XSEXa=2;  
  END;  
  ELSE IF (SEX='F' AND MALE=0 AND FEMALE=0) THEN DO;  
    N20a=2;  
    XSEXa=2;  
  END;  
  ELSE IF (SEX='M' AND MALE AND FEMALE) THEN DO;  
    N20a=3;  
    XSEXa=1;  
  END;  
  ELSE IF (SEX='M' AND MALE=0 AND FEMALE=0) THEN DO;  
    N20a=4;  
    XSEXa=1;  
  END;  
  ELSE IF MALE AND NOT FEMALE THEN DO;  
    N20a=5;  
    XSEXa=1;  
  END;  
  ELSE IF FEMALE AND NOT MALE THEN DO;  
    N20a=6;  
    XSEXa=2;  
  END;  
  ELSE IF (SEX='Z' AND MALE AND FEMALE) THEN DO;  
    N20a=7;  
    XSEXa=.;  
  END;  
  ELSE IF (SEX='Z' AND MALE=0 AND FEMALE=0) THEN DO;  
    N20a=8;  
    XSEXa=.;  
  END;  
END;  
ELSE IF (H04066=1) THEN DO;  
  IF MALE AND NOT FEMALE THEN DO;  
    N20a=9;  
    XSEXa=1;  
  END;  
  ELSE IF NOT MALE AND FEMALE THEN DO;  
    IF SEX='F' THEN DO;  
      N20a=10;  
      XSEXa=2;  
    END;  
    ELSE DO;  
      N20a=11;  
      XSEXa=1;  
    END;  
  END;  
  ELSE IF MALE AND FEMALE THEN DO;  
    N20a=12;  
    XSEXa=1;  
  END;  
  ELSE IF MALE=0 AND FEMALE=0 THEN DO;  
    N20a=13;  
    XSEXa=1;  
  END;  
END;  
ELSE IF (H04066=2) THEN DO;  
  IF NOT MALE AND FEMALE THEN DO;
```

```

        N20a=14;
        XSEXa=2;
    END;
ELSE IF MALE AND NOT FMALE THEN DO;
    IF SEX='M' THEN DO;
        N20a=15;
        XSEXa=1;
    END;
ELSE DO;
    N20a=16;
    XSEXa=2;
END;
END;
ELSE IF MALE AND FMALE THEN DO;
    N20a=17;
    XSEXa=2;
END;
ELSE IF MALE=0 AND FMALE=0 THEN DO;
    N20a=18;
    XSEXa=2;
END;
END;

/* Note 20b - gender vs prostate */

IF XSEXa=1 THEN N20b=1; /* male */
ELSE IF XSEXa=2 THEN DO; /* female */
    IF H04067 NE . THEN DO;
        N20b=2;
        H04067=.C;
    END; /*inconsistent resp */
ELSE DO;
    N20b=3;
    H04067=.N;
END; /* valid skip */
END;
ELSE IF XSEXa=. THEN DO; /* missing sex */
    N20b=4;
    H04067=.;
END;

/* Note 20c - gender vs mammogram/paps/pregnancy */
/* REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM, PAP SMEAR ENTRIES and PREGNANCY */

ARRAY NOTE20c H04068 H04069 H04070 H04071 H04072 H04073 H04074 ;

cntfemale=0;
DO OVER NOTE20c; /* mammogram/pap smear/PREGNANT*/
    IF NOTE20c NE . THEN cntfemale=cntfemale+1;
END;
IF cntfemale>0 THEN FMALE=1;
ELSE FMALE = 0;

IF XSEXa=1 THEN DO; /* male */
    IF FMALE=0 THEN DO;
        N20c=1;
        DO OVER NOTE20c;
            NOTE20c=.N;
        END;
    END; /* inconsistent response */
ELSE IF FMALE=1 THEN DO;
    N20c=2;
    DO OVER NOTE20c;
        IF NOTE20c=. THEN NOTE20c = .N;
        ELSE NOTE20c=.C;
    END;
END; /* valid skip */
END;
ELSE IF XSEXa=2 THEN N20c=3; /* female */
ELSE IF XSEXa=. THEN DO; /* missing sex */
    N20c=4;
    DO OVER NOTE20c;
        NOTE20c=.;
    END;
END;

```

```

END;

DROP MALE FEMALE CNTFEMALE;

/* Note 21 - breast exam for female 40 or over */
/* Note 1999 -- no self reported age variable */
/* Note no dob variable -- macro not used */

IF XSEXA=1 THEN DO; /* male */
  IF (H04069=.C OR H04069=.N) AND (H04070=.C OR H04070=.N)
  AND (H04071=.C OR H04071=.N) THEN N21 = 1;
END;
ELSE IF XSEXA=2 THEN DO;
  IF H04069=2 THEN N21=2; /* female 40 or over */
  ELSE IF H04069=1 THEN DO; /* female < 40 */
    IF H04070 NE . THEN H04070=.C;
    ELSE H04070=.N;
    IF H04071 NE . THEN H04071=.C;
    ELSE H04071=.N;
    N21=3;
  END;
  ELSE IF H04069=.A THEN DO;
    IF H04070 NE . OR H04071 NE . THEN DO;
      H04069=2;
      N21=4;
    END;
    ELSE IF H04070=. AND H04071=. THEN DO;
      H04069=1;
      H04070=.N;
      H04071=.N;
      N21=5;
    END;
  END;
  ELSE IF H04069=. THEN DO;
    IF H04070 NE . OR H04071 NE . THEN DO;
      H04069=2;
      N21=6;
    END;
    ELSE IF H04070=. AND H04071=. THEN DO;
      IF AGE<40 THEN DO;
        H04069 = 1;
        H04070=.N;
        H04071=.N;
        N21=7;
      END;
      ELSE IF AGE >= 40 THEN DO;
        H04069=1;
        H04070=.N;
        H04071=.N;
        N21=8;
      END;
      ELSE IF AGE=. THEN N21=9;
    END;
  END;
END;
ELSE IF XSEXA=. THEN N21=10;

/* Note 22 - gender vs Pregnancy */

IF XSEXA=1 THEN N22=1; /* male */
ELSE IF XSEXA=2 THEN DO; /* female */
  IF H04072=1 THEN N22=2; /* pregnant */
  ELSE IF H04072=2 THEN DO;
    IF H04073=. THEN H04073 = .N;
    ELSE H04073=.C;
    N22=3;
  END;
  ELSE IF H04072=3 THEN DO;
    IF H04073=. THEN H04073 = .N;

```

```

        ELSE H04073=.C;
        IF H04074=. THEN H04074=.N;
        ELSE H04074=.C;
        N22=4;
    END;
    ELSE IF H04072 IN (.,.A) THEN DO;
        IF H04073 NE . THEN DO;
            H04072=1;
            N22=5;
        END;
        ELSE IF H04073=. THEN DO;
            IF H04072=. THEN N22=6;
            ELSE IF H04072=.A THEN DO;
                H04072=3;
                H04073=.N;
                IF H04074=. THEN H04074=.N;
                ELSE H04074=.C;
                N22=7;
            END;
        END;
    END;
    ELSE IF XSEXA=. AND H04072 IN (.,.A) THEN N22=8;
END;

NOSURVEY:

/* missing values */

ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
MISS_TOT=0;
DO OVER MISS;
    MISS = 0;
END;
ARRAY MISSARRAY &VARLIST2.;

DO OVER MISSARRAY;
    IF (MISSARRAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
    ELSE IF (MISSARRAY EQ -8) THEN MISS_8 = MISS_8 + 1;
    ELSE IF (MISSARRAY EQ -7) THEN MISS_7 = MISS_7 + 1;
    ELSE IF (MISSARRAY EQ -6) THEN MISS_6 = MISS_6 + 1;
    ELSE IF (MISSARRAY EQ -5) THEN MISS_5 = MISS_5 + 1;
    ELSE IF (MISSARRAY EQ -4) THEN MISS_4 = MISS_4 + 1;
    ELSE IF (MISSARRAY EQ -1) THEN MISS_1 = MISS_1 + 1;
END;
DO OVER MISS;
    MISS_TOT=MISS_TOT + MISS;
END;

*****;

OUTPUT;

RUN;

PROC FORMAT;
    VALUE GRID
        0='0'
        1-9999='>=1' ;
    VALUE $GRIDB
        1-5 = '1-5' ;
    VALUE $AGE
        018-039='<40'
        040-120='>=40';
    VALUE SCALE
        0-10='0-10';
    VALUE MARK
        1-6='Marked' ;
    VALUE MARKB
        2-7='Marked';

```

```
VALUE MARKC  
1='1'  
2-HIGH='>1';
```

```
RUN;
```

```
proc contents data=out.cschm04q;  
run;
```

G.2.B Q2_2004\PROGRAMS\CODINGScheme\CSCHEM04Q.SAS - Implement Coding Scheme and Coding Tables for Quarter 2 CY2004.

```
*****;
* Program: Cschm04q.sas
* Written: 06/04/2001
* Author: C. Rankin
*
* Input: MERGENRC.SD2 - Merged MPR Sampling, DEERS, and NRC Response Data
* Output: CSCHEM04Q.SD2 - 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
*           5/27/2003 - Updated Variable names for Q2 2003
*           12/05/2003 - Updated Variable names for Q4 2003
*           3/25/2004 - Updated Variable names for Q1 2004
*           6/3/2004 - Updated Variable names for Q2 2004
* Purpose: Apply Coding Scheme Specifications to DoD Health Care Survey
*         Response Data, check for consistency in responses and skip
*         patterns
* Include
* files: Cschm04q.fmt
*
*****;
```

```
OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;
```

```
LIBNAME LIBRARY v612 "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN v612 "..\..\DATA\AFINAL";
LIBNAME OUT v612 "..\..\DATA\AFINAL";
```

```
%LET INDATA=MERGENRC;
%LET OUTDATA=CSCHEM04Q;
%LET PERIOD=April, 2003 to March, 2004;
```

```
/* Variable names in survey -- become recoded variables */
```

```
%Let varlist1 =
```

```
H04001 H04002A H04002C H04002F H04002G H04002H H04002I H04002J
H04002K H04002L H04002M H04002N H04002O H04003 H04004 H04005
H04006 H04007 H04008
S04C01 S04C02 S04C03 S04C04
H04009 H04010
H04011 H04012 H04013 H04014
S04C05
H04015 H04016 H04017 H04018 H04019 H04020 H04021
H04022 H04023 H04024 H04025 H04026 H04027 H04028 H04029
H04030 H04031 H04032 H04033 H04034 H04035
H04036 H04037
S04C06 S04C07 S04C08
H04038 H04039
S04C09 S04C10 S04C11 S04C12 S04C13 S04C14
S04V01 S04V02 S04V04 S04V05 S04V06 S04V07
H04040 H04041 H04042 H04043 H04044 H04045
H04046 H04047 H04048 H04049 H04050 H04051 H04052
H04053 H04054
H04055 H04056 H04057 H04058 H04059 H04060
H04061 H04062 H04063 H04064 H04065 H04066 H04067 H04068
H04069 H04070 H04071
H04072 H04073 H04074 H04075 H04076
S04C15 S04C16 S04C17 S04C18
H04077 H04078 H04079
```

```

H04080   H04081   H04082   H04083   H04084
S04C19   S04C20   S04C21   S04C22
SREDA
H04085
SRRACEA  SRRACEB  SRRACEC  SRRACED  SRRACEE  SRAGE
;

/* _O variables are the original values from the survey response */

%Let varlist2 =
H04001_O H04002AO H04002CO H04002FO H04002GO H04002HO H04002IO H04002JO
H04002KO H04002LO H04002MO H04002NO H04002OO H04003_O H04004_O H04005_O
H04006_O H04007_O H04008_O
S04C01_O S04C02_O S04C03_O S04C04_O
H04009_O H04010_O
H04011_O H04012_O H04013_O H04014_O
S04C05_O
H04015_O H04016_O H04017_O H04018_O H04019_O H04020_O H04021_O
H04022_O H04023_O H04024_O H04025_O H04026_O H04027_O H04028_O H04029_O
H04030_O H04031_O H04032_O H04033_O H04034_O H04035_O
H04036_O H04037_O
S04C06_O S04C07_O S04C08_O
H04038_O H04039_O
S04C09_O S04C10_O S04C11_O S04C12_O S04C13_O S04C14_O
S04V01_O S04V02_O S04V04_O S04V05_O S04V06_O S04V07_O
H04040_O H04041_O H04042_O H04043_O H04044_O H04045_O
H04046_O H04047_O H04048_O H04049_O H04050_O H04051_O H04052_O
H04053_O H04054_O
H04055_O H04056_O H04057_O H04058_O H04059_O H04060_O
H04061_O H04062_O H04063_O H04064_O H04065_O H04066_O H04067_O
H04068_O H04069_O H04070_O H04071_O
H04072_O H04073_O H04074_O H04075_O H04076_O
S04C15_O S04C16_O S04C17_O S04C18_O
H04077_O H04078_O
H04079_O H04080_O H04081_O H04082_O H04083_O H04084_O
S04C19_O S04C20_O S04C21_O S04C22_O
SREDA_O
H04085_O
SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O
;

TITLE "DoD 2004 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";

DATA MERGENRC;

    SET IN.MERGENRC;

RUN;

DATA OUT.CSCHM04Q;

    LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
    INFORMAT &VARLIST2. 4.;
    %INCLUDE "CSCHM04Q.FMT";

/* label and format statements for original variables */

    SET MERGENRC;

*****
***** Recodes for invalid responses:*****
*****

/* This is a version of the coding scheme and coding tables for the
2004 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.);
DROP SEX AGE;

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)= -8 THEN RECODE(I)=.A;
    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;
    ELSE RECODE(I)=RECODE(I);
  END;
END;
DROP I;

/* recode selected responses to be 1=marked, 2=unmarked */

ARRAY MARKED(*) H04002A H04002C H04002F H04002G H04002H H04002I H04002J
                H04002K H04002L H04002M H04002N H04002O
                SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
                ;

ARRAY INFORMAT(*) H04002AO H04002CO H04002FO H04002GO H04002HO H04002IO H04002JO
                  H04002KO H04002LO H04002MO H04002NO H04002OO
                  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 H04002A H04002C H04002F H04002G H04002H H04002I H04002J
        H04002K H04002L H04002M H04002N H04002O
        SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
        MARKED.;

*****;

/* skip coding scheme for all surveys not returned */

IF FLAG_FIN NE '1' THEN GOTO NOSURVEY;

/** Note 1 -- H04006, H04007 health plan usage */

IF H04006 > 0 OR H04006 =.D THEN N1=1;
ELSE IF H04006= .N THEN DO;
  IF H04007 NOT=. THEN DO;
    N1=2;
    H04007=.C;
  END;
ELSE DO;
  N1=3;
  H04007=.N;

```

```

        END;
    END;
    ELSE IF H04006=. THEN N1=4;
    ELSE IF H04006=.A THEN DO;
        IF H04007 NOT=. THEN N1=5;
        ELSE DO;
            H04006=.N;
            H04007=.N;
            N1=6;
        END;
    END;
END;

/** Note 2 -- H04008 S04C01-S04C04 H04009 H04010: Personal doctor or nurse **/

ARRAY NOTE2 H04009 H04010 S04C01-S04C04;
ARRAY NOTE2B H04009 S04C01 S04C02 S04C04;
N2NMISS=0;
N2MARK=0;

DO OVER NOTE2;
    IF NOTE2 NOT IN (.) THEN N2NMISS+1 ;
END;

DO OVER NOTE2B;
    IF NOTE2B NOT IN (.,.N) THEN N2MARK+1;
END;

IF S04C03 NOT IN (2, .) THEN N2MARK+1;
IF H04010 NOT IN (2, .) THEN N2MARK+1;

IF H04008 = 1 AND (N2NMISS=0 OR N2MARK>0) THEN DO;
    N2=1;
    DO OVER NOTE2;
        IF NOTE2=.N THEN NOTE2=.;
    END;
END;
ELSE IF H04008 IN (1,.,.A) AND N2NMISS>0 AND N2MARK=0 THEN DO;
    N2=2;
    H04008=2;
    DO OVER NOTE2;
        IF NOTE2=. THEN NOTE2=.N;
        ELSE NOTE2=.C;
    END;
END;
ELSE IF H04008 IN (2,.,.A) AND N2MARK>0 THEN DO;
    H04008=1;
    N2=3;
    DO OVER NOTE2;
        IF NOTE2=.N THEN NOTE2=.;
    END;
END;
ELSE IF H04008=2 AND (N2NMISS=0 OR (N2NMISS>0 AND N2MARK=0)) THEN DO;
    N2=4;
    DO OVER NOTE2;
        IF NOTE2=. THEN NOTE2=.N;
        ELSE NOTE2=.C;
    END;
END;
ELSE IF H04008=. AND N2NMISS=0 THEN N2=5;
ELSE IF H04008=.A AND N2NMISS=0 THEN DO;
    H04008=2;
    N2=6;
    DO OVER NOTE2;
        NOTE2=.N;
    END;
END;

DROP N2NMISS N2MARK;

/** Note 2A -- S04C03,S04C04: ability to work **/

```

```

IF S04C03 IN (.N, .C) AND S04C04 IN (.N,.C) THEN N2A=1;
ELSE IF S04C03=1 AND S04C04 IN (1,2,..A) THEN N2A=2;
ELSE IF S04C03 IN (1,..A) AND S04C04=.N THEN DO;
    S04C03=2;
    S04C04=.C;
    N2A=3;
END;
ELSE IF S04C03 in (2,..A) AND S04C04 IN (1,2,.A) THEN DO;
    S04C03=1;
    N2A=4;
END;
ELSE IF S04C03 =2 AND S04C04 IN (,..N) THEN DO;
    IF S04C04=. THEN S04C04=.N;
    ELSE S04C04=.C;
    N2A=5;
END;
ELSE IF S04C03=. AND S04C04=. THEN N2A=6;
ELSE IF S04C03=.A AND S04C04=. THEN DO;
    S04C03=2;
    S04C04=.N;
    N2A=7;
END;

/** Note3 -- H04010, H04011: Personal doctor or nurse **/

IF H04010 IN (.N, .C) THEN N3=1;
ELSE IF H04010 IN (1,..A) AND (H04011 GT 0 OR H04011 IN(.A)) THEN DO;
    H04010=2;
    N3=2;
END;
ELSE IF H04010=1 AND H04011 IN (.) THEN DO;
    H04011=.N;
    N3=3;
END;
ELSE IF H04010=2 AND H04011 IN (1,2,3,..A) THEN N3=4;
ELSE IF H04010=. AND H04011=. THEN N3=5;
ELSE IF H04010=.A AND H04011=. THEN DO;
    H04010=1;
    H04011=.N;
    N3=6;
END;

/** Note 4 -- H04012, H04013: needed to see a specialist in last 12 months **/

IF H04012=1 AND H04013 IN (1,2,3,..A) THEN N4=1;
ELSE IF H04012 IN (1,..A) AND H04013=.N THEN DO;
    H04012=2;
    H04013=.C;
    N4=2;
END;
ELSE IF H04012 IN (2,..A) AND H04013 IN (1,2,3,.A) THEN DO;
    H04012=1;
    N4=3;
END;
ELSE IF H04012=2 AND H04013 IN (,..N) THEN DO;
    IF H04013=. THEN H04013=.N;
    ELSE H04013=.C;
    N4=4;
END;
ELSE IF H04012=. AND H04013=. THEN N4=5;
ELSE IF H04012=.A AND H04013=. THEN DO;
    H04012=2;
    H04013=.N;
    N4=6;
END;

/** Note 5 -- H04014, S04C05, H04015,H04016: saw a specialist in last 12 months **/

```

```

ARRAY NOTE5 S04C05 H04015 H04016;
N5MARK=0;
N5NMISS=0;

DO OVER NOTE5;
  IF NOTE5 NE . THEN N5NMISS+1;
  IF NOTE5 NOT IN (.N,.) THEN N5MARK+1;
END;

IF H04014=1 AND (N5NMISS=0 OR N5MARK>0) THEN N5=1;
ELSE IF H04014 IN (1,..A) AND N5NMISS>0 AND N5MARK=0 THEN DO;
  H04014=2;
  N5=2;
  DO OVER NOTE5;
    IF NOTE5=. THEN NOTE5=.N;
    ELSE NOTE5=.C;
  END;
END;
ELSE IF H04014 IN (2,..A) AND N5MARK>0 THEN DO;
  H04014=1;
  N5=3;
END;
ELSE IF H04014=2 AND (N5NMISS=0 OR (N5NMISS>0 AND N5MARK=0)) THEN DO;
  N5=4;
  DO OVER NOTE5;
    IF NOTE5=. THEN NOTE5=.N;
    ELSE NOTE5=.C;
  END;
END;
ELSE IF H04014=. AND N5NMISS=0 THEN N5=5;
ELSE IF H04014=.A AND N5NMISS=0 THEN DO;
  H04014=2;
  N5=6;
  DO OVER NOTE5;
    NOTE5=.N;
  END;
END;

DROP N5NMISS N5MARK;

```

/** Note 5A -- S04C05,H04015,H04016: saw a specialist in last 12 months **/

```

ARRAY NOTE5A H04015 H04016;
N5AMARK=0;
N5ANMISS=0;

DO OVER NOTE5A;
  IF NOTE5A NE . THEN N5ANMISS+1;
  IF NOTE5A NOT IN (.N,.) THEN N5AMARK+1;
END;

IF S04C05 IN (.N,.C) AND H04015 IN (.N,.C) AND H04016 IN (.N,.C) THEN N5A=1;
ELSE IF S04C05=.N THEN DO;
  N5A=2;
  DO OVER NOTE5A;
    IF NOTE5A=. THEN NOTE5A=.N;
    ELSE NOTE5A=.C;
  END;
END;
ELSE IF S04C05 IN (,..A) AND N5AMARK>0 THEN N5A=3;
ELSE IF S04C05 IN (1,2,3,4,5,6,..A) AND (N5ANMISS>0 AND N5AMARK=0) THEN DO;
  S04C05=.N;
  N5A=4;
  DO OVER NOTE5A;
    IF NOTE5A=. THEN NOTE5A=.N;
    ELSE NOTE5A=.C;
  END;
END;
ELSE IF S04C05 IN (1,2,3,4,5,6) AND (N5ANMISS=0 OR N5AMARK>0) THEN N5A=5;
ELSE IF S04C05=. AND N5ANMISS=0 THEN N5A=6;
ELSE IF S04C05=.A AND N5ANMISS=0 THEN DO;
  S04C05=.N;

```

```

N5A=7;
DO OVER NOTE5A;
  NOTE5A=.N;
END;
END;

DROP N5ANMISS N5AMARK;

```

```

/** Note 6 -- called a doctor's office: H04017, H04018 **/

```

```

IF H04017=1 AND H04018 IN (1,2,3,4,..A) THEN N6=1;
ELSE IF H04017 IN (1,..A) AND H04018=.N THEN DO;
  H04017=2;
  H04018=.C;
  N6=2;
END;
ELSE IF H04017 IN (2,..A) AND H04018 IN (1,2,3,4,.A) THEN DO;
  H04017=1;
  N6=3;
END;

ELSE IF H04017=2 AND H04018 IN (,..N) THEN DO;
  IF H04018=. THEN H04018=.N;
  ELSE H04018=.C;
  N6=4;
END;
ELSE IF H04017=. AND H04018=. THEN N6=5;
ELSE IF H04017=.A AND H04018=. THEN DO;
  H04017=2;
  N6=6;
  H04018=.N;
END;

```

```

/** Note 7 -- H04019,H04020,H04021: illness or injury **/

```

```

ARRAY NOTE7 H04020 H04021;
N7MARK=0;
N7NMISS=0;

DO OVER NOTE7;
  IF NOTE7 NE . THEN N7NMISS+1;
  IF NOTE7 NOT IN (.N,..) THEN N7MARK+1;
END;

IF H04019=1 AND (N7NMISS=0 OR N7MARK>0) THEN N7=1;
ELSE IF H04019 IN (1,..A) AND N7NMISS>0 AND N7MARK=0 THEN DO;
  H04019=2;
  N7=2;
  DO OVER NOTE7;
    IF NOTE7=. THEN NOTE7=.N;
    ELSE NOTE7=.C;
  END;
END;
ELSE IF H04019 IN (2,..A) AND N7MARK>0 THEN DO;
  H04019=1;
  N7=3;
END;
ELSE IF H04019=2 AND (N7NMISS=0 OR (N7NMISS>0 AND N7MARK=0)) THEN DO;
  N7=4;
  DO OVER NOTE7;
    IF NOTE7=. THEN NOTE7=.N;
    ELSE NOTE7=.C;
  END;
END;
ELSE IF H04019=. AND N7NMISS=0 THEN N7=5;
ELSE IF H04019=.A AND N7NMISS=0 THEN DO;
  H04019=2;
  N7=6;
  DO OVER NOTE7;
    NOTE7=.N;
  END;
END;

```

```

        END;
    END;

    DROP N7NMISS N7MARK;

/** Note 8 -- H04022,H04023,H04024: regular or routine healthcare **/

    ARRAY NOTE8 H04023 H04024;
    N8MARK=0;
    N8NMISS=0;

    DO OVER NOTE8;
        IF NOTE8 NE . THEN N8NMISS+1;
        IF NOTE8 NOT IN (.N,.) THEN N8MARK+1;
    END;

    IF H04022=1 AND (N8NMISS=0 OR N8MARK>0) THEN N8=1;
    ELSE IF H04022 IN (1,..,A) AND N8NMISS>0 AND N8MARK=0 THEN DO;
        H04022=2;
        N8=2;
        DO OVER NOTE8;
            IF NOTE8=. THEN NOTE8=.N;
            ELSE NOTE8=.C;
        END;
    END;
    ELSE IF H04022 IN (2,..,A) AND N8MARK>0 THEN DO;
        H04022=1;
        N8=3;
    END;
    ELSE IF H04022=2 AND (N8NMISS=0 OR (N8NMISS>0 AND N8MARK=0)) THEN DO;
        N8=4;
        DO OVER NOTE8;
            IF NOTE8=. THEN NOTE8=.N;
            ELSE NOTE8=.C;
        END;
    END;
    ELSE IF H04022=. AND N8NMISS=0 THEN N8=5;
    ELSE IF H04022=.A AND N8NMISS=0 THEN DO;
        H04022=2;
        N8=6;
        DO OVER NOTE8;
            NOTE8=.N;
        END;
    END;

    DROP N8NMISS N8MARK;

/** Note 9 -- H04026, H04027-H04037 S04C06-S04C08 H04038: doctor's office or clinic **/

    ARRAY NOTE9 H04027-H04037 S04C06-S04C08 H04038;

    N9MARK=0;
    N9NMISS=0;

    DO OVER NOTE9;
        IF NOTE9 NE . THEN N9NMISS+1;
        IF NOTE9 NOT IN (.N,.) THEN N9MARK+1;
    END;

    IF H04026=1 THEN DO;
        N9=1;
        DO OVER NOTE9;
            IF NOTE9=. THEN NOTE9=.N;
            ELSE NOTE9=.C;
        END;
    END;
    ELSE IF H04026 IN (2,3,4,5,6,7,..,A) AND N9NMISS>0 AND N9MARK=0 THEN DO;
        H04026=1;
        N9=2;
        DO OVER NOTE9;

```

```

        IF NOTE9=. THEN NOTE9=.N;
        ELSE NOTE9=.C;
    END;
END;
ELSE IF H04026 IN (2,3,4,5,6,7) AND (N9NMISS=0 OR N9MARK>0) THEN N9=3;
ELSE IF H04026=. AND N9NMISS=0 THEN N9=4;
ELSE IF H04026=.A AND N9NMISS=0 THEN DO;
    H04026=1;
    N9=5;
    DO OVER NOTE9;
        NOTE9=.N;
    END;
END;
ELSE IF H04026 IN (.,.A) AND N9MARK>0 THEN N9=6;

DROP N9NMISS N9MARK;

/** Note 10 -- You or doctor believed you needed care, tests or treatment:
    H04027, H04028 **/

IF H04027 IN (.N, .C) THEN N10=1;
ELSE IF H04027=1 AND H04028 IN (1,2,3,..A) THEN N10=2;
ELSE IF H04027 IN (1,..A) AND H04028=.N THEN DO;
    H04027=2;
    H04028=.C;
    N10=3;
END;
ELSE IF H04027 IN (2,..A) AND H04028 IN (1,2,3,.A) THEN DO;
    H04027=1;
    N10=4;
END;
ELSE IF H04027=2 AND H04028 IN (.,.N) THEN DO;
    IF H04028=. THEN H04028=.N;
    ELSE H04028=.C;
    N10=5;
END;
ELSE IF H04027=. AND H04028=. THEN N10=6;
ELSE IF H04027=.A AND H04028=. THEN DO;
    H04027=2;
    N10=7;
    H04028=.N;
END;

/** Note 11 -- Needed approval from healthplan for care, tests or treatment:
    H04029, H04030 **/

IF H04029 IN (.N, .C) THEN N11=1;
ELSE IF H04029=1 AND H04030 IN (1,2,3,..A) THEN N11=2;
ELSE IF H04029 IN (1,..A) AND H04030=.N THEN DO;
    H04029=2;
    H04030=.C;
    N11=3;
END;
ELSE IF H04029 IN (2,..A) AND H04030 IN (1,2,3,.A) THEN DO;
    H04029=1;
    N11=4;
END;
ELSE IF H04029=2 AND H04030 IN (.,.N) THEN DO;
    IF H04030=. THEN H04030=.N;
    ELSE H04030=.C;
    N11=5;
END;
ELSE IF H04029=. AND H04030=. THEN N11=6;
ELSE IF H04029=.A AND H04030=. THEN DO;
    H04029=2;
    N11=7;
    H04030=.N;
END;

```

```
/** Note 11a -- S04C06,S04C07,S04C08: decisions about healthcare **/
```

```
ARRAY NOTE11a S04C07 S04C08;
N11aMARK=0;
N11aNMISS=0;

DO OVER NOTE11a;
  IF NOTE11a NE . THEN N11aNMISS+1;
  IF NOTE11a NOT IN (.N,.) THEN N11aMARK+1;
END;

IF S04C06 IN (.N,.C) THEN N11a=1;
ELSE IF S04C06=1 AND (N11aNMISS=0 OR N11aMARK>0) THEN N11a=2;
ELSE IF S04C06 IN (1,..A) AND N11aNMISS>0 AND N11aMARK=0 THEN DO;
  S04C06=2;
  N11a=3;
  DO OVER NOTE11a;
    IF NOTE11a=. THEN NOTE11a=.N;
    ELSE NOTE11a=.C;
  END;
END;
ELSE IF S04C06 IN (2,..A) AND N11aMARK>0 THEN DO;
  S04C06=1;
  N11a=4;
END;
ELSE IF S04C06=2 AND (N11aNMISS=0 OR (N11aNMISS>0 AND N11aMARK=0)) THEN DO;
  N11a=5;
  DO OVER NOTE11a;
    IF NOTE11a=. THEN NOTE11a=.N;
    ELSE NOTE11a=.C;
  END;
END;
ELSE IF S04C06=. AND N11aNMISS=0 THEN N11a=6;
ELSE IF S04C06=.A AND N11aNMISS=0 THEN DO;
  S04C06=2;
  N11a=7;
  DO OVER NOTE11a;
    NOTE11a=.N;
  END;
END;

DROP N11aNMISS N11aMARK;
```

```
/** Note11b -- S04C09, S04C10: special medical equipment **/
```

```
IF S04C09=1 AND S04C10 IN (1,2,3,..A) THEN n11b=1;
ELSE IF S04C09 IN (1,..A) AND S04C10=.N THEN DO;
  S04C09=2;
  S04C10=.C;
  n11b=2;
END;
ELSE IF S04C09 IN (2,..A) AND S04C10 in (1, 2, 3, .A) THEN DO;
  S04C09=1;
  n11b=3;
END;
ELSE IF S04C09=2 AND S04C10 IN (.N,.) THEN DO;
  IF S04C10=. THEN S04C10=.N;
  ELSE S04C10=.C;
  n11b=4;
END;
ELSE IF S04C09=. AND S04C10=. THEN n11b=5;
ELSE IF S04C09=.A AND S04C10=. THEN DO;
  S04C09=2;
  S04C10=.N;
  n11b=6;
END;
```

```
/** Note11c -- S04C11, S04C12: special therapy **/
```

```
IF S04C11=1 AND S04C12 IN (1,2,3,..A) THEN n11c=1;
ELSE IF S04C11 IN (1,..A) AND S04C12=.N THEN DO;
```

```

        S04C11=2;
        S04C12=.C;
        n11c=2;
    END;
    ELSE IF S04C11 IN (2,..A) AND S04C12 IN (1,2,3,..A) THEN DO;
        S04C11=1;
        n11c=3;
    END;
    ELSE IF S04C11=2 AND S04C12 IN (.N,..) THEN DO;
        IF S04C12=. THEN S04C12=.N;
        ELSE S04C12=.C;
        n11c=4;
    END;
    ELSE IF S04C11=. AND S04C12=. THEN n11c=5;
    ELSE IF S04C11=.A AND S04C12=. THEN DO;
        S04C11=2;
        S04C12=.N;
        n11c=6;
    END;

/** Note11d -- S04C13, S04C14: home health care or assistance **/

    IF S04C13=1 AND S04C14 IN (1,2,3,..A) THEN n11d=1;
    ELSE IF S04C13 IN (1,..A) AND S04C14=.N THEN DO;
        S04C13=2;
        S04C14=.C;
        n11d=2;
    END;
    ELSE IF S04C13 IN (2,..A) AND S04C14 IN (1,2,3, .A) THEN DO;
        S04C13=1;
        n11d=3;
    END;
    ELSE IF S04C13=2 AND S04C14 IN (.,.N) THEN DO;
        IF S04C14=. THEN S04C14=.N;
        ELSE S04C14=.C;
        n11d=4;
    END;
    ELSE IF S04C13=. AND S04C14=. THEN n11d=5;
    ELSE IF S04C13=.A AND S04C14=. THEN DO;
        S04C13=2;
        S04C14=.N;
        n11d=6;
    END;

/** Note 12 -- S04V01, S04V02 S04V04-S04V07: health care received from TRICARE civilian network **/

    ARRAY NOTE12 S04V02 S04V04-S04V07;
    N12MARK=0;
    N12NMISS=0;

    DO OVER NOTE12;
        IF NOTE12 NE . THEN N12NMISS+1;
        IF NOTE12 NOT IN (.N,..) THEN N12MARK+1;
    END;

    IF S04V01 IN (1,2,3,4) AND (N12NMISS=0 OR N12MARK>0) THEN N12=1;
    ELSE IF S04V01 IN (1,2,3,..A) AND N12NMISS>0 AND N12MARK=0 THEN DO;
        N12=2;
        S04V01=.N;
        DO OVER NOTE12;
            IF NOTE12=. THEN NOTE12=.N;
            ELSE NOTE12=.C;
        END;
    END;
    ELSE IF S04V01=4 AND N12NMISS>0 AND N12MARK=0 THEN DO;
        N12=3;
    END;
    ELSE IF S04V01=.N
    THEN DO;
        N12=4;

```

```

DO OVER NOTE12;
  IF NOTE12=. THEN NOTE12=.N;
  ELSE NOTE12=.C;
END;
END;
ELSE IF S04V01=. AND N12NMISS=0 THEN N12=5;
ELSE IF S04V01=.A AND N12NMISS=0 THEN DO;
  S04V01=.N;
  N12=6;
  DO OVER NOTE12;
    NOTE12=.N;
  END;
END;
ELSE IF S04V01 IN (.,.A) AND N12MARK>0 THEN N12=7;

DROP N12NMISS N12MARK;

/** Note 13 -- H04040, H04041-H04043: claims to health plan **/

  ARRAY NOTE13 H04041-H04043;
N13MARK=0;
N13NMISS=0;
N13NDK=0;

DO OVER NOTE13;
  IF NOTE13 NE . THEN N13NMISS+1;
  IF NOTE13 NOT IN (.N,.) THEN N13MARK+1;
  IF NOTE13 NOT IN (.,.D) THEN N13NDK+1;
END;

IF H04040=1 AND
  (N13NMISS=0 OR (N13MARK>0 and N13NDK>0) or (N13NMISS>0 AND N13NDK=0))
THEN N13=1;
ELSE IF H04040 IN (1,.,.A,.D) AND N13NMISS>0 AND N13MARK=0 THEN DO;
  N13=2;
  H04040=2;
  DO OVER NOTE13;
    IF NOTE13=. THEN NOTE13=.N;
    ELSE NOTE13=.C;
  END;
END;
ELSE IF H04040 IN (2,.,.A,.D) AND
  ((N13MARK>0 AND N13NDK>0) OR (N13NMISS>0 AND N13NDK=0))
  THEN DO;
  H04040=1;
  N13=3;
END;
ELSE IF H04040 IN (2) AND (N13NMISS=0 OR (N13NMISS>0 AND N13MARK=0)) THEN DO;
  N13=4;
  DO OVER NOTE13;
    IF NOTE13=. THEN NOTE13=.N;
    ELSE NOTE13=.C;
  END;
END;
ELSE IF H04040 IN (.,.D) AND N13NMISS=0 THEN N13=5;
ELSE IF H04040=.A AND N13NMISS=0 THEN DO;
  H04040=2;
  N13=6;
  DO OVER NOTE13;
    NOTE13=.N;
  END;
END;

DROP N13NMISS N13MARK N13NDK;

/** NOTE14 -- H04044, H04045: **/

IF H04044=1 AND H04045 IN (1,2,3,.,.A) THEN N14=1;
ELSE IF H04044 IN (1,.,.A) AND H04045=.N THEN DO;

```

```

H04044=2;
H04045=.C;
N14=2;
END;
ELSE IF H04044 IN (2,..A) AND H04045 IN (1,2,3,..A) THEN DO; /* JMA per Daisy's suggestion
3/20/03 */
H04044=1;
N14=3;
END;
ELSE IF H04044=2 AND H04045 IN (.N,..) THEN DO;
IF H04045=. THEN H04045=.N;
ELSE H04045=.C;
N14=4;
END;
ELSE IF H04044=. AND H04045=. THEN N14=5;
ELSE IF H04044=.A AND H04045=. THEN DO;
H04044=2;
H04045=.N;
N14=6;
END;

```

/** NOTE15 -- H04046, H04047: health plan's customer service **/

```

IF H04046=1 AND H04047 IN (1,2,3,..A) THEN N15=1;
ELSE IF H04046 IN (1,..A) AND H04047=.N THEN DO;
H04046=2;
H04047=.C;
N15=2;
END;
ELSE IF H04046 IN (2,..A) AND H04047 IN (1,2,3,..A) THEN DO; /* JMA per Daisy's suggestion
3/20/03 */
H04046=1;
N15=3;
END;
ELSE IF H04046=2 AND H04047 IN (.N,..) THEN DO;
IF H04047=. THEN H04047=.N;
ELSE H04047=.C;
N15=4;
END;
ELSE IF H04046=. AND H04047=. THEN N15=5;
ELSE IF H04046=.A AND H04047=. THEN DO;
H04046=2;
H04047=.N;
N15=6;
END;

```

/** Note 16 -- H04048, H04049, H04050, H04051: complaint or problem **/

```

ARRAY NOTE16 H04049-H04051;
N16MARK=0;
N16NMISS=0;

DO OVER NOTE16;
IF NOTE16 NE . THEN N16NMISS+1;
IF NOTE16 NOT IN (.N,..) THEN N16MARK+1;
END;

IF H04048=1 AND (N16NMISS=0 OR N16MARK>0) THEN N16=1;
ELSE IF H04048 IN (1,..A) AND N16NMISS>0 AND N16MARK=0 THEN DO;
H04048=2;
N16=2;
DO OVER NOTE16;
IF NOTE16=. THEN NOTE16=.N;
ELSE NOTE16=.C;
END;
END;
ELSE IF H04048 IN (2,..A) AND N16MARK>0 THEN DO;
H04048=1;
N16=3;
END;
ELSE IF H04048=2 AND (N16NMISS=0 OR (N16NMISS>0 AND N16MARK=0)) THEN DO;

```

```

N16=4;
DO OVER NOTE16;
  IF NOTE16=. THEN NOTE16=.N;
  ELSE NOTE16=.C;
END;
END;
ELSE IF H04048=. AND N16NMISS=0 THEN N16=5;
ELSE IF H04048=.A AND N16NMISS=0 THEN DO;
  H04048=2;
  N16=6;
  DO OVER NOTE16;
    NOTE16=.N;
  END;
END;

DROP N16NMISS N16MARK;

/** Note 17 -- H04049, H04050, H04051 Resolving complaint **/

IF H04049 IN (.N, .C) AND H04050 IN (.N, .C) AND H04051 IN (.N, .C) THEN N17=1;
ELSE IF H04049 IN (1, 2, 3, 4, 5) THEN DO;
  IF H04050=1 THEN DO;
    N17=2;
    IF H04051 NE . THEN H04051= .C;
    ELSE H04051= .N;
  END;
  ELSE IF H04050 IN (2, .N) THEN N17=3;
  ELSE IF H04050 IN (., .A) THEN DO;
    IF H04051 NE . THEN DO;
      H04050= 2;
      N17=4;
    END;
    ELSE DO;
      H04050= 1;
      H04051= .N;
      N17=5;
    END;
  END;
END;
ELSE IF H04049=6 THEN DO;
  N17=6;
  IF H04050 NE . THEN H04050= .C;
  ELSE H04050= .N;
END;
ELSE IF H04049 IN (., .N) THEN N17=7;
ELSE IF H04049=.A THEN N17=8;

/** NOTE18 -- H04052, H04053: paperwork **/

IF H04052=1 AND H04053 IN (1,2,3,..,A) THEN N18=1;
ELSE IF H04052 IN (1,..,A) AND H04053=.N THEN DO;
  H04052=2;
  H04053=.C;
  N18=2;
END;
ELSE IF H04052 IN (2,..,A) AND H04053 IN (1,2,3,..,A) THEN DO;
  H04052=1;
  N18=3;
END;
ELSE IF H04052=2 AND H04053 IN (.N,..) THEN DO;
  IF H04053=. THEN H04053=.N;
  ELSE H04053=.C;
  N18=4;
END;
ELSE IF H04052=. AND H04053=. THEN N18=5;
ELSE IF H04052=.A AND H04053=. THEN DO;
  H04052=2;
  H04053=.N;
  N18=6;
END;

```

```

/** Note 19 -- smoking: H04060 - H04063 **/

ARRAY NOTE19 H04063 H04064 H04065;

IF H04060=1 and H04061 IN (3,4) THEN DO; /* still smoke */
  IF H04062 NE . THEN H04062=.C;
  ELSE H04062=.N;
  N19=1;
END;
ELSE IF H04060=1 AND H04061=2 THEN DO; /* quit */
  /* JMA March 25 2004,
  Updated because H04064 and H04065 have been added to the
  skip pattern */
  IF H04062 IN (2,.D) THEN DO; /* > 1 year ago */
    DO OVER NOTE19;
      NOTE19=.C; /* Should be skipped */
    END;
    N19=2;
  END;
  ELSE IF H04062 IN (3,..A) THEN N19=3; /* < 1 year ago */
END;
ELSE IF H04060=1 AND H04061 IN (.D,..A) THEN DO; /* don't know */
  IF H04062=2 THEN DO; /* > 1 year ago */

  /* JMA March 25 2004,
  Updated because H04064 and H04065 have been added to the
  skip pattern */

  DO OVER NOTE19;
    NOTE19=.C; /* Should be skipped */
  END;
  H04061=2;
  N19=4;
END;
ELSE IF H04062=3 THEN DO; /* < 1 year ago */
  H04061=2;
  N19=5;
END;
ELSE IF H04062 IN (.D,..A) THEN N19=6; /* don't know */
END;
ELSE IF H04060 IN (2,.D,..A) AND H04061 IN (3,4) THEN DO; /*never smoke*/
  H04060=1;

  IF H04062 NE . THEN H04062=.C;
  ELSE H04062=.N;

  N19=7;
END;
ELSE IF H04060 IN (2,.D) AND H04061 IN (2,.D,.A, .) THEN DO; /*never smoke*/
  /* JMA March 25 2004,
  Updated because H04064 and H04065 have been added to the
  skip pattern */

  IF H04061 NE . THEN H04061 =.C;
  ELSE H04061=.N;

  IF H04062 NE . THEN H04062 =.C;
  ELSE H04062=.N;

  DO OVER NOTE19;
    NOTE19=.C; /* Should be skipped */
  END;

  N19=8;
END;
ELSE IF H04060 IN (.A, .) THEN DO;
  IF (H04061 IN (2) AND
    H04062 IN (,..A) AND
    (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5)))
  THEN DO;
    /* JMA March 25 2004,
    Updated because H04064 and H04065 have been added to the
    skip pattern */

```

```

H04060=1;
H04062=3;
N19=9;
END;
ELSE IF H04061 IN (2,..A) THEN DO; /*MRE/blank*/
  IF H04062=3 THEN DO;
    IF (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5))
    THEN DO;
      H04060=1;
      N19=10;
    END;
    ELSE N19=11;
  END;
ELSE IF H04062 IN (2, .D) THEN DO;
  /* JMA March 25 2004,
  Updated because H04064 and H04065 have been added to the
  skip pattern */

  DO OVER NOTE19;
    NOTE19=.C; /* Should be skipped */
  END;
  N19=12;
END;
ELSE IF H04062 IN (,..A) THEN DO;
  IF (H04063 IN (1,.N,..A) AND H04064 IN (1,.N,..A) AND H04065 IN (1,.N,..A))
  THEN N19=13;
  /* JMA March 25 2004,
  Updated because H04064 and H04065 have been added to the
  skip pattern */
  ELSE IF (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5))
  THEN DO;
    H04060=1;
    N19=14;
  END;
END;
END;
ELSE IF H04061=.D THEN DO; /*MRE/blank*/
  /* JMA March 25 2004,
  Updated because H04064 and H04065 have been added to the
  skip pattern */

  IF H04062 NE . THEN H04062 =.C;
  ELSE H04062=.N;

  DO OVER NOTE19;
    NOTE19=.C; /* Should be skipped */
  END;

  N19=15;
END;
END;

/** Note 20 - gender H04066, SEX, H04067, H04068--H04074, XSEX */

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

ARRAY fmaleval H04068 H04069 H04070 H04071 H04072 H04073 H04074;

IF H04067 > 0 THEN MALE=1; /* prostate */
ELSE MALE = 0;

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

```

```

IF H04066=. OR H04066=.A THEN DO;
  IF (SEX='F' AND MALE AND FMALE) THEN DO;
    N20a=1;
    XSEXa=2;
  END;
  ELSE IF (SEX='F' AND MALE=0 AND FMALE=0) THEN DO;
    N20a=2;
    XSEXa=2;
  END;
  ELSE IF (SEX='M' AND MALE AND FMALE) THEN DO;
    N20a=3;
    XSEXa=1;
  END;
  ELSE IF (SEX='M' AND MALE=0 AND FMALE=0) THEN DO;
    N20a=4;
    XSEXa=1;
  END;
  ELSE IF MALE AND NOT FMALE THEN DO;
    N20a=5;
    XSEXa=1;
  END;
  ELSE IF FMALE AND NOT MALE THEN DO;
    N20a=6;
    XSEXa=2;
  END;
  ELSE IF (SEX='Z' AND MALE AND FMALE) THEN DO;
    N20a=7;
    XSEXa=.;
  END;
  ELSE IF (SEX='Z' AND MALE=0 AND FMALE=0) THEN DO;
    N20a=8;
    XSEXa=.;
  END;
END;
ELSE IF (H04066=1) THEN DO;
  IF MALE AND NOT FMALE THEN DO;
    N20a=9;
    XSEXa=1;
  END;
  ELSE IF NOT MALE AND FMALE THEN DO;
    IF SEX='F' THEN DO;
      N20a=10;
      XSEXa=2;
    END;
    ELSE DO;
      N20a=11;
      XSEXa=1;
    END;
  END;
  ELSE IF MALE AND FMALE THEN DO;
    N20a=12;
    XSEXa=1;
  END;
  ELSE IF MALE=0 AND FMALE=0 THEN DO;
    N20a=13;
    XSEXa=1;
  END;
END;
ELSE IF (H04066=2) THEN DO;
  IF NOT MALE AND FMALE THEN DO;
    N20a=14;
    XSEXa=2;
  END;
  ELSE IF MALE AND NOT FMALE THEN DO;
    IF SEX='M' THEN DO;
      N20a=15;
      XSEXa=1;
    END;
    ELSE DO;
      N20a=16;
      XSEXa=2;
    END;
  END;
END;

```

```

ELSE IF MALE AND FMALE THEN DO;
  N20a=17;
  XSEXA=2;
END;
ELSE IF MALE=0 AND FMALE=0 THEN DO;
  N20a=18;
  XSEXA=2;
END;
END;

/* Note 20b - gender vs prostate */

IF XSEXA=1 THEN N20b=1; /* male */
ELSE IF XSEXA=2 THEN DO; /* female */
  IF H04067 NE . THEN DO;
    N20b=2;
    H04067=.C;
  END; /*inconsistent resp */
  ELSE DO;
    N20b=3;
    H04067=.N;
  END; /* valid skip */
END;
ELSE IF XSEXA=. THEN DO; /* missing sex */
  N20b=4;
  H04067=.;
END;

/* Note 20c - gender vs mammogram/paps/pregnancy */
/* REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM, PAP SMEAR ENTRIES and PREGNANCY */

ARRAY NOTE20c H04068 H04069 H04070 H04071 H04072 H04073 H04074 ;

cntfemale=0;
DO OVER NOTE20c; /* mammogram/pap smear/PREGNANT*/
  IF NOTE20c NE . THEN cntfemale=cntfemale+1;
END;
IF cntfemale>0 THEN FMALE=1;
ELSE FMALE = 0;

IF XSEXA=1 THEN DO; /* male */
  IF FMALE=0 THEN DO;
    N20c=1;
    DO OVER NOTE20c;
      NOTE20c=.N;
    END;
  END; /* valid skip */
  ELSE IF FMALE=1 THEN DO;
    N20c=2;
    DO OVER NOTE20c;
      IF NOTE20c=. THEN NOTE20c = .N;
      ELSE NOTE20c=.C;
    END;
  END; /* inconsistent response */
END;
ELSE IF XSEXA=2 THEN N20c=3; /* female */
ELSE IF XSEXA=. THEN DO; /* missing sex */
  N20c=4;
  DO OVER NOTE20c;
    NOTE20c=.;
  END;
END;

DROP MALE FMALE CNTFEMALE;

/* Note 21 - breast exam for female 40 or over */

IF XSEXA=1 THEN DO; /* male */
  IF (H04069=.C OR H04069=.N) AND (H04070=.C OR H04070=.N)
  AND (H04071=.C OR H04071=.N) THEN N21 = 1;
END;

```

```

ELSE IF XSEXA=2 THEN DO;
  IF H04069=2 THEN N21=2;          /* female 40 or over */
  ELSE IF H04069=1 THEN DO;       /* female < 40 */
    IF H04070 NE . THEN H04070=.C;
    ELSE H04070=.N;
    IF H04071 NE . THEN H04071=.C;
    ELSE H04071=.N;
    N21=3;
  END;
  ELSE IF H04069=.A THEN DO;
    IF H04070 NE . OR H04071 NE . THEN DO;
      H04069=2;
      N21=4;
    END;
    ELSE IF H04070=. AND H04071=. THEN DO;
      H04069=1;
      H04070=.N;
      H04071=.N;
      N21=5;
    END;
  END;
  ELSE IF H04069=. THEN DO;
    IF H04070 NE . OR H04071 NE . THEN DO;
      H04069=2;
      N21=6;
    END;
    ELSE IF H04070=. AND H04071=. THEN DO;
      IF AGE<40 THEN DO;
        H04069 = 1;
        H04070=.N;
        H04071=.N;
        N21=7;
      END;
      ELSE IF AGE >= 40 THEN DO;
        H04069=1;
        H04070=.N;
        H04071=.N;
        N21=8;
      END;
      ELSE IF AGE=. THEN N21=9;
    END;
  END;
END;
ELSE IF XSEXA=. THEN N21=10;

```

/* Note 22 - gender vs Pregnancy */

```

IF XSEXA=1 THEN N22=1;           /* male */
ELSE IF XSEXA=2 THEN DO;       /* female */
  IF H04072=1 THEN N22=2;      /* pregnant */
  ELSE IF H04072=2 THEN DO;
    IF H04073=. THEN H04073 = .N;
    ELSE H04073=.C;
    N22=3;
  END;
  ELSE IF H04072=3 THEN DO;
    IF H04073=. THEN H04073 = .N;
    ELSE H04073=.C;
    IF H04074=. THEN H04074=.N;
    ELSE H04074=.C;
    N22=4;
  END;
  ELSE IF H04072 IN (., .A) THEN DO;
    IF H04073 NE . THEN DO;
      H04072=1;
      N22=5;
    END;
    ELSE IF H04073=. THEN DO;
      IF H04072=. THEN N22=6;
      ELSE IF H04072=.A THEN DO;
        H04072=3;
        H04073=.N;
      END;
    END;
  END;

```

```

                IF H04074=. THEN H04074=.N;
                ELSE H04074=.C;
                N22=7;
            END;
        END;
    END;
END;
ELSE IF XSEXA=. AND H04072 IN (.,.A) THEN N22=8;

/** Note 23 -- S04C20,S04C21,S04C22: Physical/Mental Conditions **/

ARRAY NOTE23 S04C21 S04C22;
N23MARK=0;
N23NMISS=0;

DO OVER NOTE23;
    IF NOTE23 NE . THEN N23NMISS+1;
    IF NOTE23 NOT IN (.N,.) THEN N23MARK+1;
END;

IF S04C20=1 AND (N23NMISS=0 OR N23MARK>0) THEN N23=1;
ELSE IF S04C20 IN (1,.,.A) AND N23NMISS>0 AND N23MARK=0 THEN DO;
    S04C20=2;
    N23=2;
    DO OVER NOTE23;
        IF NOTE23=. THEN NOTE23=.N;
        ELSE NOTE23=.C;
    END;
END;
ELSE IF S04C20 IN (2,.,.A) AND N23MARK>0 THEN DO;
    S04C20=1;
    N23=3;
END;
ELSE IF S04C20=2 AND (N23NMISS=0 OR (N23NMISS>0 AND N23MARK=0)) THEN DO;
    N23=4;
    DO OVER NOTE23;
        IF NOTE23=. THEN NOTE23=.N;
        ELSE NOTE23=.C;
    END;
END;
ELSE IF S04C20=. AND N23NMISS=0 THEN N23=5;
ELSE IF S04C20=.A AND N23NMISS=0 THEN DO;
    S04C20=2;
    N23=6;
    DO OVER NOTE23;
        NOTE23=.N;
    END;
END;

DROP N23NMISS N23MARK;

NOSURVEY:

/* missing values */

ARRAY MISS MISS_9 MISS_8 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 -8) THEN MISS_8 = MISS_8 + 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 FORMAT;
VALUE GRID
0='0'
1-9999='>=1' ;
VALUE $GRIDB
1-5 = '1-5' ;
VALUE $AGE
018-039='<40'
040-120='>=40';
VALUE SCALE
0-10='0-10';
VALUE MARK
1-6='Marked' ;
VALUE MARKB
2-7='Marked';

VALUE MARKC
1='1'
2-HIGH='>1';
```

```
RUN;
```

```
proc contents data=out.cschm04q;
run;
```

G.2.C Q3_2004\PROGRAMS\CODINGScheme\CSCHEM04Q.SAS - Implement Coding Scheme and Coding Tables for Quarter 3 CY2004.

```
*****;
* Program: Cschm04q.sas
* Written: 06/04/2001
* Author: C. Rankin
*
* Input: MERGENRC.SD2 - Merged MPR Sampling, DEERS, and NRC Response Data
* Output: CSCHEM04Q.SD2 - 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
*           5/27/2003 - Updated Variable names for Q2 2003
*           12/05/2003 - Updated Variable names for Q4 2003
*           3/25/2004 - Updated Variable names for Q1 2004
*           6/3/2004 - Updated Variable names for Q2 2004
*           8/23/2004 - Updated Variable names for Q3 2004
* Purpose: Apply Coding Scheme Specifications to DoD Health Care Survey
*           Response Data, check for consistency in responses and skip
*           patterns
* Include
* files: Cschm04q.fmt
*****;
```

```
OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;
```

```
LIBNAME LIBRARY v612 "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN v612 "..\..\DATA\AFINAL";
LIBNAME OUT v612 "..\..\DATA\AFINAL";
```

```
%LET INDATA=MERGENRC;
%LET OUTDATA=CSCHEM04Q;
%LET PERIOD=July, 2003 to June, 2004;
```

```
/* Variable names in survey -- become recoded variables */
```

```
%Let varlist1 =
```

```
H04001 H04002A H04002C H04002F H04002G H04002H H04002I H04002J
H04002K H04002L H04002M H04002N H04002O H04003 H04004 H04005
H04006 H04007 H04008 H04009 H04010 H04011 H04012 H04013
H04014 H04015 H04016 H04017 H04018 H04019 H04020 H04021
H04022 H04023 H04024 H04025 H04026 H04027 H04028 H04029
H04030 H04031 H04032 H04033 H04034 H04035 H04036 H04037
H04038 H04039
S04R01 S04R02 S04R03 S04R04A S04R04B S04R04C S04R04D S04R04E
S04R05 S04R06 S04R07 S04R08 S04R09 S04R10 S04R11 S04R12
S04R13 S04R14 S04R15
S04V01 S04V02 S04V03 S04V04 S04V05 S04V06 S04V07
H04040 H04041 H04042 H04043 H04044 H04045 H04046 H04047
H04048 H04049 H04050 H04051 H04052 H04053 H04054 H04055
H04056 H04057 H04058 H04059 H04060 H04061 H04062 H04063
H04064 H04065 H04066 H04067 H04068 H04069 H04070 H04071
H04072 H04073 H04074 H04075
```

```
SRHGTF SRHGTI SRWGT
```

```
H04076 H04077 H04078 H04079 H04080 H04081 H04082 H04083
H04084
SREDA
```

```

H04085
SRRACEA SRRACEB SRRACEC SRRACED SRRACEE SRAGE
;

/* _O variables are the original values from the survey response */

%Let varlist2 =
H04001_O H04002AO H04002CO H04002FO H04002GO H04002HO H04002IO H04002JO
H04002KO H04002LO H04002MO H04002NO H04002OO H04003_O H04004_O H04005_O
H04006_O H04007_O H04008_O H04009_O H04010_O H04011_O H04012_O H04013_O
H04014_O H04015_O H04016_O H04017_O H04018_O H04019_O H04020_O H04021_O
H04022_O H04023_O H04024_O H04025_O H04026_O H04027_O H04028_O H04029_O
H04030_O H04031_O H04032_O H04033_O H04034_O H04035_O H04036_O H04037_O
H04038_O H04039_O
S04R01_O S04R02_O S04R03_O S04R04AO S04R04BO S04R04CO S04R04DO S04R04EO
S04R05_O S04R06_O S04R07_O S04R08_O S04R09_O S04R10_O S04R11_O S04R12_O
S04R13_O S04R14_O S04R15_O
S04V01_O S04V02_O S04V04_O S04V05_O S04V06_O S04V07_O
H04040_O H04041_O H04042_O H04043_O H04044_O H04045_O H04046_O H04047_O
H04048_O H04049_O H04050_O H04051_O H04052_O H04053_O H04054_O H04055_O
H04056_O H04057_O H04058_O H04059_O H04060_O H04061_O H04062_O H04063_O
H04064_O H04065_O H04066_O H04067_O H04068_O H04069_O H04070_O H04071_O
H04072_O H04073_O H04074_O H04075_O

SRHGTF_O SRHGTI_O SRWGT_O

H04076_O H04077_O H04078_O H04079_O H04080_O H04081_O H04082_O H04083_O
H04084_O
SREDA_O
H04085_O
SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O
;

TITLE "DoD 2004 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";

DATA MERGENRC;

SET IN.MERGENRC;

*****;
* 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 SRHGTF= .A THEN SRHGTF=.;
IF SRHGTI= .A THEN SRHGTI=.;

IF SRHGTF < 2 OR
SRHGTF > 8
THEN SRHGTF= -7;

IF SRWGT < 40 OR
SRWGT > 1000
THEN SRWGT= -7;

RUN;

DATA OUT.CSCHM04Q;

LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;

```

```

INFORMAT &VARLIST2. 4.;
%INCLUDE "CSCHM04Q.FMT";

/* label and format statements for original variables */

SET MERGENRC;

*****;
*** Recodes for invalid responses:*****;
*****;

/* This is a version of the coding scheme and coding tables for the
2004 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.);
DROP SEX AGE;

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)= -8 THEN RECODE(I)=.A;
    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;
    ELSE RECODE(I)=RECODE(I);
  END;
END;
DROP I;

/* recode selected responses to be 1=marked, 2=unmarked */

ARRAY MARKED(*) H04002A H04002C H04002F H04002G H04002H H04002I H04002J
H04002K H04002L H04002M H04002N H04002O
S04R04A S04R04B S04R04C S04R04D S04R04E
SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
;

ARRAY INFORMAT(*) H04002AO H04002CO H04002FO H04002GO H04002HO H04002IO H04002JO
H04002KO H04002LO H04002MO H04002NO H04002OO
S04R04AO S04R04BO S04R04CO S04R04DO S04R04EO
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 H04002A H04002C H04002F H04002G H04002H H04002I H04002J
H04002K H04002L H04002M H04002N H04002O

```

```

S04R04A S04R04B S04R04C S04R04D S04R04E
SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
MARKED.;

```

```

*****;

```

```

/* skip coding scheme for all surveys not returned */

```

```

IF FLAG_FIN NE '1' THEN GOTO NOSURVEY;

```

```

/** Note 1 -- H04006, H04007 health plan usage */

```

```

IF H04006 > 0 OR H04006 =.D THEN N1=1;

```

```

ELSE IF H04006=.N THEN DO;

```

```

IF H04007 NOT=. THEN DO;

```

```

N1=2;

```

```

H04007=.C;

```

```

END;

```

```

ELSE DO;

```

```

N1=3;

```

```

H04007=.N;

```

```

END;

```

```

END;

```

```

ELSE IF H04006=. THEN N1=4;

```

```

ELSE IF H04006=.A THEN DO;

```

```

IF H04007 NOT=. THEN N1=5;

```

```

ELSE DO;

```

```

H04006=.N;

```

```

H04007=.N;

```

```

N1=6;

```

```

END;

```

```

END;

```

```

/** Note 2A -- H04008 H04009 H04010 H04011: Personal doctor or nurse */

```

```

IF H04008 IN (1,..,A) AND H04009 = .N THEN DO;

```

```

H04008 = 2;

```

```

H04009 =.C;

```

```

IF H04010=. THEN H04010=.N;

```

```

ELSE H04010=.C;

```

```

N2A=1;

```

```

END;

```

```

ELSE IF H04008 IN (1) AND H04009 NE .N THEN DO;

```

```

IF H04010 IN (1) AND H04011 IN (1,2,3,.A) THEN DO;

```

```

H04011=.C;

```

```

N2A=2;

```

```

END;

```

```

ELSE IF H04010 IN (1,..,A) AND H04011 IN (1,2,3,.A) THEN DO;

```

```

H04010=2;

```

```

N2A=3;

```

```

END;

```

```

ELSE IF H04010 IN (1) AND H04011 IN (.) THEN DO;

```

```

H04011=.N;

```

```

N2A=4;

```

```

END;

```

```

ELSE IF H04010 IN (2) THEN DO;

```

```

N2A=5;

```

```

END;

```

```

ELSE IF H04010 IN (.) AND H04011 IN (.) THEN DO;

```

```

N2A=6;

```

```

END;

```

```

ELSE IF H04010 IN (.A) AND H04011 IN (.) THEN DO;

```

```

H04010=1;

```

```

H04011=.N;

```

```

N2A=7;

```

```

END;

```

```

END;

```

```

ELSE IF H04008 IN (2,..,A) THEN DO;

```

```

IF H04009 NOT IN (.N, .) AND H04010 IN (1,..,A) AND H04011 IN (1,2,3,.A)

```

```

THEN DO;

```

```

H04008=1;

```

```

        H04010=2;
        N2A=8;
    END;
    ELSE IF H04009 IN (.) AND H04010 IN (1,.A) AND H04011 IN (1,2,3,.A)
    THEN DO;
        H04008=1;
        H04010=2;
        N2A=9;
    END;
    ELSE IF H04009 IN (.N)
    THEN DO;
        H04008=2;
        H04009=.C;
        IF H04010=. THEN H04010=.N;
        ELSE H04010=.C;
        N2A=10;
    END;
    ELSE IF H04010 IN (1) AND H04011 IN (.)
    THEN DO;
        H04008=1;
        IF H04009=.N THEN H04009=.;
        H04011=.N;
        N2A=11;
    END;
    ELSE IF H04010 IN (2)
    THEN DO;
        H04008=1;
        IF H04009=.N THEN H04009=.;
        N2A=12;
    END;
    ELSE IF H04009 NOT IN (.N, .) AND H04010 IN (.) AND H04011 IN (.)
    THEN DO;
        H04008=1;
        N2A=13;
    END;
    ELSE IF H04008=2 AND H04009 In (.N,.) AND H04010= . THEN DO;
        IF H04009=. THEN H04009=.N;
        ELSE H04009=.C;
        H04010=.N;
        N2A=14;
    END;
    ELSE IF H04008=. AND H04009=. AND H04010=. THEN DO;
        IF H04011 IN (1,2,3,.A) THEN DO;
            N2A=15;
        END;
        ELSE N2A=16;
    END;
    ELSE IF H04008=.A AND H04009=. AND H04010=. THEN DO;
        H04008=2;
        H04009=.N;
        H04010=.N;
        N2A=17;
    END;
END;

```

/** Note 4 -- H04012, H04013: needed to see a specialist in last 12 months **/

```

    IF H04012=1 AND H04013 IN (1,2,3,..A) THEN N4=1;
    ELSE IF H04012 IN (1,..A) AND H04013=.N THEN DO;
        H04012=2;
        H04013=.C;
        N4=2;
    END;
    ELSE IF H04012 IN (2,..A) AND H04013 IN (1,2,3,.A) THEN DO;
        H04012=1;
        N4=3;
    END;
    ELSE IF H04012=2 AND H04013 IN (.,.N) THEN DO;
        IF H04013=. THEN H04013=.N;
        ELSE H04013=.C;
        N4=4;
    END;

```

```

END;
ELSE IF H04012=. AND H04013=. THEN N4=5;
ELSE IF H04012=.A AND H04013=. THEN DO;
    H04012=2;
    H04013=.N;
    N4=6;
END;

```

/** Note 5 -- H04014, H04015,H04016: saw a specialist in last 12 months **/

```

ARRAY NOTE5 H04015 H04016;
N5MARK=0;
N5NMISS=0;

DO OVER NOTE5;
    IF NOTE5 NE . THEN N5NMISS+1;
    IF NOTE5 NOT IN (.N,.) THEN N5MARK+1;
END;

IF H04014=1 AND (N5NMISS=0 OR N5MARK>0) THEN N5=1;
ELSE IF H04014 IN (1,..A) AND N5NMISS>0 AND N5MARK=0 THEN DO;
    H04014=2;
    N5=2;
    DO OVER NOTE5;
        IF NOTE5=. THEN NOTE5=.N;
        ELSE NOTE5=.C;
    END;
END;
ELSE IF H04014 IN (2,..A) AND N5MARK>0 THEN DO;
    H04014=1;
    N5=3;
END;
ELSE IF H04014=2 AND (N5NMISS=0 OR (N5NMISS>0 AND N5MARK=0)) THEN DO;
    N5=4;
    DO OVER NOTE5;
        IF NOTE5=. THEN NOTE5=.N;
        ELSE NOTE5=.C;
    END;
END;
ELSE IF H04014=. AND N5NMISS=0 THEN N5=5;
ELSE IF H04014=.A AND N5NMISS=0 THEN DO;
    H04014=2;
    N5=6;
    DO OVER NOTE5;
        NOTE5=.N;
    END;
END;

DROP N5NMISS N5MARK;

```

/** Note 6 -- called a doctor's office: H04017, H04018 **/

```

IF H04017=1 AND H04018 IN (1,2,3,4,..A) THEN N6=1;
ELSE IF H04017 IN (1,..A) AND H04018=.N THEN DO;
    H04017=2;
    H04018=.C;
    N6=2;
END;
ELSE IF H04017 IN (2,..A) AND H04018 IN (1,2,3,4,.A) THEN DO;
    H04017=1;
    N6=3;
END;

ELSE IF H04017=2 AND H04018 IN (.,.N) THEN DO;
    IF H04018=. THEN H04018=.N;
    ELSE H04018=.C;
    N6=4;
END;
ELSE IF H04017=. AND H04018=. THEN N6=5;

```

```
ELSE IF H04017=.A AND H04018=. THEN DO;
  H04017=2;
  N6=6;
  H04018=.N;
END;
```

```
/** Note 7 -- H04019,H04020,H04021: illness or injury **/
```

```
ARRAY NOTE7 H04020 H04021;
N7MARK=0;
N7NMISS=0;
```

```
DO OVER NOTE7;
  IF NOTE7 NE . THEN N7NMISS+1;
  IF NOTE7 NOT IN (.N,.) THEN N7MARK+1;
END;
```

```
IF H04019=. and H04020=.N AND H04021 In (1,2,3,4,5,6,7) THEN DO;
  H04019=2;
  H04020=.C;
  H04021=.C;
  N7=7;
END;
```

```
ELSE IF H04019=1 and H04020=.N AND H04021 In (1,2,3,4,5,6,7) THEN DO;
  H04020=.;
  N7=8;
END;
```

```
ELSE IF H04019=1 and H04020 IN (1,2,3,4) AND H04021=.N THEN DO;
  H04021=.;
  N7=9;
END;
```

```
ELSE IF H04019=2 and H04020 IN (1,2,3,4) THEN DO;
  H04019=1;
  N7=10;
END;
```

```
ELSE IF H04019=1 AND (N7NMISS=0 OR N7MARK>0) THEN DO;
  DO OVER NOTE7;
    IF NOTE7=.N THEN DO;
      NOTE7=.;
      N7=11;
    END;
    ELSE N7=1;
  END;
END;
```

```
ELSE IF H04019 IN (1,..A) AND N7NMISS>0 AND N7MARK=0 THEN DO;
  H04019=2;
  N7=2;
  DO OVER NOTE7;
    IF NOTE7=. THEN NOTE7=.N;
    ELSE NOTE7=.C;
  END;
END;
```

```
ELSE IF H04019 IN (2,..A) AND N7MARK>0 THEN DO;
  H04019=1;
  N7=3;
  DO OVER NOTE7;
    IF NOTE7=.N THEN NOTE7=.;
  END;
END;
```

```
ELSE IF H04019=2 AND (N7NMISS=0 OR (N7NMISS>0 AND N7MARK=0)) THEN DO;
  N7=4;
  DO OVER NOTE7;
    IF NOTE7=. THEN NOTE7=.N;
    ELSE NOTE7=.C;
  END;
END;
```

```
ELSE IF H04019=. AND N7NMISS=0 THEN N7=5;
ELSE IF H04019=.A AND N7NMISS=0 THEN DO;
  H04019=2;
  N7=6;
  DO OVER NOTE7;
```

```

        NOTE7=.N;
    END;
END;

DROP N7NMISS N7MARK;

/** Note 8 -- H04022,H04023,H04024: regular or routine healthcare **/

ARRAY NOTE8 H04023 H04024;
N8MARK=0;
N8NMISS=0;

DO OVER NOTE8;
    IF NOTE8 NE . THEN N8NMISS+1;
    IF NOTE8 NOT IN (.N,.) THEN N8MARK+1;
END;

IF H04022=. and H04023=.N AND H04024 In (1,2,3,4,5,6,7) THEN DO;
    H04022=2;
    H04023=.C;
    H04024=.C;
    N8=7;
END;
ELSE IF H04022=1 and H04023=.N AND H04024 In (1,2,3,4,5,6,7) THEN DO;
    H04023=.;
    N8=8;
END;
ELSE IF H04022=1 and H04023 IN (1,2,3,4) AND H04024=.N THEN DO;
    H04024=.;
    N8=9;
END;
ELSE IF H04022=2 and H04023 IN (1,2,3,4) THEN DO;
    H04022=1;
    N8=10;
END;

ELSE IF H04022=1 AND (N8NMISS=0 OR N8MARK>0) THEN DO;
    DO OVER NOTE8;
        IF NOTE8=.N THEN DO;
            NOTE8=.;
            N8=11;
        END;
        ELSE N8=1;
    END;
END;

ELSE IF H04022 IN (1,..,A) AND N8NMISS>0 AND N8MARK=0 THEN DO;
    H04022=2;
    N8=2;
    DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
    END;
END;

ELSE IF H04022 IN (2,..,A) AND N8MARK>0 THEN DO;
    H04022=1;
    N8=3;
    DO OVER NOTE8;
        IF NOTE8=.N THEN NOTE8=.;
    END;
END;

ELSE IF H04022=2 AND (N8NMISS=0 OR (N8NMISS>0 AND N8MARK=0)) THEN DO;
    N8=4;
    DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
    END;
END;

ELSE IF H04022=. AND N8NMISS=0 THEN N8=5;
ELSE IF H04022=.A AND N8NMISS=0 THEN DO;
    H04022=2;
    N8=6;
    DO OVER NOTE8;
        NOTE8=.N;

```

```

        END;
    END;

    DROP N8NMISS N8MARK;

/** Note 9 -- H04026, H04027-H04037 H04038: doctor's office or clinic **/

    ARRAY NOTE9 H04027-H04038;

    N9MARK=0;
    N9NMISS=0;

    DO OVER NOTE9;
        IF NOTE9 NE . THEN N9NMISS+1;
        IF NOTE9 NOT IN (., .N) THEN N9MARK+1;
    END;

    IF H04026=1 THEN DO;
        N9=1;
        DO OVER NOTE9;
            IF NOTE9=. THEN NOTE9=.N;
            ELSE NOTE9=.C;
        END;
    END;
    ELSE IF H04026 IN (2,3,4,5,6,7,..A) AND N9NMISS>0 AND N9MARK=0 THEN DO;
        H04026=1;
        N9=2;
        DO OVER NOTE9;
            IF NOTE9=. THEN NOTE9=.N;
            ELSE NOTE9=.C;
        END;
    END;
    ELSE IF H04026 IN (2,3,4,5,6,7) AND (N9NMISS=0 OR N9MARK>0) THEN DO;
        DO OVER NOTE9;
            IF NOTE9=.N THEN NOTE9=.;
        END;

        N9=3;
    END;
    ELSE IF H04026=. AND N9NMISS=0 THEN N9=4;
    ELSE IF H04026=.A AND N9NMISS=0 THEN DO;
        H04026=1;
        N9=5;
        DO OVER NOTE9;
            NOTE9=.N;
        END;
    END;
    ELSE IF H04026 IN (,..A) AND N9MARK>0 THEN N9=6;

    DROP N9NMISS N9MARK;

/** Note 10 -- You or doctor believed you needed care, tests or treatment:
    H04027, H04028 **/

    IF H04027 IN (.N, .C) THEN N10=1;
    ELSE IF H04027=1 AND H04028 IN (1,2,3,..A) THEN N10=2;
    ELSE IF H04027 IN (1,..A) AND H04028=.N THEN DO;
        H04027=2;
        H04028=.C;
        N10=3;
    END;
    ELSE IF H04027 IN (2,..A) AND H04028 IN (1,2,3,.A) THEN DO;
        H04027=1;
        N10=4;
    END;
    ELSE IF H04027=2 AND H04028 IN (.,.N) THEN DO;
        IF H04028=. THEN H04028=.N;
        ELSE H04028=.C;
    END;

```

```

N10=5;
END;
ELSE IF H04027=. AND H04028=. THEN N10=6;
ELSE IF H04027=.A AND H04028=. THEN DO;
    H04027=2;
    N10=7;
    H04028=.N;
END;

/** Note 11 -- Needed approval from healthplan for care, tests or treatment:
    H04029, H04030 **/

IF H04029 IN (.N, .C) THEN N11=1;
ELSE IF H04029=1 AND H04030 IN (1,2,3,..A) THEN N11=2;
ELSE IF H04029 IN (1,..A) AND H04030=.N THEN DO;
    H04029=2;
    H04030=.C;
    N11=3;
END;
ELSE IF H04029 IN (2,..A) AND H04030 IN (1,2,3,..A) THEN DO;
    H04029=1;
    N11=4;
END;
ELSE IF H04029=2 AND H04030 IN (.,.N) THEN DO;
    IF H04030=. THEN H04030=.N;
    ELSE H04030=.C;
    N11=5;
END;
ELSE IF H04029=. AND H04030=. THEN N11=6;
ELSE IF H04029=.A AND H04030=. THEN DO;
    H04029=2;
    N11=7;
    H04030=.N;
END;

/** Note 11E -- S04R01 S04R02 S04R03 S04R04A-S04R04E S04R05-S04R15
    Enrolled in Tricare Prime **/

ARRAY NOTE11E S04R02 S04R03 S04R05-S04R15 ;
ARRAY MARK11E S04R04A--S04R04E;

N11ENMISS=0;
N11EMARK=0;

DO OVER NOTE11E;
    IF NOTE11E NOT IN (.) THEN N11ENMISS+1 ;
    IF NOTE11E NOT IN (., .N) THEN N11EMARK+1;
END;

DO OVER MARK11E;
    IF MARK11E NOT IN (2, .) THEN N11ENMISS+1 ;
    IF MARK11E NOT IN (2, ., .N) THEN N11EMARK+1;
END;

IF S04R01 = 1 AND (N11ENMISS=0 OR N11EMARK>0) THEN DO;
    N11E=1;
END;
ELSE IF S04R01 IN (1,..A) AND N11ENMISS>0 AND N11EMARK=0 THEN DO;
    N11E=2;
    S04R01=2;
    DO OVER NOTE11E;
        IF NOTE11E=. THEN NOTE11E=.N;
        ELSE NOTE11E=.C;
    END;
    DO OVER MARK11E;
        IF MARK11E IN (2, .) THEN MARK11E=.N;
        ELSE MARK11E =.C;
    END;
END;
ELSE IF S04R01 IN (2,..A) AND N11EMARK>0 THEN DO;

```

```

        S04R01=1;
        N11E=3;
    END;
ELSE IF S04R01=2 AND (N11ENMISS=0 OR (N11ENMISS>0 AND N11EMARK=0)) THEN DO;
    N11E=4;
    DO OVER NOTE11E;
        IF NOTE11E=. THEN NOTE11E=.N;
        ELSE NOTE11E=.C;
    END;
    DO OVER MARK11E;
        IF MARK11E IN (2, .) THEN MARK11E=.N;
        ELSE MARK11E =.C;
    END;
END;
ELSE IF S04R01=. AND N11ENMISS=0 THEN N11E=5;
ELSE IF S04R01=.A AND N11ENMISS=0 THEN DO;
    S04R01=2;
    N11E=6;
    DO OVER NOTE11E;
        NOTE11E=.N;
    END;
    DO OVER MARK11E;
        MARK11E=.N;
    END;
END;
END;

DROP N11ENMISS N11EMARK;

/** Note 11F -- S04R02 S04R03 S04R04A-S04R04E S04R05-S04R15: Enrolled to a Military/Civilian PCM
**/

ARRAY NOTE11F S04R03 S04R05-S04R15 ;
ARRAY MARK11F S04R04A--S04R04E;

N11FNMISS=0;
N11FMARK=0;

DO OVER NOTE11F;
    IF NOTE11F NOT IN (.) THEN N11FNMISS+1 ;
    IF NOTE11F NOT IN (.,.N,.C) THEN N11FMARK+1;
END;

DO OVER MARK11F;
    IF MARK11F NOT IN (2, .) THEN N11FNMISS+1 ;
    IF MARK11F NOT IN (2, ., .N, .C) THEN N11FMARK+1;
END;

IF S04R02 IN (.N, .C) THEN N11F=1;
ELSE IF S04R02 IN (1,2) AND (N11FNMISS=0 OR N11FMARK>0) THEN DO;
    N11F=2;
END;
ELSE IF S04R02 IN (1, 2,..A) AND N11FNMISS>0 AND N11FMARK=0 THEN DO;
    N11F=3;
    S04R02=3;
    DO OVER NOTE11F;
        IF NOTE11F=. THEN NOTE11F=.N;
        ELSE NOTE11F=.C;
    END;
    DO OVER MARK11F;
        IF MARK11F IN (2, .) THEN MARK11F=.N;
        ELSE MARK11F =.C;
    END;
END;
ELSE IF S04R02 IN (3,4,..A) AND N11FMARK>0 THEN DO;
    N11F=4;
END;
ELSE IF S04R02 IN (3,4) AND (N11FNMISS=0 OR (N11FNMISS>0 AND N11FMARK=0)) THEN DO;
    N11F=5;
    DO OVER NOTE11F;
        IF NOTE11F=. THEN NOTE11F=.N;
        ELSE NOTE11F=.C;
    END;
END;

```

```

DO OVER MARK11F;
  IF MARK11F IN (2, .) THEN MARK11F=.N;
  ELSE MARK11F =.C;
END;
END;
ELSE IF S04R02=. AND N11FNMISS=0 THEN N11F=6;
ELSE IF S04R02=.A AND N11FNMISS=0 THEN DO;
  S04R02=4;
  N11F=7;
  DO OVER NOTE11F;
    NOTE11F=.N;
  END;
  DO OVER MARK11F;
    MARK11F=.N;
  END;
END;
DROP N11FNMISS N11FMARK;

```

/** Note 11G -- S04R03 S04R04A-S04R04E S04R05-S04R15: Referred to Specialist by PCM **/

```

ARRAY NOTE11G S04R05-S04R15 ;
ARRAY MARK11G S04R04A--S04R04E;
N11GNMISS=0;
N11GMARK=0;

DO OVER NOTE11G;
  IF NOTE11G NOT IN (.) THEN N11GNMISS+1 ;
  IF NOTE11G NOT IN (.,.N,.C) THEN N11GMARK+1;
END;

DO OVER MARK11G;
  IF MARK11G NOT IN (2, .) THEN N11GNMISS+1 ;
  IF MARK11G NOT IN (2, ., .N, .C) THEN N11GMARK+1;
END;

IF S04R03 IN (.N, .C) THEN N11G=1;
ELSE IF S04R03 = 1 AND (N11GNMISS=0 OR N11GMARK>0) THEN DO;
  N11G=2;
  DO OVER MARK11G;
    IF MARK11G IN (2) THEN MARK11G=.;
  END;
END;
ELSE IF S04R03 IN (1,..A) AND N11GNMISS>0 AND N11GMARK=0 THEN DO;
  N11G=3;
  S04R03=2;
  DO OVER NOTE11G;
    IF NOTE11G=. THEN NOTE11G=.N;
    ELSE NOTE11G=.C;
  END;
  DO OVER MARK11G;
    IF MARK11G IN (2, .) THEN MARK11G=.N;
    ELSE MARK11G =.C;
  END;
END;
ELSE IF S04R03 IN (2,..A) AND N11GMARK>0 THEN DO;
  S04R03=1;
  N11G=4;
END;
ELSE IF S04R03=2 AND (N11GNMISS=0 OR (N11GNMISS>0 AND N11GMARK=0)) THEN DO;
  N11G=5;
  DO OVER NOTE11G;
    IF NOTE11G=. THEN NOTE11G=.N;
    ELSE NOTE11G=.C;
  END;
  DO OVER MARK11G;
    IF MARK11G IN (2, .) THEN MARK11G=.N;
    ELSE MARK11G =.C;
  END;
END;
ELSE IF S04R03=. AND N11GNMISS=0 THEN N11G=6;
ELSE IF S04R03=.A AND N11GNMISS=0 THEN DO;

```

```

S04R03=2;
N11G=7;
DO OVER NOTE11G;
    NOTE11G=.N;
END;
DO OVER MARK11G;
    MARK11G=.N;
END;
END;

DROP N11GNMISS N11GMARK;

/** Note 11H -- S04R06 S04R07-S04R10: Appointment to see Specialist **/

ARRAY NOTE11H    S04R07-S04R10 ;

N11HNMISS=0;
N11HMARK=0;

DO OVER NOTE11H;
    IF NOTE11H NOT IN (.) THEN N11HNMISS+1 ;
    IF NOTE11H NOT IN (.,.N) THEN N11HMARK+1;
END;

IF S04R06 IN (.N, .C) THEN N11H=1;
ELSE IF S04R06 = 1 AND (N11HNMISS=0 OR N11HMARK>0) THEN DO;
    N11H=2;
END;
ELSE IF S04R06 IN (1,..A) AND N11HNMISS>0 AND N11HMARK=0 THEN DO;
    N11H=3;
    S04R06=2;
    DO OVER NOTE11H;
        IF NOTE11H=. THEN NOTE11H=.N;
        ELSE NOTE11H=.C;
    END;
END;
ELSE IF S04R06 IN (2,..A) AND N11HMARK>0 THEN DO;
    S04R06=1;
    N11H=4;
END;
ELSE IF S04R06=2 AND (N11HNMISS=0 OR (N11HNMISS>0 AND N11HMARK=0)) THEN DO;
    N11H=5;
    DO OVER NOTE11H;
        IF NOTE11H=. THEN NOTE11H=.N;
        ELSE NOTE11H=.C;
    END;
END;
ELSE IF S04R06=. AND N11HNMISS=0 THEN N11H=6;
ELSE IF S04R06=..A AND N11HNMISS=0 THEN DO;
    S04R06=2;
    N11H=7;
    DO OVER NOTE11H;
        NOTE11H=.N;
    END;
END;

DROP N11HNMISS N11HMARK;

/** Note 11I -- S04R11 S04R12-S04R15: Referred to a Specialist at an MTF **/

ARRAY NOTE11I    S04R12-S04R15 ;

N11INMISS=0;
N11IMARK=0;

DO OVER NOTE11I;
    IF NOTE11I NOT IN (.) THEN N11INMISS+1 ;
    IF NOTE11I NOT IN (.,.N) THEN N11IMARK+1;
END;

```

```

IF S04R11 IN (.N, .C) THEN N11I=1;
ELSE IF S04R11 = 1 AND (N11INMISS=0 OR N11IMARK>0) THEN DO;
  N11I=2;
END;
ELSE IF S04R11 IN (1,..A) AND N11INMISS>0 AND N11IMARK=0 THEN DO;
  N11I=3;
  S04R11=2;
  DO OVER NOTE11I;
    IF NOTE11I=. THEN NOTE11I=.N;
    ELSE NOTE11I=.C;
  END;
END;
ELSE IF S04R11 IN (2,..A) AND N11IMARK>0 THEN DO;
  S04R11=1;
  N11I=4;
END;
ELSE IF S04R11=2 AND (N11INMISS=0 OR (N11INMISS>0 AND N11IMARK=0)) THEN DO;
  N11I=5;
  DO OVER NOTE11I;
    IF NOTE11I=. THEN NOTE11I=.N;
    ELSE NOTE11I=.C;
  END;
END;
ELSE IF S04R11=. AND N11INMISS=0 THEN N11I=6;
ELSE IF S04R11=.A AND N11INMISS=0 THEN DO;
  S04R11=2;
  N11I=7;
  DO OVER NOTE11I;
    NOTE11I=.N;
  END;
END;

DROP N11INMISS N11IMARK;

```

/** Note 12 -- S04V01, S04V02 S04V04-S04V07: health care received from TRICARE civilian network **/

```

ARRAY NOTE12 S04V02 S04V04-S04V07;
N12MARK=0;
N12NMISS=0;

DO OVER NOTE12;
  IF NOTE12 NE . THEN N12NMISS+1;
  IF NOTE12 NOT IN (.N,..) THEN N12MARK+1;
END;

IF S04V01 IN (1,2,3,4) AND (N12NMISS=0 OR N12MARK>0) THEN N12=1;
ELSE IF S04V01 IN (1,2,3,..A) AND N12NMISS>0 AND N12MARK=0 THEN DO;
  N12=2;
  S04V01=.N;
  DO OVER NOTE12;
    IF NOTE12=. THEN NOTE12=.N;
    ELSE NOTE12=.C;
  END;
END;
ELSE IF S04V01=4 AND N12NMISS>0 AND N12MARK=0 THEN DO;
  N12=3;
END;
ELSE IF S04V01=.N
THEN DO;
  N12=4;
  DO OVER NOTE12;
    IF NOTE12=. THEN NOTE12=.N;
    ELSE NOTE12=.C;
  END;
END;
ELSE IF S04V01=. AND N12NMISS=0 THEN N12=5;
ELSE IF S04V01=.A AND N12NMISS=0 THEN DO;
  S04V01=.N;
  N12=6;

```

```

DO OVER NOTE12;
  NOTE12=.N;
END;
END;
ELSE IF S04V01 IN (.,.A) AND N12MARK>0 THEN N12=7;

DROP N12NMISS N12MARK;

/** Note 13 -- H04040, H04041-H04043: claims to health plan **/

  ARRAY NOTE13 H04041-H04043;
  N13MARK=0;
  N13NMISS=0;
  N13NDK=0;

DO OVER NOTE13;
  IF NOTE13 NE . THEN N13NMISS+1;
  IF NOTE13 NOT IN (.N,.) THEN N13MARK+1;
  IF NOTE13 NOT IN (.,.D) THEN N13NDK+1;
END;

IF H04040=1 AND
  (N13NMISS=0 OR (N13MARK>0 and N13NDK>0) or (N13NMISS>0 AND N13NDK=0))
THEN DO;
  N13=1;
  DO OVER NOTE13;
    IF NOTE13=.N THEN NOTE13=.;
  END;
END;
ELSE IF H04040 IN (1,.,.A,.D) AND N13NMISS>0 AND N13MARK=0 THEN DO;
  N13=2;
  H04040=2;
  DO OVER NOTE13;
    IF NOTE13=. THEN NOTE13=.N;
    ELSE NOTE13=.C;
  END;
END;
ELSE IF H04040 IN (2,.,.A,.D) AND
  ((N13MARK>0 AND N13NDK>0) OR (N13NMISS>0 AND N13NDK=0))
  THEN DO;
  H04040=1;
  N13=3;
  DO OVER NOTE13;
    IF NOTE13=.N THEN NOTE13=.;
  END;
END;
ELSE IF H04040 IN (2) AND (N13NMISS=0 OR (N13NMISS>0 AND N13MARK=0)) THEN DO;
  N13=4;
  DO OVER NOTE13;
    IF NOTE13=. THEN NOTE13=.N;
    ELSE NOTE13=.C;
  END;
END;
ELSE IF H04040 IN (.,.D) AND N13NMISS=0 THEN N13=5;
ELSE IF H04040=.A AND N13NMISS=0 THEN DO;
  H04040=2;
  N13=6;
  DO OVER NOTE13;
    NOTE13=.N;
  END;
END;

DROP N13NMISS N13MARK N13NDK;

/** NOTE14 -- H04044, H04045: **/

IF H04044=1 AND H04045 IN (1,2,3,.,.A) THEN N14=1;
ELSE IF H04044 IN (1,.,.A) AND H04045=.N THEN DO;
  H04044=2;

```

```

        H04045=.C;
        N14=2;
    END;
    ELSE IF H04044 IN (2,..A) AND H04045 IN (1,2,3,..A) THEN DO; /* JMA per Daisy's suggestion
3/20/03 */
        H04044=1;
        N14=3;
    END;
    ELSE IF H04044=2 AND H04045 IN (.N,..) THEN DO;
        IF H04045=. THEN H04045=.N;
        ELSE H04045=.C;
        N14=4;
    END;
    ELSE IF H04044=. AND H04045=. THEN N14=5;
    ELSE IF H04044=.A AND H04045=. THEN DO;
        H04044=2;
        H04045=.N;
        N14=6;
    END;

```

/** NOTE15 -- H04046, H04047: health plan's customer service **/

```

    IF H04046=1 AND H04047 IN (1,2,3,..A) THEN N15=1;
    ELSE IF H04046 IN (1,..A) AND H04047=.N THEN DO;
        H04046=2;
        H04047=.C;
        N15=2;
    END;
    ELSE IF H04046 IN (2,..A) AND H04047 IN (1,2,3,..A) THEN DO; /* JMA per Daisy's suggestion
3/20/03 */
        H04046=1;
        N15=3;
    END;
    ELSE IF H04046=2 AND H04047 IN (.N,..) THEN DO;
        IF H04047=. THEN H04047=.N;
        ELSE H04047=.C;
        N15=4;
    END;
    ELSE IF H04046=. AND H04047=. THEN N15=5;
    ELSE IF H04046=.A AND H04047=. THEN DO;
        H04046=2;
        H04047=.N;
        N15=6;
    END;

```

/** Note 16 -- H04048, H04049, H04050, H04051: complaint or problem **/

```

    ARRAY NOTE16 H04049-H04051;
    N16MARK=0;
    N16NMISS=0;

    DO OVER NOTE16;
        IF NOTE16 NE . THEN N16NMISS+1;
        IF NOTE16 NOT IN (.N,..) THEN N16MARK+1;
    END;

    IF H04048=1 AND (N16NMISS=0 OR N16MARK>0) THEN DO;
        N16=1;
        DO OVER NOTE16;
            IF NOTE16=.N THEN NOTE16=.;
        END;
    END;
    ELSE IF H04048 IN (1,..A) AND N16NMISS>0 AND N16MARK=0 THEN DO;
        H04048=2;
        N16=2;
        DO OVER NOTE16;
            IF NOTE16=. THEN NOTE16=.N;
            ELSE NOTE16=.C;
        END;
    END;
    ELSE IF H04048 IN (2,..A) AND N16MARK>0 THEN DO;

```

```

H04048=1;
N16=3;
DO OVER NOTE16;
  IF NOTE16=.N THEN NOTE16=.;
END;
END;
ELSE IF H04048=2 AND (N16NMISS=0 OR (N16NMISS>0 AND N16MARK=0)) THEN DO;
  N16=4;
  DO OVER NOTE16;
    IF NOTE16=. THEN NOTE16=.N;
    ELSE NOTE16=.C;
  END;
END;
ELSE IF H04048=. AND N16NMISS=0 THEN N16=5;
ELSE IF H04048=.A AND N16NMISS=0 THEN DO;
  H04048=2;
  N16=6;
  DO OVER NOTE16;
    NOTE16=.N;
  END;
END;
END;

DROP N16NMISS N16MARK;

```

/** Note 17 -- H04049, H04050, H04051 Resolving complaint **/

```

IF H04049 IN (.N, .C) AND H04050 IN (.N, .C) AND H04051 IN (.N, .C) THEN N17=1;
ELSE IF H04049 IN (1, 2, 3, 4, 5) THEN DO;
  IF H04050=1 THEN DO;
    N17=2;
    IF H04051 NE . THEN H04051= .C;
    ELSE H04051= .N;
  END;
ELSE IF H04050 IN (2, .N) THEN DO;
  N17=3;
  IF H04050=2 AND H04051 IN (.N) THEN H04051=.;
END;
ELSE IF H04050 IN (., .A) THEN DO;
  IF H04051 NE . THEN DO;
    H04050= 2;
    N17=4;
    IF H04051=.N THEN H04051=.;
  END;
ELSE DO;
  H04050= 1;
  H04051= .N;
  N17=5;
END;
END;
ELSE IF H04049=6 THEN DO;
  N17=6;
  IF H04050 NE . THEN H04050= .C;
  ELSE H04050= .N;
END;
ELSE IF H04049 IN (., .N) THEN N17=7;
ELSE IF H04049=.A THEN N17=8;

```

/** NOTE18 -- H04052, H04053: paperwork **/

```

IF H04052=1 AND H04053 IN (1,2,3,..A) THEN N18=1;
ELSE IF H04052 IN (1,..A) AND H04053=.N THEN DO;
  H04052=2;
  H04053=.C;
  N18=2;
END;
ELSE IF H04052 IN (2,..A) AND H04053 IN (1,2,3,..A) THEN DO;
  H04052=1;
  N18=3;
END;
ELSE IF H04052=2 AND H04053 IN (.N,..) THEN DO;
  IF H04053=. THEN H04053=.N;

```

```

        ELSE H04053=.C;
        N18=4;
    END;
    ELSE IF H04052=. AND H04053=. THEN N18=5;
    ELSE IF H04052=.A AND H04053=. THEN DO;
        H04052=2;
        H04053=.N;
        N18=6;
    END;

/** Note 19 -- smoking: H04060 - H04063 **/

    ARRAY NOTE19 H04063 H04064 H04065;

    IF H04060=1 and H04061 IN (3,4) THEN DO; /* still smoke */
        IF H04062 NE . THEN H04062=.C;
        ELSE H04062=.N;
        N19=1;
    END;
    ELSE IF H04060=1 AND H04061=2 THEN DO; /* quit */
        /* JMA March 25 2004,
        Updated because H04064 and H04065 have been added to the
        skip pattern */
        IF H04062 IN (2,.D) THEN DO; /* > 1 year ago */
            DO OVER NOTE19;
                NOTE19=.C; /* Should be skipped */
            END;
            N19=2;
        END;
        ELSE IF H04062 IN (3,..A) THEN N19=3; /* < 1 year ago */
    END;
    ELSE IF H04060=1 AND H04061 IN (.D,..A) THEN DO; /* don't know */
        IF H04062=2 THEN DO; /* > 1 year ago */

            /* JMA March 25 2004,
            Updated because H04064 and H04065 have been added to the
            skip pattern */

            DO OVER NOTE19;
                NOTE19=.C; /* Should be skipped */
            END;
            H04061=2;
            N19=4;
        END;
        ELSE IF H04062=3 THEN DO; /* < 1 year ago */
            H04061=2;
            N19=5;
        END;
        ELSE IF H04062 IN (.D,..A) THEN N19=6; /* don't know */
    END;
    ELSE IF H04060 IN (2,.D,..A) AND H04061 IN (3,4) THEN DO; /*never smoke*/
        H04060=1;

        IF H04062 NE . THEN H04062=.C;
        ELSE H04062=.N;

        N19=7;
    END;
    ELSE IF H04060 IN (2,.D) AND H04061 IN (2,.D,.A, .) THEN DO; /*never smoke*/
        /* JMA March 25 2004,
        Updated because H04064 and H04065 have been added to the
        skip pattern */

        IF H04061 NE . THEN H04061 =.C;
        ELSE H04061=.N;

        IF H04062 NE . THEN H04062 =.C;
        ELSE H04062=.N;

        DO OVER NOTE19;
            NOTE19=.C; /* Should be skipped */
        END;

```

```

N19=8;
END;
ELSE IF H04060 IN (.A, .) THEN DO;
  IF (H04061 IN (2) AND
      H04062 IN (.,.A) AND
      (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5)))
  THEN DO;
    /* JMA March 25 2004,
       Updated because H04064 and H04065 have been added to the
       skip pattern */

    H04060=1;
    H04062=3;
    N19=9;
  END;
ELSE IF H04061 IN (2,..A) THEN DO; /*MRE/blank*/
  IF H04062=3 THEN DO;
    IF (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5))
    THEN DO;
      H04060=1;
      N19=10;
    END;
    ELSE N19=11;
  END;
ELSE IF H04062 IN (2, .D) THEN DO;
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */

  DO OVER NOTE19;
    NOTE19=.C; /* Should be skipped */
  END;
  N19=12;
END;
ELSE IF H04062 IN (.,.A) THEN DO;
  IF (H04063 IN (1,.N,..A) AND H04064 IN (1,.N,..A) AND H04065 IN (1,.N,..A))
  THEN N19=13;
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */
  ELSE IF (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5))
  THEN DO;
    H04060=1;
    N19=14;
  END;
END;
END;
ELSE IF H04061=.D THEN DO; /*MRE/blank*/
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */

  IF H04062 NE . THEN H04062 =.C;
  ELSE H04062=.N;

  DO OVER NOTE19;
    NOTE19=.C; /* Should be skipped */
  END;

  N19=15;
END;
END;

/** Note 20 - gender H04066, SEX, H04067, H04068--H04074, XSEX */

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

ARRAY fmaleval H04068 H04069 H04070 H04071 H04072 H04073 H04074;

```

```

IF H04067 > 0 THEN MALE=1;      /* prostate */
ELSE MALE = 0;

cntfemale=0;
DO OVER femaleval;             /* mammogram/pap smear/PREGNANT*/
  IF femaleval>0 THEN cntfemale=cntfemale+1;
END;
IF cntfemale>0 THEN FEMALE=1;
ELSE FEMALE = 0;

IF H04066=. OR H04066=.A THEN DO;
  IF (SEX='F' AND MALE AND FEMALE) THEN DO;
    N20a=1;
    XSEXa=2;
  END;
  ELSE IF (SEX='F' AND MALE=0 AND FEMALE=0) THEN DO;
    N20a=2;
    XSEXa=2;
  END;
  ELSE IF (SEX='M' AND MALE AND FEMALE) THEN DO;
    N20a=3;
    XSEXa=1;
  END;
  ELSE IF (SEX='M' AND MALE=0 AND FEMALE=0) THEN DO;
    N20a=4;
    XSEXa=1;
  END;
  ELSE IF MALE AND NOT FEMALE THEN DO;
    N20a=5;
    XSEXa=1;
  END;
  ELSE IF FEMALE AND NOT MALE THEN DO;
    N20a=6;
    XSEXa=2;
  END;
  ELSE IF (SEX='Z' AND MALE AND FEMALE) THEN DO;
    N20a=7;
    XSEXa=.;
  END;
  ELSE IF (SEX='Z' AND MALE=0 AND FEMALE=0) THEN DO;
    N20a=8;
    XSEXa=.;
  END;
  ELSE IF (SEX=' ' AND MALE=0 AND FEMALE=0) THEN DO;
    N20a=19;
    XSEXa=.;
  END;
END;
ELSE IF (H04066=1) THEN DO;
  IF MALE AND NOT FEMALE THEN DO;
    N20a=9;
    XSEXa=1;
  END;
  ELSE IF NOT MALE AND FEMALE THEN DO;
    IF SEX='F' THEN DO;
      N20a=10;
      XSEXa=2;
    END;
    ELSE DO;
      N20a=11;
      XSEXa=1;
    END;
  END;
  ELSE IF MALE AND FEMALE THEN DO;
    N20a=12;
    XSEXa=1;
  END;
  ELSE IF MALE=0 AND FEMALE=0 THEN DO;
    N20a=13;
    XSEXa=1;
  END;
END;
END;

```

```

ELSE IF (H04066=2) THEN DO;
  IF NOT MALE AND FMALE THEN DO;
    N20a=14;
    XSEXA=2;
  END;
ELSE IF MALE AND NOT FMALE THEN DO;
  IF SEX='M' THEN DO;
    N20a=15;
    XSEXA=1;
  END;
ELSE DO;
  N20a=16;
  XSEXA=2;
END;
END;
ELSE IF MALE AND FMALE THEN DO;
  N20a=17;
  XSEXA=2;
END;
ELSE IF MALE=0 AND FMALE=0 THEN DO;
  N20a=18;
  XSEXA=2;
END;
END;

/* Note 20b - gender vs prostate */

IF XSEXA=1 THEN N20b=1; /* male */
ELSE IF XSEXA=2 THEN DO; /* female */
  IF H04067 NE . THEN DO;
    N20b=2;
    H04067=.C;
  END; /*inconsistent resp */
ELSE DO;
  N20b=3;
  H04067=.N;
END; /* valid skip */
END;
ELSE IF XSEXA=. THEN DO; /* missing sex */
  N20b=4;
  H04067=.;
END;

/* Note 20c - gender vs mammogram/paps/pregnancy */
/* REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM, PAP SMEAR ENTRIES and PREGNANCY */

ARRAY NOTE20c H04068 H04069 H04070 H04071 H04072 H04073 H04074 ;

cntfemale=0;
DO OVER NOTE20c; /* mammogram/pap smear/PREGNANT*/
  IF NOTE20c NE . THEN cntfemale=cntfemale+1;
END;
IF cntfemale>0 THEN FMALE=1;
ELSE FMALE = 0;

IF XSEXA=1 THEN DO; /* male */
  IF FMALE=0 THEN DO;
    N20c=1;
    DO OVER NOTE20c;
      NOTE20c=.N;
    END;
  END; /* valid skip */
ELSE IF FMALE=1 THEN DO;
  N20c=2;
  DO OVER NOTE20c;
    IF NOTE20c=. THEN NOTE20c = .N;
    ELSE NOTE20c=.C;
  END;
END; /* inconsistent response */
END;
ELSE IF XSEXA=2 THEN N20c=3; /* female */
ELSE IF XSEXA=. THEN DO; /* missing sex */
  N20c=4;
  DO OVER NOTE20c;

```

```
NOTE20c=.;
END;
END;
```

```
DROP MALE FEMALE CNTFEMALE;
```

```
/* Note 21 - breast exam for female 40 or over */
```

```
IF XSEXA=1 THEN DO; /* male */
  IF (H04069=.C OR H04069=.N) AND (H04070=.C OR H04070=.N)
  AND (H04071=.C OR H04071=.N) THEN N21 = 1;
END;
ELSE IF XSEXA=2 THEN DO;
  IF H04069=2 THEN N21=2; /* female 40 or over */
  ELSE IF H04069=1 THEN DO; /* female < 40 */
    IF H04070 NE . THEN H04070=.C;
    ELSE H04070=.N;
    IF H04071 NE . THEN H04071=.C;
    ELSE H04071=.N;
    N21=3;
  END;
  ELSE IF H04069=.A THEN DO;
    IF H04070 NE . OR H04071 NE . THEN DO;
      H04069=2;
      N21=4;
    END;
    ELSE IF H04070=. AND H04071=. THEN DO;
      H04069=1;
      H04070=.N;
      H04071=.N;
      N21=5;
    END;
  END;
  ELSE IF H04069=. THEN DO;
    IF H04070 NE . OR H04071 NE . THEN DO;
      H04069=2;
      N21=6;
    END;
    ELSE IF H04070=. AND H04071=. THEN DO;
      IF AGE<40 THEN DO;
        H04069 = 1;
        H04070=.N;
        H04071=.N;
        N21=7;
      END;
      ELSE IF AGE >= 40 THEN DO;
        H04069=1;
        H04070=.N;
        H04071=.N;
        N21=8;
      END;
      ELSE IF AGE=. THEN N21=9;
    END;
  END;
  ELSE IF XSEXA=. THEN N21=10;
```

```
/* Note 22 - gender vs Pregnancy */
```

```
IF XSEXA=1 THEN N22=1; /* male */
ELSE IF XSEXA=2 THEN DO; /* female */
  IF H04072=1 THEN DO; /* pregnant */
    IF H04073=1 AND H04074 IN (3,2) THEN DO;
      N22=9;
      H04074=.;
    END;
    ELSE IF H04073=2 AND H04074 IN (2) THEN DO;
      N22=10;
      H04074=.;
    END;
  END;
```

```

        END;
        ELSE N22=2;
    END;
    ELSE IF H04072=2 THEN DO;
        IF H04073=. THEN H04073 = .N;
        ELSE H04073=.C;
        N22=3;
    END;
    ELSE IF H04072=3 THEN DO;
        IF H04073=. THEN H04073 = .N;
        ELSE H04073=.C;
        IF H04074=. THEN H04074=.N;
        ELSE H04074=.C;
        N22=4;
    END;
    ELSE IF H04072 IN (., .A) THEN DO;
        IF H04073 NE . THEN DO;
            H04072=1;
            N22=5;
        END;
        ELSE IF H04073=. THEN DO;
            IF H04072=. THEN N22=6;
            ELSE IF H04072=.A THEN DO;
                H04072=3;
                H04073=.N;
                IF H04074=. THEN H04074=.N;
                ELSE H04074=.C;
                N22=7;
            END;
        END;
    END;
    ELSE IF XSEXA=. AND H04072 IN (.,.A) THEN N22=8;

NOSURVEY:

/* missing values */

ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
MISS_TOT=0;
DO OVER MISS;
    MISS = 0;
END;
ARRAY MISSARRAY &VARLIST2.;

DO OVER MISSARRAY;
    IF (MISSARRAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
    ELSE IF (MISSARRAY EQ -8) THEN MISS_8 = MISS_8 + 1;
    ELSE IF (MISSARRAY EQ -7) THEN MISS_7 = MISS_7 + 1;
    ELSE IF (MISSARRAY EQ -6) THEN MISS_6 = MISS_6 + 1;
    ELSE IF (MISSARRAY EQ -5) THEN MISS_5 = MISS_5 + 1;
    ELSE IF (MISSARRAY EQ -4) THEN MISS_4 = MISS_4 + 1;
    ELSE IF (MISSARRAY EQ -1) THEN MISS_1 = MISS_1 + 1;
END;
DO OVER MISS;
    MISS_TOT=MISS_TOT + MISS;
END;

*****;

OUTPUT;

RUN;

PROC FORMAT;
    VALUE GRID
        0='0'
        1-9999='>=1' ;
    VALUE $GRIDB
        1-5 = '1-5' ;

```

```
VALUE $AGE
  018-039='<40'
  040-120='>=40';
VALUE SCALE
  0-10='0-10';
VALUE MARK
  1-6='Marked' ;
VALUE MARKB
  2-7='Marked' ;

VALUE MARKC
  1='1'
  2-HIGH='>1' ;

RUN;

proc contents data=out.cschm04q;
run;
```

G.2.D Q4_2004\PROGRAMS\CODINGScheme\CSCHEM04Q.SAS - Implement Coding Scheme and Coding Tables for Quarter 4 CY2004.

```
*****;
* Program: Cschm04q.sas
* Written: 06/04/2001
* Author: C. Rankin
*
* Input: MERGENRC.SD2 - Merged MPR Sampling, DEERS, and NRC Response Data
* Output: CSCHEM04Q.SD2 - 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
*           5/27/2003 - Updated Variable names for Q2 2003
*           12/05/2003 - Updated Variable names for Q4 2003
*           3/25/2004 - Updated Variable names for Q1 2004
*           6/3/2004 - Updated Variable names for Q2 2004
*           8/23/2004 - Updated Variable names for Q3 2004
*           1/13/2005 - Updated Variable names for Q4 2004
* Purpose: Apply Coding Scheme Specifications to DoD Health Care Survey
*           Response Data, check for consistency in responses and skip
*           patterns
* Include
* files: Cschm04q.fmt
*****;
```

```
OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;
```

```
LIBNAME LIBRARY v612 "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN v612 "..\..\DATA\AFINAL";
LIBNAME OUT v612 "..\..\DATA\AFINAL";
```

```
%LET INDATA=MERGENRC;
%LET OUTDATA=CSCHEM04Q;
%LET PERIOD=October, 2003 to September, 2004;
```

```
/* Variable names in survey -- become recoded variables */
```

```
%Let varlist1 =
```

```
H04001 H04002A H04002C H04002F H04002G H04002H H04002I H04002J
H04002K H04002L H04002M H04002N H04002O H04003 H04004 H04005
H04006 H04007 H04008 H04009 H04010 H04011 H04012 H04013
H04014 H04015 H04016 H04017 H04018 H04019 H04020 H04021
H04022 H04023 H04024 H04025 H04026 H04027 H04028 H04029
H04030 H04031 H04032 H04033 H04034 H04035 H04036 H04037
H04038 H04039
S04V01 S04V02 S04V04 S04V05 S04V06 S04V07
H04040 H04041 H04042 H04043 H04044 H04045 H04046 H04047
H04048 H04049 H04050 H04051 H04052 H04053 H04054 H04055
H04056 H04057 H04058 H04059 H04060 H04061
S04G02 S04G03 S04G04 S04G05
S04G06 S04G07 S04G08 S04G09 S04G10 S04G11 S04G12
S04G13 S04G14 S04G15 S04G16 S04G17
H04062 H04063
H04064 H04065 H04066 H04067 H04068 H04069 H04070 H04071
H04072 H04073 H04074 H04075
```

```
SRHGTF SRHGTI SRWGT
```

```
H04076 H04077 H04078 H04079 H04080 H04081 H04082 H04083
```

```

H04084
SREDA
H04085
SRRACEA  SRRACEB  SRRACEC  SRRACED  SRRACEE  SRAGE
;

/* _O variables are the original values from the survey response */

%Let varlist2 =
H04001_O  H04002AO  H04002CO  H04002FO  H04002GO  H04002HO  H04002IO  H04002JO
H04002KO  H04002LO  H04002MO  H04002NO  H04002OO  H04003_O  H04004_O  H04005_O
H04006_O  H04007_O  H04008_O  H04009_O  H04010_O  H04011_O  H04012_O  H04013_O
H04014_O  H04015_O  H04016_O  H04017_O  H04018_O  H04019_O  H04020_O  H04021_O
H04022_O  H04023_O  H04024_O  H04025_O  H04026_O  H04027_O  H04028_O  H04029_O
H04030_O  H04031_O  H04032_O  H04033_O  H04034_O  H04035_O  H04036_O  H04037_O
H04038_O  H04039_O
S04V01_O  S04V02_O  S04V04_O  S04V05_O  S04V06_O  S04V07_O
H04040_O  H04041_O  H04042_O  H04043_O  H04044_O  H04045_O  H04046_O  H04047_O
H04048_O  H04049_O  H04050_O  H04051_O  H04052_O  H04053_O  H04054_O  H04055_O
H04056_O  H04057_O  H04058_O  H04059_O  H04060_O  H04061_O
S04G02_O  S04G03_O  S04G04_O  S04G05_O
S04G06_O  S04G07_O  S04G08_O  S04G09_O  S04G10_O  S04G11_O  S04G12_O
S04G13_O  S04G14_O  S04G15_O  S04G16_O  S04G17_O
H04062_O  H04063_O
H04064_O  H04065_O  H04066_O  H04067_O  H04068_O  H04069_O  H04070_O  H04071_O
H04072_O  H04073_O  H04074_O  H04075_O

SRHGTF_O  SRHGTI_O  SRWGT_O

H04076_O  H04077_O  H04078_O  H04079_O  H04080_O  H04081_O  H04082_O  H04083_O
H04084_O
SREDA_O
H04085_O
SRRACEAO  SRRACEBO  SRRACECO  SRRACEDO  SRRACEEO  SRAGE_O
;

TITLE  "DoD 2004 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";

DATA MERGENRC;

    SET IN.MERGENRC;

*****;
* 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;

**** Q4, 2004 only
**** Change value of ontime from YES to Y to make it the same as previous
**** 3 quarters;
IF ONTIME="YES" THEN ONTIME="Y";

/****!!!! ONLY Q4 2004.
        Synovate mistakenly assigned -1 when they should
        have assigned -9.
*****/
ARRAY VARS(*) &VARLIST1;

DO I = 1 to DIM(VARS);
    IF VARS(I)= -1 THEN VARS(I)= -9;
END;
DROP I;

```

```

**** update variables with both filled items and check boxes
**** Per Eric Schone;

IF SRHGTF LT 1      THEN SRHGTF=SRHGTF*TN;
IF SRHGTF IN (-9,.) THEN SRHGTF=SRHGTF*TN;
IF SRWGTF LT 40    THEN SRWGTF =SRWGTF*TN;

ARRAY DAYS  H04077  H04078  H04079  H04080
           H04081  H04082  H04083  H04084;

ARRAY DAYSN H04077N H04078N H04079N H04080N
          H04081N H04082N H04083N H04084N;

DO OVER DAYS;
  IF DAYS IN (-9,.) AND DAYSN LE 30 THEN DAYS=DAYSN;
  IF DAYS GT 30 THEN DAYS=30;
END;

*** Correct odd height and weights Per Eric Schone;

IF SRHGTF= .A THEN SRHGTF=. ;
IF SRHGTF= .A THEN SRHGTF=. ;

IF SRHGTF < 2 OR
   SRHGTF > 8
THEN SRHGTF= -7;

IF SRWGTF < 40 OR
   SRWGTF > 1000
THEN SRWGTF= -7;

RUN;

DATA OUT.CSCHM04Q;

  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;
  %INCLUDE "CSCHM04Q.FMT";

/* label and format statements for original variables */

  SET MERGENRC;

*****
**** Recodes for invalid responses:*****
*****

/* This is a version of the coding scheme and coding tables for the
2004 HCSD 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.);
DROP SEX AGE;

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)= -8 THEN RECODE(I)=.A;
        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;
        ELSE RECODE(I)=RECODE(I);
    END;
END;
DROP I;

/* recode selected responses to be 1=marked, 2=unmarked */

    ARRAY   MARKED(*) H04002A H04002C H04002F H04002G H04002H H04002I H04002J
            H04002K H04002L H04002M H04002N H04002O
            SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
            ;

    ARRAY INFORMAT(*) H04002AO H04002CO H04002FO H04002GO H04002HO H04002IO H04002JO
            H04002KO H04002LO H04002MO H04002NO H04002OO
            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 H04002A H04002C H04002F H04002G H04002H H04002I H04002J
        H04002K H04002L H04002M H04002N H04002O
        SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
        MARKED.;

*****;

/* skip coding scheme for all surveys not returned */

    IF FLAG_FIN NE '1' THEN GOTO NOSURVEY;

/** Note 1 -- H04006, H04007 health plan usage */

    IF H04006 > 0 OR H04006 =.D THEN N1=1;
    ELSE IF H04006=.N THEN DO;
        IF H04007 NOT=. THEN DO;
            N1=2;
            H04007=.C;
        END;
        ELSE DO;
            N1=3;
            H04007=.N;
        END;
    END;
    ELSE IF H04006=. THEN N1=4;
    ELSE IF H04006=.A THEN DO;
        IF H04007 NOT=. THEN N1=5;
        ELSE DO;
            H04006=.N;
            H04007=.N;
            N1=6;
        END;
    END;
END;

/** Note 2A -- H04008 H04009 H04010 H04011: Personal doctor or nurse */

    IF H04008 IN (1,..,A) AND H04009 = .N THEN DO;

```

```

H04008 = 2;
H04009 = .C;
IF H04010=. THEN H04010=.N;
ELSE H04010=.C;
N2A=1;
END;
ELSE IF H04008 IN (1) AND H04009 NE .N THEN DO;
IF H04010 IN (1) AND H04011 IN (1,2,3,.A) THEN DO;
H04011=.C;
N2A=2;
END;
ELSE IF H04010 IN (.,.A) AND H04011 IN (1,2,3,.A) THEN DO;
H04010=2;
N2A=3;
END;
ELSE IF H04010 IN (1) AND H04011 IN (.) THEN DO;
H04011=.N;
N2A=4;
END;
ELSE IF H04010 IN (2) THEN DO;
N2A=5;
END;
ELSE IF H04010 IN (.) AND H04011 IN (.) THEN DO;
N2A=6;
END;
ELSE IF H04010 IN (.A) AND H04011 IN (.) THEN DO;
H04010=1;
H04011=.N;
N2A=7;
END;
END;
ELSE IF H04008 IN (2,..A) THEN DO;
IF H04009 NOT IN (.N, .) AND H04010 IN (1,..A) AND H04011 IN (1,2,3,.A)
THEN DO;
H04008=1;
H04010=2;
N2A=8;
END;
ELSE IF H04009 IN (.) AND H04010 IN (1,.A) AND H04011 IN (1,2,3,.A)
THEN DO;
H04008=1;
H04010=2;
N2A=9;
END;
ELSE IF H04009 IN (.N)
THEN DO;
H04008=2;
H04009=.C;
IF H04010=. THEN H04010=.N;
ELSE H04010=.C;
N2A=10;
END;
ELSE IF H04010 IN (1) AND H04011 IN (.)
THEN DO;
H04008=1;
IF H04009=.N THEN H04009=. ;
H04011=.N;
N2A=11;
END;
ELSE IF H04010 IN (2)
THEN DO;
H04008=1;
IF H04009=.N THEN H04009=. ;
N2A=12;
END;
ELSE IF H04009 NOT IN (.N, .) AND H04010 IN (.) AND H04011 IN (.)
THEN DO;
H04008=1;
N2A=13;
END;
ELSE IF H04008=2 AND H04009 In (.N,..) AND H04010= . THEN DO;
IF H04009=. THEN H04009=.N;
ELSE H04009=.C;
H04010=.N;

```

```

        N2A=14;
    END;
    ELSE IF H04008=. AND H04009=. AND H04010=. THEN DO;
        IF H04011 IN (1,2,3,.A) THEN DO;
            N2A=15;
        END;
        ELSE N2A=16;
    END;
    ELSE IF H04008=.A AND H04009=. AND H04010=. THEN DO;
        H04008=2;
        H04009=.N;
        H04010=.N;
        N2A=17;
    END;
END;

```

/** Note 4 -- H04012, H04013: needed to see a specialist in last 12 months **/

```

IF H04012=1 AND H04013 IN (1,2,3,..A) THEN N4=1;
ELSE IF H04012 IN (1,..A) AND H04013=.N THEN DO;
    H04012=2;
    H04013=.C;
    N4=2;
END;
ELSE IF H04012 IN (2,..A) AND H04013 IN (1,2,3,.A) THEN DO;
    H04012=1;
    N4=3;
END;
ELSE IF H04012=2 AND H04013 IN (,..N) THEN DO;
    IF H04013=. THEN H04013=.N;
    ELSE H04013=.C;
    N4=4;
END;
* ELSE IF H04012=2 AND H04013 IN (.C) THEN DO;
*     N4=5;
* END;
ELSE IF H04012=. AND H04013=. THEN N4=6;
ELSE IF H04012=.A AND H04013=. THEN DO;
    H04012=2;
    H04013=.N;
    N4=7;
END;

```

/** Note 5 -- H04014, H04015,H04016: saw a specialist in last 12 months **/

```

ARRAY NOTE5 H04015 H04016;
N5MARK=0;
N5NMISS=0;

DO OVER NOTE5;
    IF NOTE5 NE . THEN N5NMISS+1;
    IF NOTE5 NOT IN (.N,.) THEN N5MARK+1;
END;

IF H04014=1 AND (N5NMISS=0 OR N5MARK>0) THEN N5=1;
ELSE IF H04014 IN (1,..A) AND N5NMISS>0 AND N5MARK=0 THEN DO;
    H04014=2;
    N5=2;
    DO OVER NOTE5;
        IF NOTE5=. THEN NOTE5=.N;
        ELSE NOTE5=.C;
    END;
END;
ELSE IF H04014 IN (2,..A) AND N5MARK>0 THEN DO;
    H04014=1;

```

```

      N5=3;
    END;
  ELSE IF H04014=2 AND (N5NMISS=0 OR (N5NMISS>0 AND N5MARK=0)) THEN DO;
    N5=4;
    DO OVER NOTE5;
      IF NOTE5=. THEN NOTE5=.N;
      ELSE NOTE5=.C;
    END;
  END;
  ELSE IF H04014=. AND N5NMISS=0 THEN N5=5;
  ELSE IF H04014=.A AND N5NMISS=0 THEN DO;
    H04014=2;
    N5=6;
    DO OVER NOTE5;
      NOTE5=.N;
    END;
  END;
END;

DROP N5NMISS N5MARK;

/** Note 6 -- called a doctor's office:  H04017, H04018 **/

IF H04017=1 AND H04018 IN (1,2,3,4,..A) THEN N6=1;
ELSE IF H04017 IN (1,..A) AND H04018=.N THEN DO;
  H04017=2;
  H04018=.C;
  N6=2;
END;
ELSE IF H04017 IN (2,..A) AND H04018 IN (1,2,3,4,.A) THEN DO;
  H04017=1;
  N6=3;
END;

ELSE IF H04017=2 AND H04018 IN (,.N) THEN DO;
  IF H04018=. THEN H04018=.N;
  ELSE H04018=.C;
  N6=4;
END;
* ELSE IF H04017=2 AND H04018 IN (.C) THEN DO;
*   N6=5;
* END;
ELSE IF H04017=. AND H04018=. THEN N6=6;
ELSE IF H04017=.A AND H04018=. THEN DO;
  H04017=2;
  N6=7;
  H04018=.N;
END;

/** Note 7 -- H04019,H04020,H04021:  illness or injury **/

ARRAY NOTE7 H04020 H04021;
N7MARK=0;
N7NMISS=0;

DO OVER NOTE7;
  IF NOTE7 NE . THEN N7NMISS+1;
  IF NOTE7 NOT IN (.N,.) THEN N7MARK+1;
END;

IF H04019=. and H04020=.N AND H04021 In (1,2,3,4,5,6,7) THEN DO;
  H04019=2;
  H04020=.C;
  H04021=.C;
  N7=7;
END;
ELSE IF H04019=1 and H04020 IN (.N) AND H04021 In (1,2,3,4,5,6,7) THEN DO;
  H04020=.;
  N7=8;
END;

```

```

ELSE IF H04019=1 and H04020 IN (1,2,3,4) AND H04021=.N THEN DO;
  H04021=.;
  N7=9;
END;
ELSE IF H04019=2 and H04020 IN (1,2,3,4) THEN DO;
  H04019=1;
  N7=10;
END;

ELSE IF H04019=1 AND (N7NMISS=0 OR N7MARK>0) THEN DO;
  DO OVER NOTE7;
    IF NOTE7=.N THEN DO;
      NOTE7=.;
      N7=11;
    END;
    ELSE N7=1;
  END;
END;
ELSE IF H04019 IN (1,..,A) AND N7NMISS>0 AND N7MARK=0 THEN DO;
  H04019=2;
  N7=2;
  DO OVER NOTE7;
    IF NOTE7=. THEN NOTE7=.N;
    ELSE NOTE7=.C;
  END;
END;
ELSE IF H04019 IN (2,..,A) AND N7MARK>0 THEN DO;
  H04019=1;
  N7=3;
  DO OVER NOTE7;
    IF NOTE7=.N THEN NOTE7=.;
  END;
END;
ELSE IF H04019=2 AND (N7NMISS=0 OR (N7NMISS>0 AND N7MARK=0)) THEN DO;
  N7=4;
  DO OVER NOTE7;
    IF NOTE7=. THEN NOTE7=.N;
    ELSE NOTE7=.C;
  END;
END;
ELSE IF H04019=. AND N7NMISS=0 THEN N7=5;
ELSE IF H04019=.A AND N7NMISS=0 THEN DO;
  H04019=2;
  N7=6;
  DO OVER NOTE7;
    NOTE7=.N;
  END;
END;

DROP N7NMISS N7MARK;

/** Note 8 -- H04022,H04023,H04024: regular or routine healthcare **/

ARRAY NOTE8 H04023 H04024;
N8MARK=0;
N8NMISS=0;

DO OVER NOTE8;
  IF NOTE8 NE . THEN N8NMISS+1;
  IF NOTE8 NOT IN (.N,.) THEN N8MARK+1;
END;

IF H04022=. and H04023=.N AND H04024 In (1,2,3,4,5,6,7) THEN DO;
  H04022=2;
  H04023=.C;
  H04024=.C;
  N8=7;
END;
ELSE IF H04022=1 and H04023=.N AND H04024 In (1,2,3,4,5,6,7) THEN DO;
  H04023=.;
  N8=8;
END;
ELSE IF H04022=1 and H04023 IN (1,2,3,4) AND H04024=.N THEN DO;

```

```

H04024=. ;
N8=9;
END;
ELSE IF H04022=2 and H04023 IN (1,2,3,4) THEN DO;
H04022=1;
N8=10;
END;

ELSE IF H04022=1 AND (N8NMISS=0 OR N8MARK>0) THEN DO;
DO OVER NOTE8;
IF NOTE8=.N THEN DO;
NOTE8=. ;
N8=11;
END;
ELSE N8=1;
END;
END;

ELSE IF H04022 IN (1,..A) AND N8NMISS>0 AND N8MARK=0 THEN DO;
H04022=2;
N8=2;
DO OVER NOTE8;
IF NOTE8=. THEN NOTE8=.N;
ELSE NOTE8=.C;
END;
END;

ELSE IF H04022 IN (2,..A) AND N8MARK>0 THEN DO;
H04022=1;
N8=3;
DO OVER NOTE8;
IF NOTE8=.N THEN NOTE8=. ;
END;
END;

ELSE IF H04022=2 AND (N8NMISS=0 OR (N8NMISS>0 AND N8MARK=0)) THEN DO;
N8=4;
DO OVER NOTE8;
IF NOTE8=. THEN NOTE8=.N;
ELSE NOTE8=.C;
END;
END;

ELSE IF H04022=. AND N8NMISS=0 THEN N8=5;
ELSE IF H04022=.A AND N8NMISS=0 THEN DO;
H04022=2;
N8=6;
DO OVER NOTE8;
NOTE8=.N;
END;
END;

DROP N8NMISS N8MARK;

```

/** Note 9 -- H04026, H04027-H04037 H04038: doctor's office or clinic **/

```

ARRAY NOTE9 H04027-H04038;

N9MARK=0;
N9NMISS=0;

DO OVER NOTE9;
IF NOTE9 NE . THEN N9NMISS+1;
IF NOTE9 NOT IN (., .N) THEN N9MARK+1;
END;

IF H04026=1 THEN DO;
N9=1;
DO OVER NOTE9;
IF NOTE9=. THEN NOTE9=.N;
ELSE NOTE9=.C;
END;
END;

ELSE IF H04026 IN (2,3,4,5,6,7,..A) AND N9NMISS>0 AND N9MARK=0 THEN DO;
H04026=1;

```

```

N9=2;
DO OVER NOTE9;
  IF NOTE9=. THEN NOTE9=.N;
  ELSE NOTE9=.C;
END;
END;
ELSE IF H04026 IN (2,3,4,5,6,7) AND (N9NMISS=0 OR N9MARK>0) THEN DO;
DO OVER NOTE9;
  IF NOTE9=.N THEN NOTE9=.;
END;

N9=3;
END;
ELSE IF H04026=. AND N9NMISS=0 THEN N9=4;
ELSE IF H04026=.A AND N9NMISS=0 THEN DO;
H04026=1;
N9=5;
DO OVER NOTE9;
  NOTE9=.N;
END;
END;
ELSE IF H04026 IN (.,.A) AND N9MARK>0 THEN N9=6;

DROP N9NMISS N9MARK;

/** Note 10 -- You or doctor believed you needed care, tests or treatment:
H04027, H04028 **/

IF H04027 IN (.N, .C) THEN N10=1;
ELSE IF H04027=1 AND H04028 IN (1,2,3,..A) THEN N10=2;
ELSE IF H04027 IN (1,..A) AND H04028=.N THEN DO;
H04027=2;
H04028=.C;
N10=3;
END;
ELSE IF H04027 IN (2,..A) AND H04028 IN (1,2,3,.A) THEN DO;
H04027=1;
N10=4;
END;
ELSE IF H04027=2 AND H04028 IN (.,.N) THEN DO;
IF H04028=. THEN H04028=.N;
ELSE H04028=.C;
N10=5;
END;
* ELSE IF H04027=2 AND H04028 IN (.C) THEN DO;
* N10=6;
* END;
ELSE IF H04027=. AND H04028=. THEN N10=7;
ELSE IF H04027=.A AND H04028=. THEN DO;
H04027=2;
N10=8;
H04028=.N;
END;

/** Note 11 -- Needed approval from healthplan for care, tests or treatment:
H04029, H04030 **/

IF H04029 IN (.N, .C) THEN N11=1;
ELSE IF H04029=1 AND H04030 IN (1,2,3,..A) THEN N11=2;
ELSE IF H04029 IN (1,..A) AND H04030=.N THEN DO;
H04029=2;
H04030=.C;
N11=3;
END;
ELSE IF H04029 IN (2,..A) AND H04030 IN (1,2,3,.A) THEN DO;
H04029=1;
N11=4;
END;
ELSE IF H04029=2 AND H04030 IN (.,.N) THEN DO;

```

```

        IF H04030=. THEN H04030=.N;
        ELSE H04030=.C;
        N11=5;
    END;
*   ELSE IF H04029=2 AND H04030 IN (.C) THEN DO;
*       N11=6;
*   END;
    ELSE IF H04029=. AND H04030=. THEN N11=7;
    ELSE IF H04029=.A AND H04030=. THEN DO;
        H04029=2;
        N11=8;
        H04030=.N;
    END;

/** Note 12 -- S04V01, S04V02 S04V04-S04V07: health care received from TRICARE civilian network **/

    ARRAY NOTE12 S04V02 S04V04-S04V07;
    N12MARK=0;
    N12NMISS=0;

    DO OVER NOTE12;
        IF NOTE12 NE . THEN N12NMISS+1;
        IF NOTE12 NOT IN (.N,.) THEN N12MARK+1;
    END;

    IF S04V01 IN (1,2,3,4) AND (N12NMISS=0 OR N12MARK>0) THEN N12=1;
    ELSE IF S04V01 IN (1,2,3,..A) AND N12NMISS>0 AND N12MARK=0 THEN DO;
        N12=2;
        S04V01=.N;
        DO OVER NOTE12;
            IF NOTE12=. THEN NOTE12=.N;
            ELSE NOTE12=.C;
        END;
    END;
    ELSE IF S04V01=4 AND N12NMISS>0 AND N12MARK=0 THEN DO;
        N12=3;
    END;
    ELSE IF S04V01=.N
    THEN DO;
        N12=4;
        DO OVER NOTE12;
            IF NOTE12=. THEN NOTE12=.N;
            ELSE NOTE12=.C;
        END;
    END;
    ELSE IF S04V01=. AND N12NMISS=0 THEN N12=5;
    ELSE IF S04V01=.A AND N12NMISS=0 THEN DO;
        S04V01=.N;
        N12=6;
        DO OVER NOTE12;
            NOTE12=.N;
        END;
    END;
    ELSE IF S04V01 IN (,..A) AND N12MARK>0 THEN N12=7;

    DROP N12NMISS N12MARK;

/** Note 13 -- H04040, H04041-H04043: claims to health plan **/

    ARRAY NOTE13 H04041-H04043;
    N13MARK=0;
    N13NMISS=0;
    N13NDK=0;

    DO OVER NOTE13;
        IF NOTE13 NE . THEN N13NMISS+1;
        IF NOTE13 NOT IN (.N,.) THEN N13MARK+1;
        IF NOTE13 NOT IN (,..D) THEN N13NDK+1;
    END;

    IF H04040=1 AND

```

```

(N13NMISS=0 OR (N13MARK>0 and N13NDK>0) or (N13NMISS>0 AND N13NDK=0))
THEN DO;
  N13=1;
  DO OVER NOTE13;
    IF NOTE13=.N THEN NOTE13=.;
  END;
END;
ELSE IF H04040 IN (1,.,.A,.D) AND N13NMISS>0 AND N13MARK=0 THEN DO;
  N13=2;
  H04040=2;
  DO OVER NOTE13;
    IF NOTE13=. THEN NOTE13=.N;
    ELSE NOTE13=.C;
  END;
END;
ELSE IF H04040 IN (2,.,.A,.D) AND
  ((N13MARK>0 AND N13NDK>0) OR (N13NMISS>0 AND N13NDK=0))
  THEN DO;
  H04040=1;
  N13=3;
  DO OVER NOTE13;
    IF NOTE13=.N THEN NOTE13=.;
  END;
END;
ELSE IF H04040 IN (2) AND (N13NMISS=0 OR (N13NMISS>0 AND N13MARK=0)) THEN DO;
  N13=4;
  DO OVER NOTE13;
    IF NOTE13=. THEN NOTE13=.N;
    ELSE NOTE13=.C;
  END;
END;
ELSE IF H04040 IN (.,.D) AND N13NMISS=0 THEN N13=5;
ELSE IF H04040=.A AND N13NMISS=0 THEN DO;
  H04040=2;
  N13=6;
  DO OVER NOTE13;
    NOTE13=.N;
  END;
END;
END;

DROP N13NMISS N13MARK N13NDK;

```

```

/** NOTE14 -- H04044, H04045: **/

```

```

IF H04044=1 AND H04045 IN (1,2,3,.,.A) THEN N14=1;
ELSE IF H04044 IN (1,.,.A) AND H04045=.N THEN DO;
  H04044=2;
  H04045=.C;
  N14=2;
END;
ELSE IF H04044 IN (2,.,.A) AND H04045 IN (1,2,3,.,.A) THEN DO; /* JMA per Daisy's suggestion
3/20/03 */
  H04044=1;
  N14=3;
END;
ELSE IF H04044=2 AND H04045 IN (.N,.) THEN DO;
  IF H04045=. THEN H04045=.N;
  ELSE H04045=.C;
  N14=4;
END;
* ELSE IF H04044=2 AND H04045 IN (.C) THEN DO;
* N14=5;
* END;
ELSE IF H04044=. AND H04045=. THEN N14=6;
ELSE IF H04044=.A AND H04045=. THEN DO;
  H04044=2;
  H04045=.N;
  N14=7;
END;
END;

```

```

/** NOTE15 -- H04046, H04047: health plan's customer service **/

  IF H04046=1 AND H04047 IN (1,2,3,..A) THEN N15=1;
  ELSE IF H04046 IN (1,..A) AND H04047=.N THEN DO;
    H04046=2;
    H04047=.C;
    N15=2;
  END;
  ELSE IF H04046 IN (2,..A) AND H04047 IN (1,2,3,..A) THEN DO; /* JMA per Daisy's suggestion
3/20/03 */
    H04046=1;
    N15=3;
  END;
  ELSE IF H04046=2 AND H04047 IN (.N,..) THEN DO;
    IF H04047=. THEN H04047=.N;
    ELSE H04047=.C;
    N15=4;
  END;
  * ELSE IF H04046=2 AND H04047 IN (.C) THEN DO;
  *   N15=5;
  * END;
  ELSE IF H04046=. AND H04047=. THEN N15=6;
  ELSE IF H04046=.A AND H04047=. THEN DO;
    H04046=2;
    H04047=.N;
    N15=7;
  END;
END;

/** Note 16 -- H04048, H04049, H04050, H04051: complaint or problem **/

ARRAY NOTE16 H04049-H04051;
N16MARK=0;
N16NMISS=0;

DO OVER NOTE16;
  IF NOTE16 NE . THEN N16NMISS+1;
  IF NOTE16 NOT IN (.N,..) THEN N16MARK+1;
END;

IF H04048=1 AND (N16NMISS=0 OR N16MARK>0) THEN DO;
  N16=1;
  DO OVER NOTE16;
    IF NOTE16=.N THEN NOTE16=.;
  END;
END;
ELSE IF H04048 IN (1,..A) AND N16NMISS>0 AND N16MARK=0 THEN DO;
  H04048=2;
  N16=2;
  DO OVER NOTE16;
    IF NOTE16=. THEN NOTE16=.N;
    ELSE NOTE16=.C;
  END;
END;
ELSE IF H04048 IN (2,..A) AND N16MARK>0 THEN DO;
  H04048=1;
  N16=3;
  DO OVER NOTE16;
    IF NOTE16=.N THEN NOTE16=.;
  END;
END;
ELSE IF H04048=2 AND (N16NMISS=0 OR (N16NMISS>0 AND N16MARK=0)) THEN DO;
  N16=4;
  DO OVER NOTE16;
    IF NOTE16=. THEN NOTE16=.N;
    ELSE NOTE16=.C;
  END;
END;
ELSE IF H04048=. AND N16NMISS=0 THEN N16=5;
ELSE IF H04048=.A AND N16NMISS=0 THEN DO;
  H04048=2;
  N16=6;
  DO OVER NOTE16;

```

```

NOTE16=.N;
END;
END;

DROP N16NMISS N16MARK;

/** Note 17 -- H04049, H04050, H04051 Resolving complaint **/

IF H04049 IN (.N, .C) AND H04050 IN (.N, .C) AND H04051 IN (.N, .C) THEN N17=1;
ELSE IF H04049 IN (1, 2, 3, 4, 5) THEN DO;
  IF H04050=1 THEN DO;
    N17=2;
    IF H04051 NE . THEN H04051= .C;
    ELSE H04051= .N;
  END;
  ELSE IF H04050 IN (2, .N) THEN DO;
    N17=3;
    IF H04050=2 AND H04051 IN (.N) THEN H04051=.;
  END;
  ELSE IF H04050 IN (.) AND H04051 IN (., .N) THEN DO;
    N17=4;
    H04049=.C;
    H04050=.C;
    H04051=.C;
  END;
  ELSE IF H04050 IN (., .A) THEN DO;
    IF H04051 NE . THEN DO;
      H04050= 2;
      N17=5;
      IF H04051=.N THEN H04051=.;
    END;
    ELSE DO;
      H04050= 1;
      H04051= .N;
      N17=6;
    END;
  END;
  ELSE IF H04049=6 THEN DO;
    N17=7;
    IF H04050 NE . THEN H04050= .C;
    ELSE H04050= .N;
  END;
  ELSE IF H04049 IN (., .N) THEN N17=8;
  ELSE IF H04049=.A THEN N17=9;

/** NOTE18 -- H04052, H04053: paperwork **/

IF H04052=1 AND H04053 IN (1,2,3,..A) THEN N18=1;
ELSE IF H04052 IN (1,..A) AND H04053=.N THEN DO;
  H04052=2;
  H04053=.C;
  N18=2;
END;
ELSE IF H04052 IN (2,..A) AND H04053 IN (1,2,3,.A) THEN DO;
  H04052=1;
  N18=3;
END;
ELSE IF H04052=2 AND H04053 IN (.N,..) THEN DO;
  IF H04053=. THEN H04053=.N;
  ELSE H04053=.C;
  N18=4;
END;
* ELSE IF H04052=2 AND H04053 IN (.C) THEN DO;
*   N18=5;
* END;
ELSE IF H04052=. AND H04053=. THEN N18=6;
ELSE IF H04052=.A AND H04053=. THEN DO;
  H04052=2;
  H04053=.N;
  N18=7;
END;

```

```
/* Note 18A - S04G15 S04G16 S04G02-S04G08 S04G17 S04G09-S04G14
Member of the National Guard or Reserve or family member */
```

```
ARRAY NOTE18A1 S04G16 S04G02-S04G08;
ARRAY NOTE18A2 S04G16 S04G02-S04G08 S04G17 S04G09-S04G14;
ARRAY NOTE18A3 S04G09-S04G11;
N18A1MARK=0;
N18A1NMISS=0;
N18A2MARK=0;
N18A2NMISS=0;
N18A3MARK=0;
N18A3NMISS=0;

DO OVER NOTE18A1;
  IF NOTE18A1 NE . THEN N18A1NMISS+1;
  IF NOTE18A1 NOT IN (.N,.) THEN N18A1MARK+1;
END;
DO OVER NOTE18A2;
  IF NOTE18A2 NOT IN (.) THEN N18A2NMISS+1;
  IF NOTE18A2 NOT IN (.N,.) THEN N18A2MARK+1;
END;
DO OVER NOTE18A3;
  IF NOTE18A3 NOT IN (.) THEN N18A3NMISS+1;
  IF NOTE18A3 NOT IN (.N,.) THEN N18A3MARK+1;
END;

IF S04G15=1 AND S04G16=1 & S04G17=4 THEN DO;
  S04G15=3;
  S04G17=.C;
  N18A=1;
END;
ELSE IF S04G15=1 AND S04G16 NE 1 AND S04G17=4 THEN DO;
  S04G15=3;
  N18A=2;
END;
ELSE IF S04G15=1 THEN DO;
  N18A=3;
END;
ELSE IF S04G15=2 AND S04G16 =1 AND S04G17=4 THEN DO;
  S04G15=3;
  S04G17=.C;
  N18A=4;
END;
ELSE IF S04G15=2 AND S04G16 IN (2,3) AND S04G17=4 THEN DO;
  S04G15=3;
  N18A=5;
END;
ELSE IF S04G15=2 and S04G16=1 THEN DO;
  S04G15=1;
  N18A=6;
END;
ELSE IF S04G15=2 AND S04G16 IN (2,3) AND S04G17 IN (1,2,3) THEN DO;
  S04G15=1;
  N18A=7;
END;
ELSE IF S04G15=2 THEN DO;
  DO OVER NOTE18A1;
    IF NOTE18A1=. THEN NOTE18A1=.N;
    ELSE NOTE18A1=.C;
  END;
  N18A=8;
END;
ELSE IF S04G15=3 AND S04G16 IN (1) AND S04G17 IN (1,2,3,4) THEN DO;
  S04G17=.C;
  DO OVER NOTE18A3;
    IF NOTE18A3=. THEN NOTE18A3=.N;
    ELSE NOTE18A3=.C;
  END;
  N18A=9;
END;
```

```

ELSE IF S04G15=3 AND S04G16 IN (2,3) AND S04G17 IN (1,2,3) THEN DO;
  S04G15=1;
  N18A=10;
END;
ELSE IF S04G15=3 THEN DO;
  N18A=11;
END;
ELSE IF S04G15 IN (4) AND S04G16=1 THEN DO;
  S04G15= 3;
  S04G17= .N;
  DO OVER NOTE18A3;
    IF NOTE18A3=. THEN NOTE18A3=.N;
    ELSE NOTE18A3=.C;
  END;
  N18A=12;
END;
ELSE IF S04G15 IN (4) AND S04G16 IN (2,3) AND S04G17 IN (1,2,3)
THEN DO;
  S04G15=1;
  N18A=13;
END;
ELSE IF S04G15 IN (4) AND S04G16 NOT IN (1,2,3,.A) AND S04G17 IN (1,2,3)
THEN DO;
  S04G15=2;
  DO OVER NOTE18A1;
    IF NOTE18A1=. THEN NOTE18A1=.N;
    ELSE NOTE18A1=.C;
  END;
  N18A=14;
END;
ELSE IF S04G15=4 THEN DO;          /* Neither Reservist Nor Family member of One */
  DO OVER NOTE18A2;
    IF NOTE18A2 IN (.) THEN NOTE18A2=.N;
    ELSE NOTE18A2=.C;
  END;
  N18A=15;
END;
ELSE IF S04G15 IN (., .A) THEN DO;
  IF S04G16 IN (1,2,3) THEN DO;
    IF S04G17 IN (1,2,3) THEN DO;
      S04G15=2;
      DO OVER NOTE18A1;
        IF NOTE18A1=. THEN NOTE18A1=.N;
        ELSE NOTE18A1=.C;
      END;
      N18A=16;
    END;
    ELSE N18A=17;
  END;
  ELSE IF S04G16 IN (1,2,3) THEN DO;
    S04G15=2;
    DO OVER NOTE18A1;
      IF NOTE18A1=. THEN NOTE18A1=.N;
      ELSE NOTE18A1=.C;
    END;
    N18A=18;
  END;
  ELSE N18A=19;
END;
DROP N18A1NMISS N18A1MARK N18A2NMISS N18A2MARK N18A3NMISS N18A3MARK;

/* Note 18B - S04G16, S04G02-S04G08
   Family member of a mobilized Member of the National Guard or Reserve*/

ARRAY NOTE18B   S04G02-S04G08;
N18BMARK=0;
N18BNMISS=0;

DO OVER NOTE18B;
  IF NOTE18B NE . THEN N18BNMISS+1;
  IF NOTE18B NOT IN (.N,.) THEN N18BMARK+1;
END;

```

```

IF S04G16 IN (.N, .C) AND S04G02 IN (.N, .C) AND S04G03 IN (.N, .C) AND
S04G04 IN (.N, .C) AND S04G05 IN (.N, .C) AND S04G06 IN (.N, .C) AND
S04G07 IN (.N, .C) AND S04G08 IN (.N, .C)
THEN N18B=1;
ELSE IF S04G16 = 1 AND (N18BNMISS=0 OR N18BMARK>0) THEN DO;
  N18B=2;
END;
ELSE IF S04G16 IN (1,..A) AND N18BNMISS>0 AND N18BMARK=0 THEN DO;
  N18B=3;
  DO OVER NOTE18B;
    IF NOTE18B=. THEN NOTE18B=.N;
    ELSE NOTE18B=.C;
  END;
END;
ELSE IF S04G16 IN (2,3,..A) AND N18BMARK>0 THEN DO;
  IF S04G16 IN (2,3) THEN DO;
    N18B=4;
    DO OVER NOTE18B;
      IF NOTE18B=. THEN NOTE18B=.N;
      ELSE NOTE18B=.C;
    END;
  END;
ELSE DO;
  DO OVER NOTE18B;

  NOTE18B=.;
  END;
  N18B=5;
END;
END;
ELSE IF S04G16 IN (2,3) AND (N18BNMISS=0 OR (N18BNMISS>0 AND N18BMARK=0)) THEN DO;
  N18B=6;
  DO OVER NOTE18B;
    IF NOTE18B=. THEN NOTE18B=.N;
    ELSE NOTE18B=.C;
  END;
END;
ELSE IF S04G16=. AND N18BNMISS=0 THEN N18B=7;
ELSE IF S04G16=.A AND N18BNMISS=0 THEN DO;
  N18B=8;
  DO OVER NOTE18B;
    NOTE18B=.N;
  END;
END;
END;
DROP N18BNMISS N18BMARK;

```

```

/** Note 18C -- S04G02,S04G03: Covered by civilian health insurance before
reservist in family was mobilized
**/

```

```

IF S04G02 IN (.N, .C) AND S04G03 IN (.N,.C) THEN N18C=1;
ELSE IF S04G02=2 AND S04G03 IN (1,2,3,..A) THEN N18C=2;
ELSE IF S04G02 in (1,3,4,..A) AND S04G03 IN (1, 2, 3, .A) THEN DO;
  S04G02=2;
  N18C=3;
END;
ELSE IF S04G02 in (1,3,4) AND S04G03 IN (.) THEN DO;
  IF S04G03=. THEN S04G03=.N;
  N18C=4;
END;
ELSE IF S04G02=. AND S04G03=. THEN N18C=5;
ELSE IF S04G02=.A AND S04G03=. THEN N18C=6;

```

```

/** Note 18D -- S04G04,S04G05-S04G11, S04G17: Employer of reservist in family pays
all or part of the premium
**/

```

```

ARRAY NOTE18D S04G05-S04G11 S04G17;
N18DMARK=0;
N18DNMISS=0;

```

```

DO OVER NOTE18D;
  IF NOTE18D NE . THEN N18DNMISS+1;
  IF NOTE18D NOT IN (.N,.) THEN N18DMARK+1;
END;

IF S04G04 IN (.N, .C) THEN N18D=1;
ELSE IF S04G04 IN (1,2,.A, .) THEN N18D=2;
ELSE IF S04G04 IN (3,.D) THEN DO;
  DO OVER NOTE18D;
    IF NOTE18D=. THEN NOTE18D=.N;
    ELSE NOTE18D=.C;
  END;
  N18D=3;
END;
DROP N18DNMISS N18DMARK;

/* Note 18E - S04G17, S04G09-S04G14
   Mobilized Member of the National Guard or Reserve*/

ARRAY NOTE18E S04G09-S04G14;
N18EMARK=0;
N18ENMISS=0;

DO OVER NOTE18E;
  IF NOTE18E NE . THEN N18ENMISS+1;
  IF NOTE18E NOT IN (.N,.) THEN N18EMARK+1;
END;

IF S04G17 IN (.N, .C) THEN N18E=1;
ELSE IF S04G17 = 1 AND (N18ENMISS=0 OR N18EMARK>0) THEN DO;
  N18E=2;
END;
ELSE IF S04G17 IN (1,..A) AND N18ENMISS>0 AND N18EMARK=0 THEN DO;
  N18E=3;
  DO OVER NOTE18E;
    IF NOTE18E=. THEN NOTE18E=.N;
    ELSE NOTE18E=.C;
  END;
END;
ELSE IF S04G17 IN (2,3,4) THEN DO;
  IF N18EMARK > 0 THEN DO;
    DO OVER NOTE18E;
      IF NOTE18E=. THEN NOTE18E=.N;
      ELSE NOTE18E=.C;
    END;
    N18E=4;
  END;
  ELSE IF (N18ENMISS=0 OR (N18ENMISS>0 AND N18EMARK=0)) THEN DO;
    N18E=5;
    DO OVER NOTE18E;
      IF NOTE18E=. THEN NOTE18E=.N;
      ELSE NOTE18E=.C;
    END;
  END;
END;
ELSE IF S04G17 IN (,..A) AND N18EMARK>0 THEN DO;
  DO OVER NOTE18E;
    NOTE18E=.;
  END;
  N18E=6;
END;
ELSE IF S04G17=. AND N18ENMISS=0 THEN N18E=7;
ELSE IF S04G17=.A AND N18ENMISS=0 THEN DO;
  N18E=8;
  DO OVER NOTE18E;
    NOTE18E=.N;
  END;
END;
END;

```

```

DROP N18ENMISS N18EMARK;

/** Note 18F -- S04G09,S04G10,S04G11: illness or injury **/

ARRAY NOTE18F S04G10 S04G11;
N18FMARK=0;
N18FNMISS=0;

DO OVER NOTE18F;
  IF NOTE18F NE . THEN N18FNMISS+1;
  IF NOTE18F NOT IN (.N,.) THEN N18FMARK+1;
END;

IF S04G09 IN (.N,.C) AND S04G10 IN (.N, .C) AND S04G11 IN (.N,.C)
THEN N18F=1;
ELSE IF S04G09 =. AND N18FMARK>0 THEN N18F=2;
ELSE IF S04G09=1 AND (N18FNMISS=0 OR N18FMARK>0) THEN N18F=2;
ELSE IF S04G09 IN (2,3,..A) AND S04G10=1 AND S04G11 IN (1,2)
THEN DO;
  S04G09=1;
  N18F=3;
END;
ELSE IF S04G09 IN (2,3) THEN DO;
  IF S04G10 IN (.) AND S04G11 IN (.)
  THEN DO;
    N18F=4;
    DO OVER NOTE18F;
      IF NOTE18F=. THEN NOTE18F=.N;
      ELSE NOTE18F=.C;
    END;
  END;
  ELSE N18F=5;
END;
ELSE IF S04G09=. THEN DO;
  IF N18FMARK>0 THEN N18F=6;
  ELSE IF N18FNMISS=0 THEN N18F=7;
END;
ELSE IF S04G09=.A AND N18FNMISS=0 THEN DO;
  N18F=8;
  DO OVER NOTE18F;
    NOTE18F=.N;
  END;
END;

DROP N18FNMISS N18FMARK;

/** Note 18G -- S04G12,S04G13,S04G14: Operation in which reservist is
currently mobilized **/

ARRAY NOTE18G S04G13 S04G14;
N18GMARK=0;
N18GNMISS=0;

DO OVER NOTE18G;
  IF NOTE18G NE . THEN N18GNMISS+1;
  IF NOTE18G NOT IN (.N,.) THEN N18GMARK+1;
END;

IF S04G12 IN (.N,.C) AND S04G13 IN (.N, .C) AND S04G14 IN (.N,.C)
THEN N18G=1;
IF S04G12 IN (1,2,3,4) AND (N18GNMISS=0 OR N18GMARK>0) THEN N18G=2;
ELSE IF S04G12 IN (.N) THEN DO;
  N18G=3;
  DO OVER NOTE18G;
    IF NOTE18G=. THEN NOTE18G=.N;
    ELSE NOTE18G=.C;
  END;
END;
ELSE IF S04G12 IN (.,.A) AND N18GMARK > 0 THEN DO;
  N18G=4;
  DO OVER NOTE18G;
    IF NOTE18G=. THEN NOTE18G=.N;

```

```

        ELSE NOTE18G=.C;
    END;
END;
ELSE IF S04G12=. AND N18GNMISS=0 THEN N18G=5;
ELSE IF S04G12=.A AND N18GNMISS=0 THEN DO;
    S04G12=.N;
    N18G=6;
    DO OVER NOTE18G;
        NOTE18G=.N;
    END;
END;

DROP N18GNMISS N18GMARK;

/** Note 19 -- smoking: H04060 - H04063 **/

ARRAY NOTE19 H04063 H04064 H04065;

IF H04060=1 and H04061 IN (3,4) THEN DO; /* still smoke */
    IF H04062 NE . THEN H04062=.C;
    ELSE H04062=.N;
    N19=1;
END;
ELSE IF H04060=1 AND H04061=2 THEN DO; /* quit */
    /* JMA March 25 2004,
    Updated because H04064 and H04065 have been added to the
    skip pattern */
    IF H04062 IN (2,.D) THEN DO; /* > 1 year ago */
        DO OVER NOTE19;
            NOTE19=.C; /* Should be skipped */
        END;
        N19=2;
    END;
    ELSE IF H04062 IN (3,..A) THEN N19=3; /* < 1 year ago */
END;
ELSE IF H04060=1 AND H04061 IN (.D,..A) THEN DO; /* don't know */
    IF H04062=2 THEN DO; /* > 1 year ago */

        /* JMA March 25 2004,
        Updated because H04064 and H04065 have been added to the
        skip pattern */

        DO OVER NOTE19;
            NOTE19=.C; /* Should be skipped */
        END;
        H04061=2;
        N19=4;
    END;
    ELSE IF H04062=3 THEN DO; /* < 1 year ago */
        H04061=2;
        N19=5;
    END;
    ELSE IF H04062 IN (.D,..A) THEN N19=6; /* don't know */
END;
ELSE IF H04060 IN (2,.D,..A) AND H04061 IN (3,4) THEN DO; /*never smoke*/
    H04060=1;

    IF H04062 NE . THEN H04062=.C;
    ELSE H04062=.N;

    N19=7;
END;
ELSE IF H04060 IN (2,.D) AND H04061 IN (2,.D,.A, .) THEN DO; /*never smoke*/
    /* JMA March 25 2004,
    Updated because H04064 and H04065 have been added to the
    skip pattern */

    IF H04061 NE . THEN H04061 =.C;
    ELSE H04061=.N;

    IF H04062 NE . THEN H04062 =.C;
    ELSE H04062=.N;

```

```

DO OVER NOTE19;
  NOTE19=.C; /* Should be skipped */
END;

N19=8;
END;
ELSE IF H04060 IN (.A, .) THEN DO;
  IF (H04061 IN (2) AND
      H04062 IN (.,.A) AND
      (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5)))
  THEN DO;
    /* JMA March 25 2004,
       Updated because H04064 and H04065 have been added to the
       skip pattern */

    H04060=1;
    H04062=3;
    N19=9;
  END;
ELSE IF H04061 IN (2,..A) THEN DO; /*MRE/blank*/
  IF H04062=3 THEN DO;
    IF (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5))
    THEN DO;
      H04060=1;
      N19=10;
    END;
    ELSE N19=11;
  END;
ELSE IF H04062 IN (2, .D) THEN DO;
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */

  DO OVER NOTE19;
    NOTE19=.C; /* Should be skipped */
  END;
  N19=12;
END;
ELSE IF H04062 IN (.,.A) THEN DO;
  IF (H04063 IN (1,.N,..A) AND H04064 IN (1,.N,..A) AND H04065 IN (1,.N,..A))
  THEN N19=13;
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */
  ELSE IF (H04063 IN (2,3,4,5) OR H04064 IN (2,3,4,5) OR H04065 IN (2,3,4,5))
  THEN DO;
    H04060=1;
    N19=14;
  END;
END;
END;
ELSE IF H04061=.D THEN DO; /*MRE/blank*/
  /* JMA March 25 2004,
     Updated because H04064 and H04065 have been added to the
     skip pattern */

  IF H04062 NE . THEN H04062 =.C;
  ELSE H04062=.N;

  DO OVER NOTE19;
    NOTE19=.C; /* Should be skipped */
  END;

  N19=15;
END;
END;

```

```

/** Note 20 - gender H04066, SEX, H04067, H04068--H04074, XSEX */

```

```

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

```

```
ARRAY fmaleval H04068 H04069 H04070 H04071 H04072 H04073 H04074;
```

```
IF H04067 > 0 THEN MALE=1;      /* prostate */  
ELSE MALE = 0;
```

```
cntfemale=0;  
DO OVER fmaleval;              /* mammogram/pap smear/PREGNANT*/  
  IF fmaleval>0 THEN cntfemale=cntfemale+1;  
END;  
IF cntfemale>0 THEN FEMALE=1;  
ELSE FEMALE = 0;
```

```
IF H04066=. OR H04066=.A THEN DO;  
  IF (SEX='F' AND MALE AND FEMALE) THEN DO;  
    N20a=1;  
    XSEXA=2;  
  END;  
  ELSE IF (SEX='F' AND MALE=0 AND FEMALE=0) THEN DO;  
    N20a=2;  
    XSEXA=2;  
  END;  
  ELSE IF (SEX='M' AND MALE AND FEMALE) THEN DO;  
    N20a=3;  
    XSEXA=1;  
  END;  
  ELSE IF (SEX='M' AND MALE=0 AND FEMALE=0) THEN DO;  
    N20a=4;  
    XSEXA=1;  
  END;  
  ELSE IF MALE AND NOT FEMALE THEN DO;  
    N20a=5;  
    XSEXA=1;  
  END;  
  ELSE IF FEMALE AND NOT MALE THEN DO;  
    N20a=6;  
    XSEXA=2;  
  END;  
  ELSE IF (SEX='Z' AND MALE AND FEMALE) THEN DO;  
    N20a=7;  
    XSEXA=.;  
  END;  
  ELSE IF (SEX='Z' AND MALE=0 AND FEMALE=0) THEN DO;  
    N20a=8;  
    XSEXA=.;  
  END;  
  ELSE IF (SEX=' ' AND MALE=0 AND FEMALE=0) THEN DO;  
    N20a=19;  
    XSEXA=.;  
  END;  
END;  
ELSE IF (H04066=1) THEN DO;  
  IF MALE AND NOT FEMALE THEN DO;  
    N20a=9;  
    XSEXA=1;  
  END;  
  ELSE IF NOT MALE AND FEMALE THEN DO;  
    IF SEX='F' THEN DO;  
      N20a=10;  
      XSEXA=2;  
    END;  
    ELSE DO;  
      N20a=11;  
      XSEXA=1;  
    END;  
  END;  
END;  
ELSE IF MALE AND FEMALE THEN DO;  
  N20a=12;  
  XSEXA=1;  
END;  
ELSE IF MALE=0 AND FEMALE=0 THEN DO;
```

```

        N20a=13;
        XSEXA=1;
    END;
END;
ELSE IF (H04066=2) THEN DO;
    IF NOT MALE AND FMALE THEN DO;
        N20a=14;
        XSEXA=2;
    END;
    ELSE IF MALE AND NOT FMALE THEN DO;
        IF SEX='M' THEN DO;
            N20a=15;
            XSEXA=1;
        END;
        ELSE DO;
            N20a=16;
            XSEXA=2;
        END;
    END;
    ELSE IF MALE AND FMALE THEN DO;
        N20a=17;
        XSEXA=2;
    END;
    ELSE IF MALE=0 AND FMALE=0 THEN DO;
        N20a=18;
        XSEXA=2;
    END;
END;

/* Note 20b - gender vs prostate */

IF XSEXA=1 THEN N20b=1;    /* male */
ELSE IF XSEXA=2 THEN DO;  /* female */
    IF H04067 NE . THEN DO;
        N20b=2;
        H04067=.C;
    END;
    /*inconsistent resp */
    ELSE DO;
        N20b=3;
        H04067=.N;
    END;
    /* valid skip */
END;
ELSE IF XSEXA=. THEN DO;  /* missing sex */
    N20b=4;
    H04067=.;
END;

/* Note 20c - gender vs mammogram/paps/pregnancy */
/* REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM, PAP SMEAR ENTRIES and PREGNANCY */

ARRAY NOTE20c H04068 H04069 H04070 H04071 H04072 H04073 H04074 ;

cntfemale=0;
DO OVER NOTE20c;          /* mammogram/pap smear/PREGNANT*/
    IF NOTE20c NE . THEN cntfemale=cntfemale+1;
END;
IF cntfemale>0 THEN FMALE=1;
ELSE FMALE = 0;

IF XSEXA=1 THEN DO;    /* male */
    IF FMALE=0 THEN DO;
        N20c=1;
        DO OVER NOTE20c;
            NOTE20c=.N;
        END;
    END;
    /* valid skip */
    ELSE IF FMALE=1 THEN DO;
        N20c=2;
        DO OVER NOTE20c;
            IF NOTE20c=. THEN NOTE20c = .N;
            ELSE NOTE20c=.C;
        END;
    END;
    ELSE /* inconsistent response */
END;
END;

```

```

ELSE IF XSEX=2 THEN N20c=3; /* female */
ELSE IF XSEX=. THEN DO; /* missing sex */
  N20c=4;
  DO OVER NOTE20c;
  NOTE20c=.;
  END;
END;

```

```

DROP MALE FEMALE CNTFEMALE;

```

```

/* Note 21 - breast exam for female 40 or over */

```

```

IF XSEX=1 THEN DO; /* male */
  IF (H04069=.C OR H04069=.N) AND (H04070=.C OR H04070=.N)
  AND (H04071=.C OR H04071=.N) THEN N21 = 1;
END;
ELSE IF XSEX=2 THEN DO;
  IF H04069=2 THEN N21=2; /* female 40 or over */
  ELSE IF H04069=1 THEN DO; /* female < 40 */
    IF H04070 NE . THEN H04070=.C;
    ELSE H04070=.N;
    IF H04071 NE . THEN H04071=.C;
    ELSE H04071=.N;
    N21=3;
  END;
  ELSE IF H04069=.A THEN DO;
    IF H04070 NE . OR H04071 NE . THEN DO;
      H04069=2;
      N21=4;
    END;
    ELSE IF H04070=. AND H04071=. THEN DO;
      H04069=1;
      H04070=.N;
      H04071=.N;
      N21=5;
    END;
  END;
  ELSE IF H04069=. THEN DO;
    IF H04070 NE . OR H04071 NE . THEN DO;
      H04069=2;
      N21=6;
    END;
    ELSE IF H04070=. AND H04071=. THEN DO;
      IF AGE<40 THEN DO;
        H04069 = 1;
        H04070=.N;
        H04071=.N;
        N21=7;
      END;
      ELSE IF AGE >= 40 THEN DO;
        H04069=1;
        H04070=.N;
        H04071=.N;
        N21=8;
      END;
      ELSE IF AGE=. THEN N21=9;
    END;
  END;
END;
ELSE IF XSEX=. THEN N21=10;

```

```

/* Note 22 - gender vs Pregnancy */

```

```

IF XSEX=1 THEN N22=1; /* male */
ELSE IF XSEX=2 THEN DO; /* female */
  IF H04072=1 THEN DO; /* pregnant */
    IF H04073=1 AND H04074 IN (3,2) THEN DO;
      N22=9;
      H04074=.;
    END;
  END;
END;

```

```

        END;
        ELSE IF H04073=2 AND H04074 IN (2) THEN DO;
            N22=10;
            H04074=. ;
        END;
        ELSE N22=2;
    END;
    ELSE IF H04072=2 THEN DO;
        IF H04073=. THEN H04073 = .N;
        ELSE H04073=.C;
        N22=3;
    END;
    ELSE IF H04072=3 THEN DO;
        IF H04073=. THEN H04073 = .N;
        ELSE H04073=.C;
        IF H04074=. THEN H04074=.N;
        ELSE H04074=.C;
        N22=4;
    END;
    ELSE IF H04072 IN (., .A) THEN DO;
        IF H04073 NE . THEN DO;
            H04072=1;
            N22=5;
        END;
        ELSE IF H04073=. THEN DO;
            IF H04072=. THEN N22=6;
            ELSE IF H04072=.A THEN DO;
                H04072=3;
                H04073=.N;
                IF H04074=. THEN H04074=.N;
                ELSE H04074=.C;
                N22=7;
            END;
        END;
    END;
    ELSE IF XSEXA=. AND H04072 IN (.,.A) THEN N22=8;

NOSURVEY:

/* missing values */

    ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
    MISS_TOT=0;
    DO OVER MISS;
        MISS = 0;
    END;
    ARRAY MISSARRAY &VARLIST2.;

    DO OVER MISSARRAY;
        IF (MISSARRAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
        ELSE IF (MISSARRAY EQ -8) THEN MISS_8 = MISS_8 + 1;
        ELSE IF (MISSARRAY EQ -7) THEN MISS_7 = MISS_7 + 1;
        ELSE IF (MISSARRAY EQ -6) THEN MISS_6 = MISS_6 + 1;
        ELSE IF (MISSARRAY EQ -5) THEN MISS_5 = MISS_5 + 1;
        ELSE IF (MISSARRAY EQ -4) THEN MISS_4 = MISS_4 + 1;
        ELSE IF (MISSARRAY EQ -1) THEN MISS_1 = MISS_1 + 1;
    END;
    DO OVER MISS;
        MISS_TOT=MISS_TOT + MISS;
    END;

*****;

    OUTPUT;

RUN;

PROC FORMAT;
    VALUE GRID

```

```
0='0'  
1-9999='>=1' ;  
VALUE $GRIDB  
1-5 = '1-5' ;  
VALUE $AGE  
018-039='<40'  
040-120='>=40' ;  
VALUE SCALE  
0-10='0-10' ;  
VALUE MARK  
1-6='Marked' ;  
VALUE MARKB  
2-7='Marked' ;  
  
VALUE MARKC  
1='1'  
2-HIGH='>1' ;  
  
RUN;  
  
proc contents data=out.cschm04q;  
run;
```

G.3 Q4_2004\PROGRAMS\WEIGHTING\SELECTQ.SAS - Create Record Selection Flag for Record Selection.

```

*****
*
* PROGRAM:   SELECTQ.SAS
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* 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.
*
* INPUTS:   1) CSCHM04Q.SD2 - 2004 Quarterly DOD Health Survey Data
*           2) ADead.sd2 - File from STI containing eligibles
*           (DBMSCopied from adult_deceased.dbf)
*
* OUTPUTS:  1) SELECTQ.SD2 - 2004 Quarterly DOD Health Survey Data w/FNSTATUS
*****
*
LIBNAME IN      V612 "..\..\DATA\AFINAL";
LIBNAME OUT     V612 "..\..\DATA\AFINAL";
LIBNAME LIBRARY V612 "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

PROC SORT DATA=IN.CSCHM04Q OUT=TEMPA1; BY MPRID; RUN;

DATA TEMP2 OUT.DUPSA;
  SET TEMP1;
  BY MPRID;
  /*****
  /** KEY VARIABLES (Total=26)          **/
  /*****
  ARRAY KEYVAR H04006 H04010 H04011 H04008 H04009 H04012
                H04014 H04015 H04017 H04018 H04022 H04019 H04020 H04025
                H04026 H04028 H04031 H04038 H04039 H04044 H04046 H04052
                H04054 H04075 SREDA H04085
                ;
  ARRAY RACE(5) SRRACEA SRRACEB SRRACEC SRRACED SRRACEE;

  FLAGRACE = 0; DROP FLAGRACE;
  DO I = 1 TO DIM(RACE);
    IF RACE(I) EQ 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 13 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;
END;

IF DUPFLAG = 'YES' THEN OUTPUT OUT.DUPSA;
ELSE OUTPUT TEMP2;

RUN;

*****
* Select the "most complete" questionnaire 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 questionnaire;
RUN;

DATA OUT.SELECTQ;
SET TEMP2 DEDUPED;
LABEL FNSTATUS = "Final Status"
      DUPFLAG = "Multiple Response Indicator"
      STRATUM = "Sampling STRATUM"
      KEYCOUNT = "# Key Questions Answered (Out of 26)"
;
RUN;

TITLE1 "Quarterly DOD Health Survey FNSTATUS assignment (6077-300)";
TITLE2 "Program Name: SELECTQ.SAS By Keith Rathbun";
TITLE3 "Program Output: SELECTQ.SD2";

PROC CONTENTS DATA=OUT.SELECTQ; RUN;

PROC FREQ DATA=OUT.SELECTQ;
TABLES FNSTATUS KEYCOUNT FLAG_FIN
      FNSTATUS*FLAG_FIN FNSTATUS*KEYCOUNT*FLAG_FIN
/MISSING LIST;
RUN;

```

G.4.A Q4_2004\PROGRAMS\CONSTRUCT\CONVARQ.SAS - Construct Variables for Analysis.

```

*****
* 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
*
* PURPOSE: TO CREATE INDEPENDENT VARIABLES: XENRLLMT, XENR_PCM, XINS_COV,
* XBNFGRP
* 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, KBRSTCR, HP_SMOKH, HP_CESS
* TO CREATE OUTCATCH, RECODE LEGDDSCD
* INPUT: ...\.DATA\AFINAL\SELECTQ.SD2
* OUTPUT: ...\.DATA\AFINAL\CONVARQ.SD2
*
* INCLUDES: 1) CONSVAR0.SAS - Construct XREGION, XTNEXREG and CONUS based on CACSMPL.
*****
* ;

LIBNAME IN V612 '..\.DATA\AFINAL';
LIBNAME LIBRARY V612 '..\.DATA\AFINAL\FMTLIB';
OPTIONS PS=78 LS=124 ERRORS=2 CENTER ;

%INCLUDE V612 '..\.DATA\AFINAL\FMTLIB';

TITLE1 '2004 Quarter 4 Health Care Survey of DoD Beneficiaries Study - Adult Form A';
TITLE2 'CREATE CONSTRUCTED & OUTCOME MEASURE VARIABLES';

/**** JMA 2/17/2005 This data step is necessary only for Q4 2004
Cacsmpl was updated by the statisticians during weighting.
We therefore need to include it here so that it can be used
to create XREGION, XTNEXREG and CONUS
*****/

PROC SORT DATA=IN.SELECTQ OUT=SELECTQ; BY MPRID; RUN;

DATA SELECTQ;
MERGE SELECTQ(DROP=CACSMPL)
IN.REPWT(KEEP=MPRID CACSMPL)
;
BY MPRID;
RUN;

DATA IN.CONVARQ(KEEP=XENRLLMT XENR_PCM XINS_COV /*XQENROLL*/
XREGION XTNEXREG CONUS
ENBGSMPL XBNFGRP
KDISENRL KMILOFFC KCIVOFFC KBGPRB1 KBGPRB2
KMILOPQY KCIVOPQY HP_PRNTL HP_MAMOG HP_MAM50 HP_PAP HP_BP HP_FLU HP_PROS
MPRID KCIVINS /*HP_GP*/ HP_CHOL HP_BRST HP_SMOKE /*KPRSCPTN*/ KBRSTCR

```

```

                OUTCATCH LEGDSD HP_SMOKH HP_CESS
                XBMI XBMICAT)
CONVARQ;
SET SELECTQ(RENAME=(CACSMPL=XCACSMPL)); *LLU 2/9/05;

*****
* Construct XREGION, XTNEXREG and CONUS.
*****

/*CHANGE CACSMPL TO BE NUMERIC*/
CACSMPL = INPUT(XCACSMPL,8.); *LLU 2/9/05;
DROP XCACSMPL;

%INCLUDE "CONSVAR0.SAS"/SOURCE2; *LLU 2/9/05;

LENGTH XREGION 3.
        XTNEXREG 3.
        CONUS 3.
        XBMI 8.
        XBMICAT 3.;

LABEL
XENRLLMT = "Enrollment in TRICARE Prime"
XENR_PCM = "Enrollment by PCM type"
XINS_COV = "Insurance Coverage"
/*XQENROLL = "Enrllmnt accordng to questionre rspnse"*/
XBNFGRP = "Constructed Beneficiary Group"
KDIENRL = "Intention to disenroll "
KMILOFFC = "Office wait of more than 15 min-Mil"
KCIVOFFC = "Office wait of more than 15 min-Civ"
KBGPRB1 = "Big problem getting referrals to spclst"
KBGPRB2 = "Big problem getting necessary care"
KMILOPQY = "Outpatient visits-use Military fcilty most"
KCIVOPQY = "Outpatient visits-use Civilian fcilty most"
/*KPRSCPTN = "6 or > civ prscrptns filled by mil phmcy"*/
HP_PRNTL = "Prngt in lst yr, receivd cre lst 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_PROS = "Men 50>=, prostrate exam in last 12 mnths"
/*HP_GP = "General physical exam in last 12 mnths"*/
HP_CHOL = "Cholesterol screening in last 5 yrs"
HP_SMOKE =
"Advised to quit smoking in last 12 mnths"
HP_BRST = "Women >=40, breast exam in last 12 mnths"
KCIVINS = "Beneficiary coverd by civilian insurance"
KBRSTCR = "Women 40>= ever had mammogram & brst exm"
OUTCATCH = "Out of catchment area indicator"
HP_SMOKH = "Smoker under HEDIS definition"
HP_CESS = "Had smoking cessation counseling"
XREGION = "XREGION - Region"
XTNEXREG = "TNEX Region"
CONUS = "CONUS - CONUS/OCONUS Indicator"
XBMI = "Body Mass Index"
XBMICAT = "Body Mass Index Category"
;

FORMAT
XENRLLMT ENROLL.
XENR_PCM PCM.
XINS_COV INSURE.
/*XQENROLL PCM.*/
XBNFGRP XBGC_S.
KDIENRL HAYNN.
KMILOFFC HAYNN.
KCIVOFFC HAYNN.
KBGPRB1 HAYNN.

```

```

KBGPRB2      HAYNN.
KMILOPQY    HAGRID.
KCIVOPQY    HAGRID.
/*KPRSCPTN   HAYNN.*/
HP_PRNTL    PRNTL.
HP_MAMOG    HAYNN.
HP_MAM50    HAYNN.
HP_PAP      HAYNN.
HP_BP       HAYNN2_.
HP_FLU      HAYNN.
HP_PROS     HAYNN.
/*HP_GP     HAYNN.*/
HP_CHOL     HAYNN.
HP_SMOKE    HAYNN.
HP_BRST     HAYNN.
KCIVINS     HAYNN2_.
KBRSTCR     HAYNN.
OUTCATCH    OCATCH.
LEGDDSCD    $DDSFMT.
HP_SMOKH    SMOKE.
HP_CESS     SMOKE.
ENBGSMPL    $ENBGS.
XREGION     CREG.
XTNEXREG    TNEX.
CONUS       CONUSMHS.
XBMICAT     XBMICAT.
;

/* CREATE INDEPENDENT VARIABLES */

/* XENRLLMT--ENROLLMENT STATUS */
IF 18 <= 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) 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;

/* XENR_PCM--ENROLLMENT BY PCM TYPE */
IF 18 <= 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) 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;

/* XINS_COV--INSURANCE COVERAGE */
IF XENRLLMT = 1 THEN XINS_COV = 1; /* Prime <65-Active Duty */
ELSE IF 18 <= INPUT(FIELDAGE,8.) < 65 AND H04006 IN (1) THEN XINS_COV = 2; /* Prime <65-Non-active Duty */
ELSE IF H04006 = 3 THEN XINS_COV = 3; /* Standard/Extra */
ELSE IF H04006 = 11 THEN XINS_COV = 7; /* Plus and Medicare */
ELSE IF H04006 = 4 THEN XINS_COV = 4; /* Medicare*/
ELSE IF H04006 IN (5,6, 7, 8, 9) THEN XINS_COV = 5; /* Other civilian health insurance*/
ELSE IF H04006 = 10 THEN XINS_COV = 8; /* Veterans Administration (VA) */
ELSE IF (INPUT(FIELDAGE,8.)>= 65 AND XENRLLMT = 5 and H04006 = 1) THEN XINS_COV = 6; /* Prime, >= 65 */
ELSE IF H04003=1 AND H04004=1 AND H04006 NE .N THEN XINS_COV = 4; /* NEW Q2 Medicare/Medicaid */

```

```

/* XQENROLL--ENROLLMENT ACCORDING TO QUESTIONNAIRE RESPONSES AND */
/* USING DEERS SAMPLING VALUES */
/* H02012 IS NOT IN THE Q12003 Survey*/
/*IF INPUT(ENBGSMPL,8.) = 1 AND 18 <= INPUT(FIELDAGE,8.) < 65 THEN XQENROLL = 1; */ /* Active Duty
(<65)*/

/* ELSE IF 18 <= INPUT(FIELDAGE,8.) < 65 AND H02012 = 1 THEN DO;
IF H04013 = 1 THEN XQENROLL = 2;
ELSE IF H04013 = 2 THEN XQENROLL = 3;

ELSE IF H04013 = 3 THEN DO;
IF INPUT(ENBGSMPL,8.) IN (3, 6) THEN XQENROLL = 2;
ELSE IF INPUT(ENBGSMPL,8.) IN (2, 5) THEN XQENROLL = 3;
END;
END;
ELSE IF H02012 NE 1 THEN DO;
IF 18 <= INPUT(FIELDAGE,8.) < 65 THEN XQENROLL = 4;
ELSE IF INPUT(FIELDAGE,8.) >= 65 THEN XQENROLL = 5;
END; */

/* XBNFGRP-Beneficiary Group that excludes those 65 and over-Active Duty
and Family Members of Active Duty */
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;
ELSE IF INPUT(ENBGSMPL,8.) IN (2, 3, 4) THEN XBNFGRP = 2;
ELSE IF INPUT(ENBGSMPL,8.) IN (5, 6, 7) THEN XBNFGRP = 3;
ELSE IF INPUT(ENBGSMPL,8.) IN (8, 9, 10) THEN XBNFGRP = 4;

/* CREATE DEPENDENT VARIABLES */

/* KDISENRL--INTENTION TO DISNEROLL */
IF H04055 IN (4, 5) THEN KDISENRL = 1; /* Yes */
ELSE IF H04055 IN (1, 2, 3, .D) THEN KDISENRL = 2; /* No */

/* KMILOFFC--OFFICE WAIT OF MORE THAN 15 MINUTES AT MILITARY FACILITES
KCIVOFFC--OFFICE WAIT OF MORE THAN 15 MINUTES AT CIVILIAN FACILITES */
IF H04039 = 1 THEN DO; /* Military */
IF H04031 IN (1,2) THEN KMILOFFC = 1; /* Yes */
ELSE IF H04031 IN (3,4) THEN KMILOFFC = 2; /* No */
END;
ELSE IF H04039 IN (2, 3, 4) THEN DO; /* Civilian */
IF H04031 IN (1,2) THEN KCIVOFFC = 1; /* Yes */
ELSE IF H04031 IN (3,4) THEN KCIVOFFC = 2; /* No */
END;

/* KBGPRB1--BIG PROBLEM GETTING REFERRALS TO SPECIALISTS */
IF H04013 = 1 THEN KBGPRB1 = 1; /* YES */
ELSE IF H04013 IN (2,3) THEN KBGPRB1 = 2; /* NO */

/* KBGPRB2--BIG PROBLEM GETTING NECESSARY CARE */
IF H04028 = 1 THEN KBGPRB2 = 1; /* YES */
ELSE IF H04028 IN (2,3) THEN KBGPRB2 = 2; /* NO */

/* KMILOPQY--OUTPATIENT VISITS TO MILITARY FACILITY
KCIVOPQY--OUTPATIENT VISITS TO CIVILIAN FACILITY */
IF H04039 = 1 THEN DO;
KMILOPQY=H04026;
KCIVOPQY=1;
END;
ELSE IF H04039 IN (2, 3, 4) THEN DO;
KCIVOPQY=H04026;
KMILOPQY=1;
END;
ELSE IF H04039 = 5 THEN DO;
KMILOPQY=1;
KCIVOPQY=1;
END;

/* KPRSCPTN--6 OR MORE CIVILIAN PRESCRIPTIONS FILLED BY MILITARY PHARMACY */
/* H04037 NOT IN Q3 2003 QUESTIONNAIRE */
/*IF H04037 IN (3,4,5) THEN KPRSCPTN = 1;*/ /* YES */
/* ELSE IF H04037 IN (1,2) THEN KPRSCPTN = 2; */ /* NO */

```

```

/* HP_PRNTL--IF PREGNANT LAST YEAR, RECEIVED PRENATAL CARE IN 1ST TRIMESTER */
IF H04072 IN (1,2) THEN DO; /* Pregnant in last 12 months */
  IF H04074 = 4 THEN HP_PRNTL = 1; /* Yes */
  ELSE IF (H04073 = 1 AND H04074 = 1) THEN HP_PRNTL = .; /* <3 months pregnant now */
  ELSE IF H04074 IN (1,2,3) THEN HP_PRNTL = 2; /* No */
END;

/* 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 H04070 IN (5, 4) THEN HP_MAMOG = 1; /* Yes */
  ELSE IF H04070 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 H04070 IN (5, 4) THEN HP_MAM50 = 1; /* Yes */
  ELSE IF H04070 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 H04068 IN (4, 5) THEN HP_PAP = 1; /* Yes */
  ELSE IF H04068 IN (1, 2, 3) THEN HP_PAP = 2; /* No */
END;

/* HP_BP--HAD BLOOD PRESSURE SCREENING IN LAST 2 YEARS AND KNOW RESULT */
IF H04056 IN (2,3) AND H04057 IN (1,2) THEN HP_BP = 1; /* Yes */
ELSE IF H04056 = 1 THEN HP_BP = 2; /* No */
ELSE IF H04056 < 0 OR H04057 < 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 H04059 = 4 THEN HP_FLU = 1; /* Yes */
  ELSE IF H04059 IN (1, 2, 3) THEN HP_FLU = 2; /* No */
END;

/* HP_PROS--FOR MEN AGE 50 AND OVER, HAD PROSTATE EXAM W/IN PAST 12 MONTHS */
IF XSEXA = 1 AND INPUT(FIELDAGE,8.) >= 50 THEN DO;
  IF H04067 = 5 THEN HP_PROS = 1; /* Yes */
  ELSE IF H04067 IN (1, 2, 3, 4) THEN HP_PROS = 2; /* No */
END;

/* HP_GP--EXCEPT WHEN SICK OR PREGNANT, GENERAL PHYSICAL EXAM W/IN PAST 12 MONTHS */
/* REMOVED Q2 2003 BECAUSE H04054 NOT ON QUESTIONNAIRE */
/*IF H04054 = 5 THEN HP_GP = 1;*/ /* Yes */
/* ELSE IF H04054 IN (1, 2, 3, 4) THEN HP_GP = 2;*/ /* No */

/* HP_CHOL--HAD CHOLESTEROL SCREENING IN PAST 5 YEARS */
IF H04058 IN (3, 4, 5) THEN HP_CHOL = 1; /* Yes */
ELSE IF H04058 IN (1, 2) THEN HP_CHOL = 2; /* No */

/* HP_SMOKE--ADVISED TO QUIT SMOKING IN PAST 12 MONTHS */
IF H04063 IN (2, 3, 4, 5) THEN HP_SMOKE = 1; /* Yes */
ELSE IF H04063 = 1 THEN HP_SMOKE = 2; /* No */

/* HP_BRST--BREAST EXAM IN PAST 12 MONTHS */
IF XSEXA=2 AND INPUT(FIELDAGE,8.) >= 40 THEN DO;
  IF H04071 = 5 THEN HP_BRST = 1; /* Yes */
  ELSE IF H04071 IN (1, 2, 3, 4) THEN HP_BRST = 2; /* No */
END;

/* KCIVINS--IS BENEFICIARY COVERED BY PRIVATE CIVILIAN INSURANCE */
IF H04002G=1 OR H04002I=1 OR H04002J=1 THEN KCIVINS=1; /* YES */ /*NJ_Q2*/
ELSE KCIVINS=2; /* NO */

/* KBRSTCR--WOMEN 40>=, EVER HAD MAMMOGRAM & EVER HAD BREAST EXAM */
IF XSEXA = 2 AND INPUT(FIELDAGE,8.) >= 40 THEN DO;
  IF (H04070 IN (5, 4, 3, 2) AND H04071 IN (5, 4, 3, 2)) THEN KBRSTCR = 1; /* Yes */
  ELSE IF (H04070 = 1 OR H04071=1) THEN KBRSTCR = 2; /* No */
END;

/* 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. */
IF H04060 IN (1,2) THEN DO;
  IF H04060=1 AND (H04061=3 OR H04061=4 OR (H04061=2 AND H04062=3)) THEN HP_SMOKH=1; /* Yes */
/*
  ELSE IF H04060=2 OR H04061 > 0 THEN HP_SMOKH=2; /* No */
END;
IF HP_SMOKH=1 AND H04026>1 AND H04063>0 THEN DO;
  IF H04063>1 THEN HP_CESS=1; /* Yes */
  ELSE HP_CESS=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 */

*****
* Collapse/Recode the DEERS dependent suffix for each possible range of values
*****
IF "01" LE LEGDDSCD LE "19" THEN LEGDDSCD = "01"; * 01-19 = 'Dependent Child';
ELSE IF "30" LE LEGDDSCD LE "39" THEN LEGDDSCD = "30"; * 30-39 = 'Spouse of Sponsor';
ELSE IF "40" LE LEGDDSCD LE "44" THEN LEGDDSCD = "40"; * 40-44 = 'Mother of Sponsor';
ELSE IF "45" LE LEGDDSCD LE "49" THEN LEGDDSCD = "45"; * 45-49 = 'Father of Sponsor';
ELSE IF "50" LE LEGDDSCD LE "54" THEN LEGDDSCD = "50"; * 50-54 = 'Mother in law of Sponsor';
ELSE IF "55" LE LEGDDSCD LE "59" THEN LEGDDSCD = "55"; * 55-59 = 'Father in law of Sponsor';
ELSE IF "60" LE LEGDDSCD LE "69" THEN LEGDDSCD = "60"; * 60-69 = 'Chidren where # > 19';

*****
* 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 SRHGTF IN (.A,.O,.I,.B) THEN TSRHGTF=.; ELSE TSRHGTF=SRHGTF;
IF SRHGTI IN (.A,.O,.I,.B) THEN TSRHGTI=.; ELSE TSRHGTI=SRHGTI;
IF SRWGT IN (.A,.O,.I,.B) THEN TSRWGT =.; ELSE TSRWGT =SRWGT;

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

* FORMAT XBMI 5.1;

DROP TSRHGTF TSRHGTI TSRWGT;

IF XSEXA = 2 THEN DO;
  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;
END;
ELSE DO;
  IF XBMI = . THEN XBMICAT=.;
  ELSE IF XBMI < 19.5 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;
END;

RUN;

DATA CONVARQ2;
  SET CONVARQ;
  WHERE FNSTATUS=11;
RUN;

```

```

/* CHECK RECONSTRUCTED 2004 VARIABLES */
PROC FREQ DATA=CONVARQ2;
  TABLES XENRLLMT XENR_PCM XINS_COV /*XQENROLL*/ XREGION XTNEXREG
    XBMICAT ENBGSMPL XBNFGRP
    KDIENRNL KMILOFFC KCIVOFFC KBGPRB1 KBGPRB2
    KMILOPQY KCIVOPQY HP_PRNTL HP_MAMOG HP_MAM50 HP_PAP HP_BP HP_FLU KBRSTCR
    HP_PROS /*HP_GP*/ HP_CHOL HP_SMOKE HP_BRST KCIVINS /*KPRSCPTN*/ OUTCATCH LEGDSDSC
    HP_SMOKH HP_CESS
  / MISSING LIST;
  TITLE3 'ONE WAY FREQUENCIES ON 2004 RECONSTRUCTED VARIABLES';
  RUN;

/* CROSSTABS TO CHECK RECONSTRUCTION OF 2004 VARIABLES */
/* COLLAPSE AGE FOR CROSSTABS */
PROC FORMAT;
  VALUE $AGE
    "018" -< "065" = "LESS THAN 65"
    "065" -< "120" = "65 OR OLDER"
    "0" = "Out of range err"
    " " = "Missing/unknown" ;
  RUN;

PROC FREQ DATA=CONVARQ2;
  TABLES FIELDAGE*ENBGSMPL*XENRLLMT
    FIELDAGE*ENBGSMPL*XENR_PCM
    FIELDAGE*XENRLLMT*H04006*H04004*XINS_COV
    XTNEXREG*XREGION*CACSMPL
    XREGION*CONUS
    FIELDAGE*ENBGSMPL*XBNFGRP
    H04055*KDIENRNL
    H04039*H04031*KMILOFFC*KCIVOFFC
    H04013*KBGPRB1
    H04028*KBGPRB2
    H04039*H04026*KMILOPQY
    H04039*H04026*KCIVOPQY
    /*H04037*KPRSCPTN*/
    H04072*H04073*H04074*HP_PRNTL
    XSEXA*H04068*HP_PAP
    H04056*H04057*HP_BP
    FIELDAGE*H04059*HP_FLU
    /*H04054*HP_GP*/
    H04058*HP_CHOL
    H04063*HP_SMOKE
    H04002I*H04002J*H04002G*KCIVINS
    OUTCATCH*CACSMPL
    H04060*H04061*H04062*HP_SMOKH
    HP_SMOKH*H04026*H04063*HP_CESS
    XBMICAT*XBMI*SRHGTF*SRWGT
  / MISSING LIST;
  FORMAT XSEXA HASEX. FIELDAGE $AGE.
    XBMICAT XBMICAT.
  ;
  TITLE3 'CROSSTABS ON NEW VARIABLES';
  RUN;

PROC FREQ DATA=CONVARQ2;
  tables XTNEXREG*XREGION*CACSMPL
  / MISSING LIST;
run;

/* COLLAPSE FOR MAMMOGRAPHY, BREAST CANCER, AND PROSTRATE XTABS*/
PROC FORMAT;
  VALUE $AGE2_
    "018" - "049" = "LESS THAN 50"
    "050" -< "120" = "50 OR OLDER"
    "0" = "Out of range err"
    " " = "Missing/unknown" ;

  VALUE $AGE3_
    "018" - "039" = "LESS THAN 40"
    "040" -< "120" = "40 OR OLDER"
    "0" = "Out of range err"

```

```
" " = "Missing/unknown" ;
RUN ;

PROC FREQ DATA=CONVARQ2;
  TABLES XSEX*FIELDAGE*H04070*HP_MAM50
          XSEX*FIELDAGE*H04067*HP_PROS
          /MISSING LIST;
          FORMAT FIELDAGE $AGE2_ XSEX HSEX.;
RUN;

PROC FREQ DATA=CONVARQ2;
  TABLES XSEX*FIELDAGE*H04070*HP_MAMOG
          XSEX*FIELDAGE*H04070*H04071*KBRSTCR
          FIELDAGE*XSEX*H04071*HP_BRST
          /MISSING LIST;
          FORMAT FIELDAGE $AGE3_ XSEX HSEX.;
RUN;

PROC CONTENTS DATA=IN.CONVARQ;
RUN;
```

G.4.B Q4_2004\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
*
* 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,
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, 0248, 5205, 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 3/16/2005 These values were gotten from UpdateXregion.lst

```

```

We needed to get the correct XREGION for cases where CACSMPL IN
9901,9902,9903,9904 and D_HEALTH =17, 18 or 19
-per Eric Schone
-FOR Q4 2004
*/

IF CACSMPL IN (9901,9902,9903,9904) THEN DO;
  IF D_HEALTH IN (17, 18, 19) THEN DO;
    IF DCATCH IN ('0123') THEN XREGION=1;
    ELSE IF DCATCH IN ('0934','0996') THEN XREGION=2;
    ELSE IF DCATCH IN ('0911','0941','0987') THEN XREGION=3;
    ELSE IF DCATCH IN ('0073','0901','0925',
'0943','0988','0989') THEN XREGION=4;
    ELSE IF DCATCH IN ('0782','0783','0789',
'0914','0915','0918',
'0923','0936','0950') THEN XREGION=5;
    ELSE IF DCATCH IN ('0079' ) THEN XREGION=7;
    ELSE IF DCATCH IN ('0786','0986' ) THEN XREGION=9;
    ELSE IF DCATCH IN ('0985' ) THEN XREGION=10;
    ELSE IF DCATCH IN ('0125','0126','0127',
'0938','0948','0973') THEN XREGION=11;
    ELSE IF DCATCH IN ('0902','0912' ) THEN XREGION=12;
    ELSE IF DCATCH IN ('0999' ) THEN XREGION=16;
  END;
  ELSE XREGION=D_HEALTH+0;
END;

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

*****
* Assign indicator of CONUS based on XREGION. CONUS stands for
* Contential United States it but includes both Alaska and Hawaii.
*****;
IF XREGION IN (1,2,3,4,5,6,7,8,9,10,11,12,16) THEN CONUS=1;
ELSE IF XREGION IN (13,14,15) THEN CONUS=0;
ELSE IF XREGION = . THEN CONUS=.;

*****
* Assign XTNEXREG using XREGION
*****;
*IF D_HEALTH=17 THEN XTNEXREG=1; *NORTH, LLU 2/9/05. FOR Q4 2004;
*IF D_HEALTH=18 THEN XTNEXREG=2; *SOUTH;
*IF D_HEALTH=19 THEN XTNEXREG=3; *WEST;

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;

```

G.5.A Q4_2004\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 STELIG.
* 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
*
* 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.SD2
* INPUT: ..\..\DATA\AFINAL\CONVARQ.SD2
* INPUT: ..\..\DATA\AFINAL\CONVARSF.SD2
* OUTPUT: ..\..\DATA\AFINAL\MERGEQ.SD2
* INCLUDE: SERVAFF.SAS
* TO MERGE ON VARIABLE SERVAFF
*****
* ;
LIBNAME IN V612 '..\..\DATA\AFINAL';
LIBNAME OUT V612 '..\..\DATA\AFINAL';
LIBNAME LIBRARY V612 '..\..\DATA\AFINAL\FMTLIB';

OPTIONS PS=78 LS=124 ERRORS=2 COMPRESS=YES ; *MPRINT;

%INCLUDE SERVAFF/SOURCE2; *LLU 2/9/05;

PROC SORT DATA=IN.SELECTQ OUT=SELECTQ;
BY MPRID;
RUN;

/**** JMA 2/17/2005 This data step is necessary only for Q4 2004
Cacsmpl was updated by the statisticians during weighting.
We therefore need to include it here so that the final file
will contain the updated CACSMPL
*****/

```

```
DATA SELECTQ;  
  MERGE SELECTQ(DROP=CACSMPL)  
    IN.REPWT(KEEP=MPRID CACSMPL)  
  ;  
  BY MPRID;  
RUN;
```

```
PROC SORT DATA=IN.CONVARQ OUT=CONVARQ;  
  BY MPRID;  
RUN;
```

```
/*  
PROC SORT DATA=IN.CONVARSF OUT=CONVARSF;  
  BY MPRID;  
RUN;  
*/
```

```
PROC SORT DATA=IN.SERVAFF OUT=SERVAFF;  
  BY MPRID;  
RUN;
```

```
PROC FREQ DATA=SERVAFF;  
  TABLES SERVAFF;  
RUN;
```

```
DATA MERGEQ (DROP =  
H04001_O  
H04002AO  
H04002CO  
H04002FO  
H04002GO  
H04002HO  
H04002IO  
H04002JO  
H04002KO  
H04002LO  
H04002MO  
H04002NO  
H04002OO  
H04003_O  
H04004_O  
H04005_O  
H04006_O  
H04007_O  
H04008_O  
H04009_O  
H04010_O  
H04011_O  
H04012_O  
H04013_O  
H04014_O  
H04015_O  
H04016_O  
H04017_O  
H04018_O  
H04019_O  
H04020_O  
H04021_O  
H04022_O  
H04023_O  
H04024_O  
H04025_O  
H04026_O  
H04027_O  
H04028_O  
H04029_O  
H04030_O  
H04031_O  
H04032_O  
H04033_O  
H04034_O  
H04035_O
```

H04036_O
H04037_O
H04038_O
H04039_O
H04040_O
H04041_O
H04042_O
H04043_O
H04044_O
H04045_O
H04046_O
H04047_O
H04048_O
H04049_O
H04050_O
H04051_O
H04052_O
H04053_O
H04054_O
H04055_O
H04056_O
H04057_O
H04058_O
H04059_O
H04060_O
H04061_O
H04062_O
H04063_O
H04064_O
H04065_O
H04066_O
H04067_O
H04068_O
H04069_O
H04070_O
H04071_O
H04072_O
H04073_O
H04074_O
H04075_O
SRHGTF_O
SRHGTI_O
SRWGT_O
H04076_O
H04077_O
H04078_O
H04079_O
H04080_O
H04081_O
H04082_O
H04083_O
H04084_O
H04085_O

SREDA_O
SRRACEAO
SRRACEBO
SRRACECO
SRRACEDO
SRRACEEO
SRAGE_O

/*LLU, 2/1/05;*/
/*

S04R01_O
S04R02_O
S04R03_O
S04R04AO
S04R04BO
S04R04CO
S04R04DO
S04R04EO

S04R05_O
S04R06_O
S04R07_O
S04R08_O
S04R09_O
S04R10_O
S04R11_O
S04R12_O
S04R13_O
S04R14_O
S04R15_O*/

S04V01_O
S04V02_O
S04V04_O
S04V05_O
S04V06_O
S04V07_O

/*LLU, 2/1/05*/

S04G02_O
S04G03_O
S04G04_O
S04G05_O
S04G06_O
S04G07_O
S04G08_O
S04G09_O
S04G10_O
S04G11_O
S04G12_O
S04G13_O
S04G14_O
S04G15_O
S04G16_O
S04G17_O

Q113OE
H04002NA
SRACE_NA

H04077BX
H04078BX
H04079BX
H04080BX
H04081BX
H04082BX
H04083BX
H04084BX

H04077N
H04078N
H04079N
H04080N
H04081N
H04082N
H04083N
H04084N

SRWGTBX
SRWGTN
SRHGTFTN
SRHGTINN
PRRECFLG
SRHGTBXF
SRHGTBXI

);

MERGE SELECTQ(in=hcsdb rename=(flag_fin=dummy CACSMPL=XCACSMPL))
CONVARQ SERVAFF; *CONVARSF; *NO SF8 Variables;
BY MPRID;
if hcsdb;

```
/*MAKE FLAG_FIN IN Q1 CHARACTER*/
FLAG_FIN=PUT(DUMMY,5.);          *LLU 2/9/05;
DROP DUMMY;
```

```
/*CHANGE CACSMPL TO BE NUMERIC*/
CACSMPL = INPUT(XCACSMPL,8.);    *LLU 2/9/05;
DROP XCACSMPL;
```

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_8 HAMISS.
MISS_9 HAMISS.
MISS_TOT HAMISS.
PCM $PCM.
PNLCATCD $PNLCAT.
PNSEXCD $SEXCD.
RACEETHN $RACECD.
SEXSMPL SEX.
SVCSMPL SVCSMPL.
XSEX HASEX.
SERVAREA $SRVAREA.
MPCSMPL MPCSMPL.
D_HEALTH $DHEALTH.
TNEXREG $TNEXREG.
D_FAC $DFAC.

MSM $MSM.

XBMICAT XBMICAT.
ENRID $ENRID.

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 Desposition"
CACSMPL = "Catchment Area"
E1 = "Elig ind for pd=1 (as of 31 July 2000)"
E2 = "Elig ind for pd=2 (as of 30 Sept 2000)"
E3 = "Elig ind for pd=3 (as of 31 Jan 2001)"
E4 = "Elig ind for pd=4 (as of 31 Mar 2001)"
E5 = "Elig ind for pd=5 (as of 31 Aug 2001)"
E6 = "Elig ind for pd=6 (as of 30 Nov 2001)"
E7 = "Elig ind for pd=7 (as of 28 Feb 2002)"
E8 = "Elig ind for pd=8 (as of 31 May 2002)"
E9 = "Elig ind for pd=9 (as of 31 Aug 2002)"
E10 = "Elig ind for pd=10 (as of 30 Nov 2002)"
E11 = "Elig ind for pd=11 (as of 28 Feb 2003)"
E12 = "Elig ind for pd=12 (as of 31 May 2003)"
E13 = "Elig ind for pd=13 (as of 30 Sept 2003)"
E14 = "Elig ind for pd=14 (as of 30 Dec 2003)"
```

```

E15      = "Elig ind for pd=15 (as of 31 Mar 2004)"
E16      = "Elig ind for pd=16 (as of 16 June 2004)"
WEB       = "Web survey indicator"
D_PAR    = "DMIS Parent ID"
D_Health = "Health Service Region"
TNEXREG  = "TNEX Region"
MSM      = 'Multiple Service Market Areas'
;

```

```
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 */
ENBGSMPL   $ 2      /* sampling variable */
MPCSMPL    8      /* sampling variable */
NHFF       8      /* sampling variable */
SERVAREA   $ 2      /* sampling variable */
QUARTER    $ 7      /* 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 */
E1         $ 1      /* sampling variable */
E2         $ 1      /* sampling variable */
E3         $ 1      /* sampling variable */
E4         $ 1      /* sampling variable */
E5         $ 1      /* sampling variable */
E6         $ 1      /* sampling variable */
E7         $ 1      /* sampling variable */
E8         $ 1      /* sampling variable */
E9         $ 1      /* sampling variable */
E10        $ 1      /* sampling variable */
E11        $ 1      /* sampling variable */
E12        $ 1      /* sampling variable */
E13        $ 1      /* sampling variable */
E14        $ 1      /* sampling variable */
E15        $ 1      /* sampling variable */
E16        $ 1      /* sampling variable */
SERVAFF    $ 1      /* sampling variable */
BWT        8      /* sampling variable */

MRTLSTAT   $ 1      /* DEERS variable    */
RACEETHN   $ 1      /* DEERS variable    */
PNSEXCD    $ 1      /* DEERS variable    */
LEGDDSCD   $ 2      /* DEERS variable    */
DAGEQY     $ 3      /* DEERS variable    */
FIELDAGE   $ 3      /* DEERS variable    */
PCM        $ 3      /* 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    */
PNLCATCD   $ 1      /* DEERS variable    */

```

H04001	4	/* questionnaire	*/
H04002A	4	/* questionnaire	*/
H04002C	4	/* questionnaire	*/
H04002F	4	/* questionnaire	*/
H04002G	4	/* questionnaire	*/
H04002H	4	/* questionnaire	*/
H04002I	4	/* questionnaire	*/
H04002J	4	/* questionnaire	*/
H04002K	4	/* questionnaire	*/
H04002L	4	/* questionnaire	*/
H04002M	4	/* questionnaire	*/
H04002N	4	/* questionnaire	*/
H04002O	4	/* questionnaire	*/
H04003	4	/* questionnaire	*/
H04004	4	/* questionnaire	*/
H04005	4	/* questionnaire	*/
H04006	4	/* questionnaire	*/
H04007	4	/* questionnaire	*/
H04008	4	/* questionnaire	*/
H04009	4	/* questionnaire	*/
H04010	4	/* questionnaire	*/
H04011	4	/* questionnaire	*/
H04012	4	/* questionnaire	*/
H04013	4	/* questionnaire	*/
H04014	4	/* questionnaire	*/
H04015	4	/* questionnaire	*/
H04016	4	/* questionnaire	*/
H04017	4	/* questionnaire	*/
H04018	4	/* questionnaire	*/
H04019	4	/* questionnaire	*/
H04020	4	/* questionnaire	*/
H04021	4	/* questionnaire	*/
H04022	4	/* questionnaire	*/
H04023	4	/* questionnaire	*/
H04024	4	/* questionnaire	*/
H04025	4	/* questionnaire	*/
H04026	4	/* questionnaire	*/
H04027	4	/* questionnaire	*/
H04028	4	/* questionnaire	*/
H04029	4	/* questionnaire	*/
H04030	4	/* questionnaire	*/
H04031	4	/* questionnaire	*/
H04032	4	/* questionnaire	*/
H04033	4	/* questionnaire	*/
H04034	4	/* questionnaire	*/
H04035	4	/* questionnaire	*/
H04036	4	/* questionnaire	*/
H04037	4	/* questionnaire	*/
H04038	4	/* questionnaire	*/
H04039	4	/* questionnaire	*/
H04040	4	/* questionnaire	*/
H04041	4	/* questionnaire	*/
H04042	4	/* questionnaire	*/
H04043	4	/* questionnaire	*/
H04044	4	/* questionnaire	*/
H04045	4	/* questionnaire	*/
H04046	4	/* questionnaire	*/
H04047	4	/* questionnaire	*/
H04048	4	/* questionnaire	*/
H04049	4	/* questionnaire	*/
H04050	4	/* questionnaire	*/
H04051	4	/* questionnaire	*/
H04052	4	/* questionnaire	*/
H04053	4	/* questionnaire	*/
H04054	4	/* questionnaire	*/
H04055	4	/* questionnaire	*/
H04056	4	/* questionnaire	*/
H04057	4	/* questionnaire	*/
H04058	4	/* questionnaire	*/
H04059	4	/* questionnaire	*/
H04060	4	/* questionnaire	*/
H04061	4	/* questionnaire	*/
H04062	4	/* questionnaire	*/
H04063	4	/* questionnaire	*/

H04064	4	/* questionnaire	*/
H04065	4	/* questionnaire	*/
H04066	4	/* questionnaire	*/
H04067	4	/* questionnaire	*/
H04068	4	/* questionnaire	*/
H04069	4	/* questionnaire	*/
H04070	4	/* questionnaire	*/
H04071	4	/* questionnaire	*/
H04072	4	/* questionnaire	*/
H04073	4	/* questionnaire	*/
H04074	4	/* questionnaire	*/
H04075	4	/* questionnaire	*/
SRHGTF	4	/* questionnaire	*/
SRHGTI	4	/* questionnaire	*/
SRWGT	4	/* questionnaire	*/
H04076	4	/* questionnaire	*/
H04077	4	/* questionnaire	*/
H04078	4	/* questionnaire	*/
H04079	4	/* questionnaire	*/
H04080	4	/* questionnaire	*/
H04081	4	/* questionnaire	*/
H04082	4	/* questionnaire	*/
H04083	4	/* questionnaire	*/
H04084	4	/* questionnaire	*/
H04085	4	/* questionnaire	*/
SREDA	4	/* questionnaire	*/
SRRACEA	4	/* questionnaire	*/
SRRACEB	4	/* questionnaire	*/
SRRACEC	4	/* questionnaire	*/
SRRACED	4	/* questionnaire	*/
SRRACEE	4	/* questionnaire	*/
SRAGE	4	/* questionnaire	*/
S04G02	4	/* supplemental	*/
S04G03	4	/* supplemental	*/
S04G04	4	/* supplemental	*/
S04G05	4	/* supplemental	*/
S04G06	4	/* supplemental	*/
S04G07	4	/* supplemental	*/
S04G08	4	/* supplemental	*/
S04G09	4	/* supplemental	*/
S04G10	4	/* supplemental	*/
S04G11	4	/* supplemental	*/
S04G12	4	/* supplemental	*/
S04G13	4	/* supplemental	*/
S04G14	4	/* supplemental	*/
S04G15	4	/* supplemental	*/
S04G16	4	/* supplemental	*/
S04G17	4	/* supplemental	*/
S04V01	4	/* supplemental	*/
S04V02	4	/* supplemental	*/
S04V04	4	/* supplemental	*/
S04V05	4	/* supplemental	*/
S04V06	4	/* supplemental	*/
S04V07	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	*/
N1	8	/* CS flag variable	*/
N2A	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	*/
N9	8	/* CS flag variable	*/
N10	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	*/
N18A	8	/* CS flag variable	*/
N18B	8	/* CS flag variable	*/
N18C	8	/* CS flag variable	*/
N18D	8	/* CS flag variable	*/
N18E	8	/* CS flag variable	*/
N18F	8	/* CS flag variable	*/
N18G	8	/* CS flag variable	*/
N19	8	/* CS flag variable	*/
N20A	8	/* CS flag variable	*/
N20B	8	/* CS flag variable	*/
N20C	8	/* CS flag variable	*/
N21	8	/* CS flag variable	*/
N22	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_8	8	/* CS Count	*/
MISS_9	8	/* CS Count	*/
MISS_TOT	8	/* CS Count	*/
XENRLMT	8	/* constructed	*/
XENR_PCM	8	/* constructed	*/
XINS_COV	8	/* constructed	*/
/* XQENROLL	8 */	/* constructed	*/
XREGION	3	/* constructed	*/
XTNEXREG	3	/* constructed	*/
CONUS	3	/* constructed	*/
OUTCATCH	8	/* constructed	*/
XSEXA	8	/* constructed	*/
XBMI	8	/* constructed	*/
XBMICAT	3	/* constructed	*/
XBNFGRP	8	/* constructed	*/
KDIENRL	8	/* constructed	*/
KMILOFFC	8	/* constructed	*/
KCIVOFFC	8	/* constructed	*/
KBGPRB1	8	/* constructed	*/
KBGPRB2	8	/* constructed	*/
KMILOPQY	8	/* constructed	*/
KCIVOPQY	8	/* constructed	*/
/* KCIVINS	8 */	/* constructed	*/
/* KPRSCPTN	8 */	/* constructed	*/
KBRSTCR	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_PROS	8	/* constructed	*/
/*HP_GP	8 */	/* constructed	*/
HP_BRST	8	/* constructed	*/
HP_CHOL	8	/* constructed	*/
HP_SMOKE	8	/* constructed	*/
HP_SMOKH	8	/* constructed	*/
HP_CESS	8	/* constructed	*/
/* SF8PF	8 */	/* constructed	*/
/* SF8RP	8 */	/* constructed	*/
/* SF8BP	8 */	/* constructed	*/

```
/*      SF8GH      8  */      /* constructed      */
/*      SF8VT      8  */      /* constructed      */
/*      SF8SF      8  */      /* constructed      */
/*      SF8RE      8  */      /* constructed      */
/*      SF8MH      8  */      /* constructed      */
/*      PCS_8      8  */      /* constructed      */
/*      MCS_8      8  */      /* constructed      */
/*      KMID_H     8  */      /* constructed      */
/*      KMID_MH    8  */      /* constructed      */

;

SET MERGEQ;

RUN;

PROC CONTENTS DATA=OUT.MERGEQ POSITION;
  title "HCSDB for Q4 2004, ordered by variable type";
RUN;
```

G.5.B Q4_2004\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.SD2 */
/* ... \DATA\AFINAL\SAMPLA02.SD2 */
/* OUTPUT: ... \DATA\AFINAL\SERVAFF.SD2 */
*****/

```

```
LIBNAME DATA V612 '..\..\DATA\AFINAL';
```

```

/* Create new DMIS merge variable */
/* First use ENRID, then ULOCDMIS, then DCATCH */

```

```

DATA SAMPLA02(KEEP=DMIS_ID ENRID MSM MPRID);
SET DATA.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(ENRID);
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=DATA.S200404 OUT=S200404; /*LLU 2/1/05*/
  BY DMIS_ID;
RUN;

DATA DATA.SERVAFF(RENAME=(FACILITY=SERVAFF));
  MERGE SAMPLA02(IN=IN1)
        S200404;
  BY DMIS_ID;
  IF IN1;
RUN;

PROC PRINT DATA=DATA.SERVAFF(OBS=200);
RUN;

PROC CONTENTS DATA=DATA.SERVAFF; RUN;
```

G.6.A Q4_2004\PROGRAMS\WEIGHTING\ADJWT.SAS - Calculate Adjusted Weights - Quarterly.

```

*****
*** Project: DoD Quarterly weighting - Nonresponse adjustments
***
*** Program: \DOD\Q4_2004\programs\weighting\adjwt.sas
***
*** TASK: 2004 QUARTERLY DOD HEALTH CARE SURVEY
*** PURPOSE: CALCULATE THE FINAL WEIGHT
***
*** WRITTEN: 11/09/1999 BY KEITH RATHBUN
*** Updated: 1) 12/29/2003 by Haixia Xu for 2003 Q4 weighting
***           2) 04/12/2004 by Haixia Xu for 2004 Q1 weighting:
***           Add the univariate of weight by tnexreg. Add the design effect for tnexreg.
***           3) 06/09/2004 by Haixia Xu for 2004 Q2 weighting.
***           4) 09/13/2004 by Haixia Xu for 2004 q3 weighing.
***           5) 11/09/2004 by Haixia Xu for 2004 q3 weighting
***           - Changed the eligibility unknown weighting step due to the different coding of
fnstatus
***           - Added the construction code of xregion
***           6) 02/01/2005 by Xiaojing Lin for 2004 q4 weighting
***           - Include ENRID from extract.sd2 to correct the wrong assignment for ENRID='6919'
to '9904',
***           change adj_cell to reflect correct geocell.
*** INPUTS: selectq.SD2
*** OUTPUTS: adjwt.SD2
*****
*
LIBNAME IN_f v6      "..\..\Data\Afinal" /* framea.sd2, sampla01.sd2**/* extract.sd2, TMA.sd2 for
Q4 2004*/;
LIBNAME IN v6       "..\..\Data\Afinal"; /* selectq.sd2 */;
LIBNAME OUT v6      "..\..\Data\Afinal"; /* adjwt.sd2*/ /* framea_n.sd2 for Q4 2004*/;

OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=1 NOCENTER mprint mlogic symbolgen ;

%include "design_effects_unequal_weights.sas" /source2;

title1 'DoD Quarterly Survey of Health Beneficiaries';
title2 'Calculate the Final Weights';
title3 'Program: adjwt.SAS ';

*****
* Calculate final weight based on user-specified domains.
*****;

*** merge ebg_com back into selectq. ***;
data selectq;
set in.selectq;
format _all_;
run;

data sampla01 (keep= mprid ebg_com);
set in_f.sampla01;
format _all_;
run;

proc sort data=selectq;
by mprid;
run;

proc sort data=sampla01;
by mprid;
run;

*****;
/*Added on 01/27/2005 by Xiaojing after Nancy's issue for Q4 2004:
Include ENRID into selectq.sd2 which will be used in the
correction of some incorrect assignment for ENRID='6919' to '9904'*/
*****;
data extract (keep= mprid enrid dcatch pcm);
set in_f.extract;
format _all_;
run;

```

```

proc sort data=extract;
by mprid;
run;
/*End of added code to include ENRID*/

data out.merged;
/*merge selectq sampla01(in=a) ;/*before modificaiton;
merge selectq extract sampla01(in=a) ;/*modified on 01/27/2005 to include ENRID*/
by mprid;
if a;
format _all_;
run;

***xregion was added on 11/08/2004, since selectq.sd2 does not contain xregion.
This code of xregion is from F:\DOD\Q3_2004\Programs\Construct\consvar0.sas;
data OUT.merged;
set OUT.merged;
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,
                  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, 0248, 5205, 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;
IF D_PAR = '0902' THEN XREGION=16;
IF XREGION = 0 THEN XREGION = .;
run;

%MACRO PROCESS(DOMAIN,CAC, FORM,INPT);

*** Initial Information. ***;

title5 'FRAMEA.SD2 Count';

proc freq data=in_f.framea;

```

```

table ebg_com / list missing;
run;

title5 'merged.SD2 Counts Using BWT as the Weight';

proc freq data=out.&inpt.;
table ebg_com fnstatus / list missing;
weight bwt;
run;

title5 'merged.SD2 Counts';

proc freq data=out.&inpt.;
table ebg_com fnstatus web*fnstatus/ list missing;
run;

*** Create the adjustment cells for nonresponse. ***;

data &inpt. ;
/*set out.&inpt.( keep = MPRID FNSTATUS BWT ebg_com xregion TNEXREG stratum &cac.
cacsmp);*/before modification;
set out.&inpt.( keep = MPRID FNSTATUS BWT ebg_com xregion TNEXREG stratum &cac. enrid
dcatch);*modified on 01/27/2005;

*****;
/*Added on 01/27/2005 by Xiaojing After Nancy's issue for Q4 2004:
beneficiaries assigned to 6919 incorrectly put in 9904, this
code changes adj_cell to reflect correct geocell in the sample*/
*****;
adj_cell=stratum; /*moved from cac_coll.inc on Feb/01/05*/
N_CACSMP=CACSMP; /*Create new cacsmp to reflect the correction*/
If ENRID in (6917,6918,6919) then
do;
If substr(adj_cell,2,4) in (9904) then
do;
xx=adj_cell;
if dcatch in (0938,0948,0973) then/*these are NONCATCH dcatch*/
do;
substr(xx,2,4)=9903;
adj_cell=xx;
end;
else
if dcatch in (0999) then
do;/*this is correct, do not do anything*/
end;
else
do;
substr(xx,2,4)=dcatch;
adj_cell=xx;
end;
end;
N_CACSMP=substr(adj_cell,2,4);/*reflect the correction*/
end;
drop xx;
/*End of added code*/

%include "cac_coll.inc" /source2;
run;

PROC SORT DATA=&inpt. OUT=&INPT.;
BY &DOMAIN.;
RUN;

*****;
/*Added on 01/28/2005 by Xiaojing after Nancy's issue for Q4 2004:
This output table for Quality Assurance(QA) review*/
*****;
title5 'Check sample correction for enrid=6919 with cacsmp=9904';
proc print data=&inpt.;
where enrid in ('6917','6918','6919') and substr(stratum,2,4) in ('9904');
var enrid &cac. n_cacsmp stratum dcatch &domain.;
run;
/*End of added code*/

```

```

*****
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
*****;
Data cellsal (keep=sumbwt sumg1-sumg4 a1 cellcnt cntg1-cntg4 &domain.)
/*mpridsal (keep=mprid fnstatus bwt &domain. ebg_com &cac.)before modification*/
mpridsal (keep=mprid fnstatus bwt &domain. ebg_com &cac. n_cacsmp)/*modified on 02/08/2005*/
;
SET &INPT.;
BY &DOMAIN;

IF FIRST.&DOMAIN. THEN DO;
  CELLCNT = 0;
  cntg1 = 0;
  cntg2 = 0;
  cntg3 = 0;
  cntg4 = 0;
  SUMBWT = 0.0;
  SUMG1 = 0.0;
  SUMG2 = 0.0;
  SUMG3 = 0.0;
  SUMG4 = 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;

*****
* Accumulate group 4 weight sum
*****;

ELSE IF FNSTATUS = 32 THEN
  do;
    SUMG4 + BWT;
    cntg4 + 1;
  end;

RETAIN SUMBWT SUMG1-SUMG4 A1 CELLCNT cntg1-cntg4 MPRID;

```

```

IF LAST.&DOMAIN. THEN DO;
  A1 = (SUMG1 + SUMG2 + SUMG3)/(SUMG1 + SUMG2);
  OUTPUT CELLSA1;
END;

OUTPUT MPRIDSAL;

RUN;

title5 'Check for CELLSA1 Data Set';

proc print data=cellsal;
var &domain. cntg1-cntg4 cellcnt sumg1-sumg4 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 cntg4 sumbwt sumg1 sumg2 sumg3 sumg4;
run;

proc print data=cellsal;
where ( a1 > 7 ) or ( cntg1 + cntg2 < 15 );
var &domain. cntg1-cntg4 cellcnt sumg1-sumg4 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 cntg4 sumbwt sumg1 sumg2 sumg3 sumg4;
run;

proc univariate data=cellsal normal ;
var a1;
run;

proc sort data=mpridsal;
by &domain.;
run;

proc sort data=cellsal;
by &domain.;
run;

data adj_one;
merge mpridsal cellsal;
by &domain.;
if fnstatus in (11,12,20,31) then adj1 = a1;
  else if fnstatus = 32 then adj1 = 1;
  else adj1 = 0;
adj_wt1 = adj1 * bwt;
run;

title5 'Checks for ADJ_ONE Data Set';

proc freq data=adj_one;
table &domain.*fnstatus*adj1/ list missing;
run;

proc means data=adj_one n sum NOPRINT;
class fnstatus;
var adj_wt1;
output out=print sum=sum;
run;

Proc print data=print;
sum _freq_ sum;
where _type_=1;
run;

proc means data=adj_one n sum NOPRINT;
class ebg_com;
var adj_wt1;
output out=print sum=sum;
run;

Proc print data=print;
sum _freq_ sum;
where _type_=1;
run;

*****
* Calculate adjustment factor A2 for each cell.
* This is the Nonresponse adjustment and creates the final weight (wrwt).

```

```

*****;

proc sort data=adj_one;
by &domain.;
run;

DATA CELLSA2 (KEEP= &domain. NUMER DENOM numercnt denomcnt A2);
  set adj_one ;
  BY &domain.;

  IF FIRST.&domain. 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
  do;
    NUMER + adj_wt1;
    numercnt + 1;
  end;

  IF FNSTATUS = 11 THEN
  do;
    DENOM + adj_wt1;
    denomcnt + 1;
  end;

  IF LAST.&domain. THEN DO;
    A2 = NUMER/DENOM;
    OUTPUT CELLSA2;
  END;

RUN;

title5 'Check for CELLSA2 Data Set';

proc print data=cellsa2;
var &domain. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

proc print data=cellsa2;
where ( a2 > 7 ) or ( denomcnt < 15 );
var &domain. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

proc univariate data=cellsa2 normal ;
var a2;
run;

proc sort data=adj_one;
by &domain.;
run;

proc sort data=cellsa2;
by &domain.;
run;

data adj_two;
merge adj_one cellsa2;
by &domain.;
if fnstatus = 11 then adj2 = a2;
else if fnstatus in (31, 32) then adj2 = 1;
else adj2 = 0;
adjwt = adj2 * adj_wt1;
label adjwt = 'Adjusted Weight';
*KEEP MPRID fnstatus adj1 adj2 adjwt &domain. ebg_com ; * before the modification;

```

```

*KEEP MPRID fnstatus adj1 adj2 adjwt &domain. ebg_com a1 a2 adj_wt1 ; *modified on 12/29/2003;
KEEP MPRID fnstatus adj1 adj2 adjwt &domain. ebg_com a1 a2 adj_wt1 n_cacsmp; *modified on
02/08/2005;

run;

title5 'Check for ADJ_TWO Data Set';

proc freq data=adj_two;
table &domain.*fnstatus*adj2 / list missing;
run;

proc means data=adj_two 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;

proc means data=adj_two n sum NOPRINT;
class ebg_com;
var adjwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

data adj_two;
set adj_two(drop=fnstatus ebg_com );
run;

*****
* Sort the original data
*****;

PROC SORT DATA=&INPT. OUT=&INPT.;
BY MPRID;
RUN;

*****
* Sort the ADJ_TWO data set
*****;

PROC SORT DATA=adj_two;
BY MPRID;
RUN;

*****
* Append final weight variable (adjwt)
*****;
DATA out.adjwt;
MERGE adj_two &INPT.;
BY MPRID;
RUN;

title5 'Sum of Adjwt By Final Status';

proc means data=out.adjwt 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;

```

```

title5 'Sum of Adjwt By ADJ_CELL';
proc freq data=OUT.adjwt noprint;
tables &domain./missing list out=adjwtCNT(rename=(count=adjwtCNT) drop=percent);
weight adjwt;
run;

*****;
/*Added on 02/01/2005 by Xiaojing after Nancy's issue for Q4 2004:
run include file framea.inc for framea.sd2 to correct
the wrong assignment for enrid='6919' with cacempl=9904'
Include enrid, dcatch into framea.sd2 which will be used
in the include file*/
*****;
data frame;set in_f.framea(drop=d_fac d_health d_instal d_par geocell);run;

proc sort data=frame;
by mprid;
run;

data frame;
merge extract frame(in=a);
by mprid;
if a;
format _all_;
run;

*Create the adj_cell variable for the frame before correction of '6919';
data frame;
set frame;
adj_cell=stratum; /*moved from cac_coll.inc on Feb/01/05*/
%include "cac_coll.inc"/source2;
run;

/*Get frameCNT_B(before correction),it will be compared with after correction*/
proc freq data=frame noprint;
tables &domain./missing list out=frameCNT_B(rename=(count=frameCNT_B)
keep=&domain. count);
run;

%let tma=tma; /*used in the include file*/
%let outdata=framea; /*used in the include file*/

data &TMA. (keep = geocell d_par d_fac d_instal d_health d_dmis);
set in_f.&TMA.;
rename facilit1=d_fac installa=d_instal dmis_fac=d_dmis;
length d_par $4.;
d_par = DMIS_PAR;
length geocell $4.;
geocell = DMIS_ID;
length d_health $2.;
d_health = HEALTH_S;
run;

proc sort nodupkey data=&TMA.;
by geocell;
run;

%include "frame.inc"/source2;
/*End of added code of correction for frame for Q4 2004*/

/*Create the adj_cell variable with the correction for Q4 2004*/
data framea;
/*set in_f.framea( keep =stratum );*/ *before modification;
set &outdata.; *modified on Feb/01/2005;
adj_cell=stratum; /*moved from cac_coll.inc on Feb/01/05*/

/*added on Feb/01/05, correction for enrid=6919 for Q4 2004*/
if enrid in (6919) then
do;
substr(adj_cell,2,4)=adj_cac;
end;
/*end of added code*/

```

```

%include "cac_coll.inc" /source2;
run;

/*get the new framea_n after the correction*/
data out.framea_n;
set &outdata.;
run;

proc freq data=framea noprint;
tables &domain./missing list out=frameCNT(rename=(count=frameCNT)
      keep=&domain. count);
run;

proc sort data=frameCNT_B ;
by &domain.;
run;

proc sort data=adjwtCNT ;
by &domain.;
run;

proc sort data=frameCNT ;
by &domain.;
run;

/*Added by Xiaojing on Feb/01/05 for Q4 2004
check original frameCNT_B and new frameCNT*/
data chk_cnt;merge frameCNT_B(in=a) frameCNT(in=b);
by &domain.;
diff=frameCNT_B-frameCNT;
if a and b then output chk_cnt;
run;

title5 'Checks for frame count before and after correction of 6919';
proc print data=chk_cnt noobs;
sum frameCNT_B frameCNT diff;
run;

title5 'Checks for enrid of 6919 correction in frame';
proc freq data=framea;
where enrid='6919';
table adj_cell*stratum*enrid*dcatch*d_fac*d_health/missing list;
run;
/*End of added codes for checking*/

data print only1 only2 problem;
merge adjwtCNT(in=A) frameCNT(in=B);
by &domain.;
diff=adjwtCNT-frameCNT;
if A and B then output print;
else if A and NOT B then output only1;
else if B and NOT A then output only2;
else output problem;
run;

title5 'Checks for adjwtCNT and new frameCNT';
Proc print data=print noobs;
sum adjwtCNT frameCNT diff;
run;

proc univariate data=print;
var diff;
run;

proc sort data=out.adjwt out=chk;
by &domain. fnstatus;
run;

data sub_chk;
set chk(keep = &cac. stratum &domain. fnstatus bwt adj1 adj2 adjwt);
by &domain. 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;

title5 'Checks for Adjwt Dataset';

proc print data=sub_chk noobs;
var &domain. fnstatus bwt adj1 adj2 prodadjs adjwt cellcnt sumadjwt;
sum cellcnt sumadjwt;
run;

proc univariate data=sub_chk normal ;
where fnstatus=11;
var prodadjs;
run;

/* Removed on 12/24/2003 after Amang's QA;
proc univariate data=sub_chk normal ;
where fnstatus=11;
var adjwt;
run;
*/

title5 "Individual Level Adjwt";
proc univariate data=out.adjwt normal ;
where fnstatus=11;
var adjwt;
run;

*****
/**Added on 12/29/2003 after Amang's QA**/
Find the individuals with the largest adjwt;
*****;

title5 " Checking the individuals with the largest adjwt";
proc sort data=out.adjwt out=sorted;
by descending adjwt;
run;

data sorted;
set sorted;
prodadjs=a1*a2;
run;

proc print data=sorted (obs=200);
var stratum adj_cell BWT fnstatus a1 adj1 adj_wt1 a2 adj2 adjwt prodadjs;
run;

data OUT.adjwt;
set OUT.adjwt;
drop a1 a2 adj_wt1;
run;
**End of the modification**;

***Modified on 9/16/2004 for Q3, 2004 weighting;
*xregion;
proc sort data=out.adjwt;
by xregion;
run;

title5 "Distribution of weights by region";
proc means data=out.adjwt noprint ;
where fnstatus=11;
var adjwt;
by xregion;

```

```

output out=out_xregion(drop=_type_ _freq_) n=n mean=mean std=stddev min=min max=max ;
run;

proc print data=out_xregion;
run;

*tnexreg;
proc sort data=out.adjwt;
by tnexreg;
run;

title5 "Distribution of weights by tnexreg";
proc means data=out.adjwt 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 ;
run;

proc print data=out_tnex;
sum n;
run;
**End of modification for q3, 2004;

*****;
*** Calculate the Design Effects ***;
*****;

*create dataset of completes only;
data adjwt_fnl;
set out.adjwt;
where fnstatus=11;
adj_cac=substr(adj_cell,2,4);/*Added on Feb/02/05 to create the new variable adj_cac for deff*/
run;

*Remove xregions of missing from design effects;
data adjwt_reg;
set adjwt_fnl;
where xregion~=. ;
run;

%design_effects_unequal_weights ( adjwt_fnl, &cac., adjwt, deff_overall, deff_cac );
%design_effects_unequal_weights ( adjwt_fnl, adj_cac, adjwt, deff_overall, deff_cac2 ); *Added in
Q4,2004;
%design_effects_unequal_weights ( adjwt_fnl, ebg_com, adjwt, deff_overall, deff_ebg );
/*%design_effects_unequal_weights ( adjwt_fnl, enbgsmpl, adjwt, deff_overall, deff_enb );*/
%design_effects_unequal_weights ( adjwt_reg, xregion, adjwt, deff_overall, deff_reg );
%design_effects_unequal_weights ( adjwt_fnl, tnexreg, adjwt, deff_overall, deff_tnexreg ); *Add in
Q1,2004;

title5 'Design Effects Overall';
proc print data = deff_overall;
run;

*** For Catchment Area ***;

title5 "Design Effects for cacsmp1";
proc print data= deff_cac;
run;

*****;
/*always need to check large deffs, so sort this dataset by
deffs to find large deffs. Added on 01/27/2005 by Xiaojing*/
*****;
proc sort data=deff_cac;
by design_effect;
run;

title5 "Design Effects for cacsmp1 sorted by deff.";
proc print data= deff_cac;
run;
/*End of added code*/

```

```

*****;
/*Added on 01/27/2005 by Xiaojing
to see the deff for adj_cac after the correction*/
*****;
*** For Catchment Area ***;
title5 "Design Effects for adj_cac";
proc print data= deff_cac2;
run;

proc sort data=deff_cac2;
  by design_effect;
run;

title5 "Design Effects for adj_cac sorted by deff.";
proc print data= deff_cac2;
run;
/*End of added code*/

*** For Enrollee/Beneficiary Groups ***;

title5 'Design Effects for ebg_com';
proc print data= deff_ebg;
run;

*** For XREGION Groups ***;

title5 'Design Effects for XREGION';
proc print data= deff_reg;
run;

*** For TNEXREG Groups ***;

title5 'Design Effects for TNEXREG';
proc print data= deff_tnexreg;
run;

data OUT.adjwt;
set OUT.adjwt;
drop xregion;
run;

title5 "Contents of OUT.adjwt";
proc contents data=OUT.adjwt;
run;

*****
* Calculate final weight based on user-specified parameters.
*****;
%MEND PROCESS;
%PROCESS(adj_cell,cacsmp1,A,merged);
RUN;

```

G.6.B Q4_2004\PROGRAMS\WEIGHTING\CAC_COLL.INC - Collapse Geographic Areas.

```

*****
*** Project:      2004 Health Care Survey of DoD Beneficiaries - Annual Adult Dataset
*** Purpose:     Geographic collapsements for 2004
*** Date:        June 20, 2003
*** Programmer:  Esther M Friedman
*** Updated:     1)June,9,2004 by Haixia Xu for 2004 Q2 weighting
***             2)September,13,2004 by Haixia Xu for 2004 Q3 weighting
***             3)January, 25,2005 by Xiaojing Lin for 2004 Q4 weighting
*** Program:    cac_coll.inc -- include file used in adjwt.sas
*** Inputs:     selectq
***
*****;

/*adj_cell=stratum;*/move this statement to adjwt.sas, modified on Feb/01/05;

*****;
*****Additional Collapsement For Small Cells*****;
*****;
*****;

If substr(adj_cell,2,4) in
(0003,0005,0006,0009,0014,0024,0028,0030,0032,0033,0037,0038,0039,0042,0045,0047,0048,0049,
0052,0053,0055,0056,0057,0060,0061,0064,0066,0067,0073,0075,0078,0079,0086,0089,0092,0093,0095,0098
,0101,0103,0104,0105,0108,
0109,0110,0112,0113,0117,0120,0121,0125,0126,0127,0131,0606,0607,0609,0612,0616,0617,0620,0621,0622
,0633,0638,0640,0805,9990)
and substr(adj_cell,6,2) in ('02','03')
then do; x=adj_cell;
substr(x,6,2)='02';
put x;
adj_cell = x;
end;

else If substr(adj_cell,2,4) in
(0001,0005,0006,0008,0010,0015,0019,0026,0029,0035,0036,0037,0046,0049,0053,0057,0058,0059,0060,006
2,0064,0066,0069,
0073,0075,0083,0084,0090,0092,0093,0096,0098,0104,0112,0113,0120,0121,0122,0125,0126,0127,0128,0131
,0306,0356,0606,0607,0609,0612,0616,0617,0620,
0621,0622,0633,0638,0640,0805,9914,
0280,0032,0109,0117,0004,0118,0321,0326,0117,0118,0129,0287)
and substr(adj_cell,6,2) in ('06')
then do; y=adj_cell;
substr(y,6,2)='05';
put y;
adj_cell = y;
end;

If substr(adj_cell,2,4) in
(0001,0005,0008,0010,0015,0019,0024,0026,0030,0035,0036,0046,0052,0056,0058,0059,0062,0069,0083,008
4,
0086,0090,0091,0092,0093,0096,0104,0108,0112,0122,0128,0131,0280,0287,0306,0326,0330,0356,0606,0607
,0609,0612,0616,0617,0620,
0621,0622,0633,0638,0640,0805,0806,0713,0991,0999, 0280, 0004,0118,0321,0326,0118,0129,0287)
and substr(adj_cell,6,2) in ('04','05')
then do; z=adj_cell;
substr(z,6,2)='04';
put z;
adj_cell = z;
end;

If substr(adj_cell,2,4) in
(0330,0607,0609,0621,0622,0638,0640,0806,0713,0014,0612,0617,0622,0805,0806,7139,0612,0617,9990,080
4)
and substr(adj_cell,6,2) in ('04','02')
then do; z2=adj_cell;
substr(z2,6,2)='02';

```

```

        *put z2;
        adj_cell = z2;
end;

*****;
*   ADDED q1 2004 TO COLLAPSE SMALL CELLS   ;
*****;

If adj_cell='0013102' then adj_cell='0013104';

If adj_cell='0060602' then adj_cell='0060604';

if adj_cell='0062101' then adj_cell='0062201';
if adj_cell='0062102' then adj_cell='0062202';

if adj_cell='0063304' then adj_cell='0063302';

If adj_cell='0063801' then adj_cell='0061201';
If adj_cell='0063802' then adj_cell='0061202';

If adj_cell='0990403' then adj_cell='0990402';
If adj_cell='0990401' then adj_cell='0990402';

*****;
*   ADDED q2 2004 TO COLLAPSE SMALL CELLS   ;
*****;

if adj_cell='0000502' then adj_cell='0000504';
if adj_cell='0990402' then adj_cell='0990405 ' ;

*****;
*   ADDED q3 2004 TO COLLAPSE SMALL CELLS   ;
*****;

if adj_cell='0000802' then adj_cell='0000804';
if adj_cell='0062002' then adj_cell='0062004';
if adj_cell='0002802' then adj_cell='0002804';
if adj_cell='0006402' then adj_cell='0006404';
if adj_cell='0009102' then adj_cell='0009103';
if adj_cell='0011304' then adj_cell='0011305';
if adj_cell='0032602' then adj_cell='0032604';

*****;
*   ADDED q4 2004 TO COLLAPSE SMALL CELLS   ;
*****;

if adj_cell='0002903' then adj_cell='0002902';
if adj_cell='0003202' then adj_cell='0003204';
if adj_cell='0004702' then adj_cell='0004704';
if adj_cell='0004705' then adj_cell='0004704';
if adj_cell='0004805' then adj_cell='0004804';
if adj_cell='0007502' then adj_cell='0007504';
if adj_cell='0008905' then adj_cell='0008904';
if adj_cell='0009202' then adj_cell='0009204';
if adj_cell='0011702' then adj_cell='0011704';
if adj_cell='0003001' then adj_cell='0002901';
if adj_cell='0003002' then adj_cell='0002902';
if adj_cell='0003004' then adj_cell='0002904';
if adj_cell='0003006' then adj_cell='0002905';

drop x y z z2;
run;

```

G.6.C Q4_2004\PROGRAMS\WEIGHTING\FRAME.INC - Include file used in adjwt.sas.

```

*****
***
*** Project:      Health Care Survey of DoD Beneficiaries - Quarterly/Annual Adult Dataset
*** Program:     Frame.inc -- include file used in adjwt.sas and cacsmp1.sas
*** Purpose:     Geographic collapsements from q4 framea to be run on all quarters
***
*** Modified:    1) 01/07/2003 by Esther M Friedman
***              2) 01/15/2003 by Keith Rathbun: Moved collapsement parts of the
***              CACSMPL.SAS program into this include file.
***              3) 01/28/03 by Esther Friedman: additional collapsements for q2 2003
*** Notes:
*** 1) Com_geo = Cacsmp1
*** 2) This include file was originally used in adjwt.sas. It was adapted with macro
***    to accomodate the reprocessing of the 2000.
*** 3) Beginning with q2 2003, this include file has been run in framea.sas
*****
*****;

DATA FRAME;
  SET FRAME;
  if pcm='MTF' then do;
    if ('1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or
      ('6991' <= enrid <= '6994') or ('6501' <=enrid <='6512') or
      ('7166' <= enrid <= '7195') or ( '6700' <= enrid <= '6881' )
      then geocell=dcatch; *administrative assignment 1976-1980 added q4 2002--6700-6881 added
q1 2004*;
    else if enrid = '6919' then geocell = dcatch; **Managed care contractor;
    else if ('3031' <= enrid <= '3057')
      then geocell = dcatch; ***On the Ship***;
    else if enrid in ('0002', '5208', '0250', '0449', '0626', '0012') /* '0626' added q2 2003,
0012 added q4 2003*/
      then geocell = dcatch; ***Inactive***;
    *****;
    else if ('0190' <= enrid <='0199') then geocell = dcatch;**BYDON;
    *****;

    *****;
    else if enrid in ('4919', '6138', '6691') then geocell=dcatch;

    * Above was added by Haixia on 07/13/04 for Q4, 2004. Remember to remove this next quarter!!!
    Since there are three records in frame, but not in TMA in terms of geocell,
    we hard-code geocell for those three records as dcatch.
    Those three records have geocell in ('4919', '6138', '6691') and PCM='MTF' ;

    *****;

    else geocell = enrid;
  end;
  else geocell=dcatch;
RUN;

/* commented out 01/23/03 by emf, since we want ALL IDS
proc sort data=frame;
  by mprid;
run;

data frame;
  merge frame(in=in1) &idfile(in=in2);
  by mprid;
  if in1 and in2; *Keep only eligible respondents;
run; */

proc sort data=frame;
  by geocell;
run;

data frame2 fr_only fy_only; /* fr_only fy_only added by emf 01/23/03 to check nonmerging cacsmp1s
*/;
  merge frame (in=infr) &TMA (in=infy) /* TMA spreadsheet changed to Macro Variable by emf
1/23/03*/;

```

```

    by geocell;
/*   if a; */;
/* Code below added 01/23/03 by emf */;
if infr=1 and infy=1 then
    output frame2;
else if infr=1 and infy=0 then
    output fr_only;
else if infr=0 and infy=1 then
    output fy_only;
run;

data &outdata /*(keep=mprid cacempl)commented out by emf 01/23/03 */ ;
set frame2;
*****;
com_geo=geocell; **BY DON**;
*****;
if pcm='MTF' then do;
    if ( '1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or ( '6991' <= enrid <=
'6994' ) or ( '6501' <=enrid <='6512' ) or ( '7166' <= enrid <= '7195' )
        or ( '6700' <= enrid <= '6881' )
        then com_geo = geocell; ***Administrative assignment--1976-1980 added q4 2002***;
    else if ( '3031' <= enrid <= '3057' )
        then com_geo = geocell; ***On board ship***;
    else if enrid = '6919' then com_geo = geocell; **Managed care contractor;
    else if enrid in ( '0002', '5208', '0250', '0449', '0626', '0012' ) /* '0626' added q2 2003,
0012 added q4 2003*/
        then com_geo = geocell; ***Inactive***;
    ***Clinics large enough-stand on their own***;
    ***else if enrid in ( '7293', '0252', '0534', '7286', '7294', '0511', '1592',
'7236', '6201', '0378', '0387', '0508' )
        then com_geo = geocell; ***By Don;
    else com_geo = d_par;
end;

*****;
*** Collapsing small areas with nearest facility ***;
*****;
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' ) then com_geo='0014';
else if com_geo in ( '0018', '0248' ) then com_geo='0019';
**else if com_geo in ( '0034', '0100' ) then com_geo='0035';
else if com_geo in ( '0034', '0035', '0100' ) then com_geo='6223'; *changed emf q1 2004;
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 ( '7043' ) then com_geo='0052';
else if com_geo in ( '0076' ) then com_geo='0058';
else if com_geo in ( '0338' ) then com_geo='0059';
else if com_geo in ( '0423' ) then com_geo='0064';
else if com_geo in ( '0068', '0413' ) then com_geo='0066';
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 ( '0085' ) then com_geo='0083';
else if com_geo in ( '0430', '0335' ) then com_geo='0089';
else if com_geo in ( '0093', '0094' ) then com_geo='0096';
else if com_geo in ( '0097' ) then com_geo='0098';
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' ) 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' ) then com_geo='0120';
else if com_geo in ( '0122' ) then com_geo='0121';
else if com_geo in ( '0431', '0434', '0395' ) 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' ) then com_geo='0129';
else if com_geo in ( '0310', '0425', '0426' ) then com_geo='0321';
else if com_geo in ( '0428' ) then com_geo='0326';

```

```

else if com_geo in ('0808') then com_geo='0609';
else if com_geo in ('0615','7042','5197') then com_geo='0616';
else if com_geo in ('0618','0623','0629',
'0624','0635','0825') then com_geo='0617';
else if com_geo in ('0802') then com_geo='0620';
else if com_geo in ('8931') then com_geo='0633';
else if com_geo in ('0637') then com_geo='0638';
else if com_geo in ('0610','0639') then com_geo='0640';
*****;
*BY DON; else if com_geo = '0041' then com_geo='0045';
*BY DON; else if com_geo = '0213' then com_geo='0019';
*BY DON; else if com_geo = '0235' then com_geo='0014';
*****;
select (com_geo);
  when ('0081') com_geo= '0086'; * By emf added q1 2003;
  **when ('0252') com_geo= '0033'; *By Don;
  **when ('0378') com_geo= '0124'; *By Don;
  **when ('0387') com_geo= '0124'; *By Don;
  **when ('0508') com_geo= '0124'; *By Don;
  **when ('0511') com_geo= '0103'; *By Don;
  **when ('0534') com_geo= '0052'; *By Don;
  when ('1587') com_geo= '0109';
  **when ('1592') com_geo= '0110'; *By Don;
  when ('1646') com_geo= '0125';
  **when ('6201') com_geo= '0123'; *By Don;
  when ('7143') com_geo= '0089';
  **when ('7236') com_geo= '0110'; *By Don;
  **when ('7286') com_geo= '0089'; *By Don;
  **when ('7293') com_geo= '0032'; *By Don;
  **when ('7294') com_geo= '0089'; *By Don;
  when ('0427') com_geo= '0056'; * By emf added q3 2003;
  when ('5196') com_geo= '0086'; * By emf added q3 2003;
  when ('8982') com_geo= '0806'; * By emf added q3 2003;
  when ('7046') com_geo= '0029'; * By emf added q4 2003;
  when ('0616') com_geo='0620'; * By Haixia added q3 2004;

  otherwise;
end;

*** added on 01/27/2004 by Haixia Xu to collapse small cells
for the facility type of TGRO into out of catchment area;
*if d_fac='NONCAT' then do; *before;
  if d_fac='NONCAT' or d_fac='TGRO' or d_fac="TPR" then do; *after;
    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, 18, 19;

  *** 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';

  rename com_geo = adj_cac;
RUN;

```

G.6.D Q4_2004\PROGRAMS\WEIGHTING\REPWT.SAS - Calculate Replicated Weights - Quarterly.

```

*****
* PROGRAM: \DOD\Q4_2004\Programs\Weighting\repwt.SAS
* TASK: 2004 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE REPLICATE WEIGHTS FOR DOD SURVEY.
* WRITTEN: 12/30/1999 BY KEITH RATHBUN
* Updated: 1)12/29/2003 By Haixia Xu
*          2)04/12/2004 by Haixia Xu for Q1, 2004 weighting
*          3)06/10/2004 by Haixia Xu for Q2, 2004 weighting
*          4)09/13/2004 by Haixia Xu for Q3, 2004 weighting
*          5)11/09/2004 by Haixia Xu for 2004 q3 weighting
*          - Changed the eligibility unknown weighting step due to the different coding of
fnstatus
*          6)02/08/2005 by Xiaojing Lin for Q4, 2004 weighting.
*          - Use post_wt.sd2 for the input dataset due to the poststratification.
*
* INPUTS: post_wt.SD2 - Final Weights file - Form A
*
* OUTPUTS: repwt.SD2 - Replicate Weights File - Form A
*
*****
* ;
LIBNAME IN v6 "..\..\Data\Afinal"; /* post_wt.sd2 */
LIBNAME OUT v6 "..\..\Data\Afinal";

OPTIONS PS=79 LS=132 COMPRESS=YES errors=0 NOCENTER /*mlogic mprint symbolgen*/;

%MACRO PROCESS(DOMAIN1,DOMAIN2,CAC, reps);

*****
* Sort the final weights file by user-specified domains
*****;

PROC SORT DATA=IN.post_wt(KEEP=FNSTATUS MPRID BWT &DOMAIN1. &DOMAIN2. stratum ) OUT=post_wt;
    BY stratum &DOMAIN2.;
RUN;

*****
* Append SUBSET index (I) to each observation
*****;
DATA SUBSETS;
    SET post_wt;
    BY stratum &DOMAIN2.;

    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
*****;
/*Get the population counts and sort it by adj_cell*/
DATA SUMframe;set IN.SUMframe;run;
PROC SORT DATA=SUMframe OUT=SUMframe;BY &DOMAIN1.;RUN;

%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-SUMG4 A1 CELLCNT cntg1-cntg4 &domain1. )
  MPRIDSA1 (KEEP=MPRID FNSTATUS BBWT &DOMAIN1. )
  ;
SET subset;
BY &DOMAIN1.;

IF FIRST.&DOMAIN1. THEN DO;
  CELLCNT = 0;
  cntg1   = 0;
  cntg2   = 0;
  cntg3   = 0;
  cntg4   = 0;
  SUMBBWT = 0.0;
  SUMG1   = 0.0;
  SUMG2   = 0.0;
  SUMG3   = 0.0;
  SUMG4   = 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;
    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;

*****
* Accumulate group 4 weight sum
*****;

ELSE IF FNSTATUS =32 THEN
  do;
    SUMG4 + BBWT;
    cntg4 + 1;
  end;

```

```

RETAIN SUMBBWT SUMG1-SUMG4 A1 CELLCNT cntg1-cntg4 MPRID;

IF LAST.&DOMAIN1. THEN DO;
  A1 = (SUMG1 + SUMG2 + SUMG3)/(SUMG1 + SUMG2);
  OUTPUT CELLSA1;
END;

OUTPUT MPRIDSA1;

RUN;

proc sort data=mpridsal;
by &domain1.;
run;

proc sort data=cellsal;
by &domain1.;
run;

data adj_one;
merge mpridsal cellsal;
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 &domain1.;
run;

DATA CELLSA2 (KEEP= &domain1. NUMER DENOM numercnt denomcnt A2);
set adj_one;
BY &domain1.;

IF FIRST.&domain1. 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
do;
  NUMER + adj_wt1;
  numercnt + 1;
end;

IF FNSTATUS = 11 THEN
do;
  DENOM + adj_wt1;
  denomcnt + 1;
end;

IF LAST.&domain1. THEN DO;
  A2 = NUMER/DENOM;
  OUTPUT CELLSA2;
END;

RUN;

proc sort data=adj_one;

```

```

by &domain1.;
run;

proc sort data=cellsa2;
by &domain1.;
run;

*****;
/*Added on 02/08/2005 by Xiaojing Lin: poststratified weighting for Q4 2004*/
*****;

*****
*Calculate adjusted weight
*****;
data adjwgt;
merge adj_one cellsa2;
by &domain1.;
if fnstatus = 11 then adj2 = a2;
  else if fnstatus in (31, 32) then adj2 = 1;
  else adj2 = 0;
awt = adj2 * adj_wt1;
KEEP FNSTATUS awt bbwt &DOMAIN1. &DOMAIN2.;
run;

*****
*Begin Final Weight Code
*****
*Assign cell names and calculate the sum of awt
*****;
proc sort data=adjwgt;by &DOMAIN1.;run;

DATA CELLS (KEEP=SUMAWT &DOMAIN1.)
  MPRIDS (KEEP=MPRID FNSTATUS AWT &DOMAIN1. &DOMAIN2.)
  ;
  SET ADJWGT;
  BY &DOMAIN1.;

  IF FIRST.&DOMAIN1. THEN DO;
    SUMAWT = 0.0;
  END;

  *****
  * Accumulate sum of adjusted weight
  *****;
  SUMAWT + AWT;

  RETAIN SUMAWT;

  IF LAST.&DOMAIN1. THEN DO;
    OUTPUT CELLS;
    SUMAWT = 0.0;
  END; * DOMAIN;
  OUTPUT MPRIDS;
RUN;

*****
* Calculate the adjusted population (AP)
*****;
DATA AP;
  MERGE SUMframe CELLS;
  BY &DOMAIN1.;
  AP = SUMframe/SUMAWT;
RUN;
/*End of added code for poststratified weighting*/

/*commentted out on 02/08/2005
data subset&i.;
merge adj_one cellsa2;
by &domain1.;
if fnstatus = 11 then adj2 = a2;
  else if fnstatus in (31, 32) then adj2 = 1;
  else adj2 = 0;
jkweight = adj2 * adj_wt1;
subset = &i.;

```

```

KEEP MPRID subset jkweight;
run;
*/

*****
* Merge the adjusted population and calculate the poststratified weight (PSWT)
*****;
data subset&i.;
  merge AP(in=in1) MPRIDS(in=in2);
  by &DOMAIN1.;
  SUBSET=&i.;
  if in2 then
  do;
    jkweight=AP*awt;
    output;
  end;
run;

proc sort data=subset&i.;
by mprid;
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) = JKWEIGHT;
  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.post_wt
  OUT=post_wt;
  BY MPRID;
RUN;

proc sort data=allsets;
by mprid;
run;

DATA OUT.repwt ;

```

```
MERGE post_wt 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 "2004 DoD Quarterly Health Survey Final/Replicated Weights";
title2 "Checks for the Replicate Weights";
TITLE3 "Program Name: repwt.SAS";
```

```
*****
/** Added on 12/29/2003 after Amang's QA**/
```

```

Check the structure of the data set OUT.repwt;
*****;

proc sort data=OUT.repwt out=sorted;
by stratum &domain2.;
run;

proc print data=sorted (obs=500);
var stratum &domain2 SUBSET fnstatus adjwt wrwt1-wrwt5;
run;
** End of the modification;

PROC CONTENTS DATA=OUT.repwt;
run;

PROC MEANS DATA=OUT.repwt n sum;
VAR adjwt WRWT1-WRWT&reps.;
RUN;

PROC SORT DATA=OUT.repwt;
BY MPRID;
RUN;

DATA OUT.repwt;
  SET OUT.repwt;
  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 adjwt WRWT1-WRWT&reps. fnstatus &domain1. &cac. cacsmp1 adj_cell;
RUN;

PROC MEANS DATA=OUT.repwt n sum;
VAR adjwt wrwt1-wrwt&reps.;
output out=sums sum(adjwt wrwt1-wrwt&reps.) = adjwt wrwt1-wrwt&reps.;
RUN;

proc transpose data=sums out=t_sums;
var adjwt wrwt1-wrwt&reps.;
run;

proc univariate data=t_sums normal ;
var coll;
run;

**added for Amang q4 2002;
data repwt2;
  set out.repwt;
  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 adjwt wrwt1-wrwt60;
output out = amang sum= / autoname;
run;

proc print data = amang;
run;

```

```
*****
* CREATE FINAL REPWT DATASET FOR KEITH -- Rename adjwt to wrwt
*****;

data out.repwt (drop = adjwt );
set in.repwt;
wrwt = adjwt;
label &domain1. = 'final adjusted cell';
label wrwt = 'Final Weight';
run;

PROC CONTENTS DATA=OUT.repwt;
run;

%MEND process;

%PROCESS(adj_cell, mprid, cacsmp1, 60);
```

G.7 Q4_2004\PROGRAMS\WEIGHTING\ADDWGTS.SAS - Merge Weights onto Data File - Quarterly.

```

*****
*
* PROGRAM:  ADDWGTS.SAS
* TASK:    DOD HEALTH CARE SURVEY ANALYSIS (8860-210)
* PURPOSE: MERGE THE FINAL WEIGHTS FILE WITH THE FINAL
*          QUESTIONNAIRE/SAMPLE FILE
*
* WRITTEN: 02/02/2001 BY KEITH RATHBUN
*
* INPUTS:  1) REPWT.SD2 - Final/Replicated Weights file - FORM A
*          2) MERGEQ.SD2 - Final FORM A Questionnaire/Sample File
*
* OUTPUTS: 1) HCSyyq_n.SD2 - 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
*
* 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) 2/17/2004 - 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.
*****
;
LIBNAME IN      V612 "..\..\DATA\AFINAL";
LIBNAME OUT     V612 "..\..\DATA\AFINAL";
LIBNAME LIBRARY V612 "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

%MACRO PROCESS(DSNI_1=,DSNI_2=,DSNO=);
*****
* Merge the final weights file with the final Questionnaire/Sample file
*****;
PROC SORT DATA=IN.&DSNI_1 OUT=&DSNI_1; BY MPRID; RUN;
PROC SORT DATA=IN.&DSNI_2 OUT=&DSNI_2; BY MPRID; RUN;

/*DATA OUT.&DSNO (DROP=PRN); changed for Q1 2003 -4/17/2003*/

PROC CONTENTS DATA=IN.&DSNI_1; Title 'repwgt'; RUN;
PROC CONTENTS DATA=IN.&DSNI_2; Title 'mergeq'; RUN;

DATA OUT.&DSNO (DROP=PRN);
MERGE &DSNI_2(IN=IN2)
      &DSNI_1(IN=IN1 DROP=CACSMPL);    *** JMA 2/17/2005;
BY MPRID;
IF FNSTATUS = 11;

IF IN1 AND IN2;
IF NOT (IN1 AND IN2) THEN PUT "ERROR: NO MATCHING MPRID WITH &DSNI_1..SD2 AND &DSNI_2..SD2";
LABEL KEYCOUNT = "# of Key Questions Answered";
LABEL WRWT      = "Final Weight";
LABEL FLAG_FIN  = "Final Status";
RUN;

TITLE1 "DOD Quarterly Health Care Survey (8860-210)";
TITLE2 "Program Name: ADDWGTS.SAS By Keith Rathbun";
TITLE3 "Program Inputs: &DSNI_1..SD2 -- &DSNI_2..SD2";
TITLE4 "Program Outputs: &DSNO..SD2";
PROC CONTENTS; RUN;

%MEND PROCESS;

```

```
%PROCESS(DSNI_1=REPWT, DSNI_2=MERGEQ, DSNO=HCS044_1);
```

G.8 Q4_2004\PROGRAMS\WEIGHTING\POSTSTR4.SAS - Build and assign final weights - Quarterly.

```

*****
*** Project: DoD Adult Sampling - Poststratification adjustments
***
*** Program: \DOD\Q4_2004\programs\weighting\poststr4.sas
***
*** TASK: 2004 Q4 ADULT DOD HEALTH CARE SURVEY
*** PURPOSE: BUILD AND ASSIGN FINAL WEIGHTS - POST STRATIFICATION - Adult Survey.
*** WEIGHTS FOR ADULT DOD SURVEY.
*** DOD HEALTH CARE SURVEY FILE.
*** WRITTEN: 12/30/99 BY KEITH RATHBUN
*** UPDATED: 10/01/03 BY Esther Friedman
*** UPDATED: 12/18/03 BY Haixia Xu
*** UPDATED: 10/11/2004 by Haixia Xu
*** MODIFIED: 02/004/2005 BY Xiaojing Lin to do poststratification for Q4 2004
*** INPUTS: adjwt.SD2 - Adjusted Weights file - Form A
*** framea_n.sd2
*** selectq.sd2
*** OUTPUTS POST_WT.SD2 - Final Weights file - Form A
*****;

OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=1 NOCENTER mprint mlogic symbolgen;

*** libname for the input and output data ***;
LIBNAME IN v6 "..\..\Data\Afinal"; /* adjwt.sd2, framea_n.sd2, selectq.sd2 */
LIBNAME OUT v6 "..\..\Data\Afinal"; /* post_wt.sd2 */

%include "design_effects_unequal_weights.sas" /source2;

title1 'DoD Quarterly Survey of Health Beneficiaries 2004 Q4';
title2 'Calculate the Poststratified Final Weights';
title3 'Program poststr4.sas';

*****
* Calculate poststratified weight based on user-specified parameters.
*****;
%MACRO PROCESS(DOMAIN,FORM,INPT);

TITLE5 "Contents of IN.ADJWT";
PROC CONTENTS DATA=IN.ADJWT;
RUN;

*****
* Sort the adjusted weights file by user-specified domains
*****;
PROC SORT DATA=IN.&inpt.
      OUT=ADJWT(KEEP=FNSTATUS MPRID ADJWT &DOMAIN.);
      BY &DOMAIN.;
RUN;

*****
* Assign cell names and calculate the sum of ADJWT
*****;
DATA CELLSA (KEEP=SUMADJWT CELLCNT SUMFN11 &DOMAIN)
      MPRIDSA (KEEP=MPRID FNSTATUS ADJWT &DOMAIN)
;
      SET &inpt.;
      BY &DOMAIN;

      IF FIRST.&DOMAIN THEN DO;
          CELLCNT = 0;
          SUMADJWT = 0.0;
          SUMFN11 = 0;
      END;

*****
* Accumulate cell count and sum of adjusted weight
*****;
      CELLCNT+1;
      SUMADJWT + ADJWT;

*****

```

```

* COUNT the FNSTATUS = 11 within each DOMAIN
*****;
IF FNSTATUS = 11 THEN SUMFN11 + 1;

RETAIN SUMADJWT SUMFN11;

IF LAST.&DOMAIN THEN DO;
    OUTPUT CELLSA;
END; * DOMAIN;
OUTPUT MPRIDSA;
RUN;

*****
* Get the population counts and calculate the adjusted population (AP)
*****;
PROC FREQ DATA=IN.framea_n NOPRINT;
    TABLES &DOMAIN./MISSING LIST OUT=SUMframe(RENAME=(count=SUMframe)
        KEEP=&DOMAIN. count);
RUN;

PROC SORT DATA=SUMframe OUT=SUMframe;
    BY &DOMAIN;
RUN;

DATA AP;
    MERGE SUMframe CELLSA;
    BY &DOMAIN;
    AP = SUMframe/SUMADJWT;
    DIFF = SUMframe-SUMADJWT;
RUN;

*****
* Check for AP dataset
*****;
title5 'Check for AP dataset';
PROC PRINT DATA=AP;
    VAR &DOMAIN. CELLCNT SUMADJWT SUMframe AP DIFF;
    SUM CELLCNT SUMADJWT SUMframe DIFF;
RUN;

PROC UNIVARIATE DATA=AP NORMAL;
    VAR AP;
RUN;

*****
* Merge the adjusted population and calculate the poststratified weight (PSWT)
*****;
PROC CONTENTS DATA=AP;RUN;

DATA POST_WT;
    MERGE AP(IN=IN1) MPRIDSA(IN=IN2);
    BY &DOMAIN;

    IF IN2 THEN DO;
        PSWT = AP*ADJWT;
        OUTPUT;
    END;

    LABEL PSWT      = 'Poststratified Weight';
    LABEL AP        = 'Poststratification Adjustment Factor';
    LABEL SUMframe  = 'DEERS population by CELLNAME for weights';
    LABEL SUMFN11   = 'COUNT of FNSTATUS=11 within CELLNAME';

    KEEP &DOMAIN. FNSTATUS PSWT ADJWT AP MPRID;
RUN;

*****
* Check POST_WT.SD2 dataset
*****;
title5 'Check for POST_WT dataset';
PROC FREQ DATA=POST_WT;
    TABLE &DOMAIN.*FNSTATUS*PSWT/LIST MISSING;
RUN;

```

```

PROC FREQ DATA=POST_WT;
  TABLE &DOMAIN.*adjwt*AP/LIST MISSING;
RUN;

PROC FREQ DATA=POST_WT;
  TABLE &DOMAIN.*AP*PSWT/LIST MISSING;
RUN;

*****
* Sort the original data and append the poststratified weight(PSWT)
*****;
PROC SORT DATA=IN.&INPT. OUT=ADJWT;BY MPRID;RUN;
PROC SORT DATA=POST_WT;BY MPRID;RUN;

DATA OUT.POST_WT;
  MERGE ADJWT POST_WT;
  BY MPRID;
RUN;

TITLE5 'Sum of ADJWT by final status';
PROC MEANS DATA=OUT.POST_WT 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;

TITLE5 'Sum of PSWT by final status';
PROC MEANS DATA=OUT.POST_WT N SUM NOPRINT;
  CLASS FNSTATUS;
  VAR PSWT;
  OUTPUT OUT=print SUM=sum;
RUN;

PROC PRINT DATA=PRINT NOOBS;
  SUM _FREQ_ sum;
  WHERE _TYPE_=1;
RUN;

*****
* SUM of PSWT by adj_cell
*****;
PROC FREQ DATA=OUT.POST_WT NOPRINT;
  TABLES &DOMAIN./MISSING LIST OUT=SUMPSWT(RENAME=(count=SUMPSWT) DROP=percent);
  WEIGHT PSWT;
RUN;

PROC SORT DATA=SUMPSWT;
  BY &DOMAIN.;
RUN;

TITLE5 'Checks for SUMPSWT and SUMframe';
DATA PRINT only1 only2 problem;
  MERGE SUMPSWT(IN=A) SUMframe(IN=B);
  BY &DOMAIN.;
  DIFF=SUMPSWT-SUMframe;
  IF A AND B THEN OUTPUT PRINT;
  ELSE IF A AND NOT B THEN OUTPUT only1;
  ELSE IF NOT A AND B THEN OUTPUT only2;
  ELSE OUTPUT problem;
RUN;

PROC PRINT DATA=PRINT NOOBS;
  SUM SUMPSWT SUMframe DIFF;
RUN;

PROC UNIVARIATE DATA=PRINT;
  VAR DIFF;
RUN;

```

```

*****;
*** Calculate the Design Effects ***;
*****;

*create dataset of completes only;
data post_wt_fnl;
set out.post_wt;
where fnstatus=11;
adj_cac=substr(adj_cell,2,4);
run;

%design_effects_unequal_weights ( post_wt_fnl, cacsmp1, pswt, deff_overall, deff_cac );
%design_effects_unequal_weights ( post_wt_fnl, adj_cac, pswt, deff_overall, deff_cac2 ); *Added in
Q4,2004;
%design_effects_unequal_weights ( post_wt_fnl, ebg_com, pswt, deff_overall, deff_ebg );
%design_effects_unequal_weights ( post_wt_fnl, tnexreg, pswt, deff_overall, deff_tnexreg ); *Add
in Q1,2004;

title5 'Design Effects Overall';
proc print data = deff_overall;
run;

*** For Catchment Area ***;

title5 "Design Effects for cacsmp1";
proc print data= deff_cac;
run;

proc sort data=deff_cac;
    by design_effect;
run;

title5 "Design Effects for cacsmp1 sorted by deff.";
proc print data= deff_cac;
run;

*** For Catchment Area ***;

title5 "Design Effects for adj_cac";
proc print data= deff_cac2;
run;

proc sort data=deff_cac2;
    by design_effect;
run;

title5 "Design Effects for adj_cac sorted by deff.";
proc print data= deff_cac2;
run;

*** For Enrollee/Beneficiary Groups ***;

title5 'Design Effects for ebg_com';
proc print data= deff_ebg;
run;

*** For TNEXREG Groups ***;

title5 'Design Effects for TNEXREG';
proc print data= deff_tnexreg;
run;

/*Rename variables*/
data post_wt;set OUT.post_wt;
    rename ADJWT=O_ADJWT CACSMPL=O_CACSMP;
    rename PSWT=ADJWT N_CACSMP=CACSMPL;
run;

data post_wt;set post_wt;
    label O_ADJWT = 'Original adjusted weight';

```

```

label O_CACSMP = 'Original CACSMP-Catchment Area';
label ADJWT = 'Poststratified adjusted weight';
label CACSMP = 'CACSMP-Catchment Area';
run;

data OUT.post_wt;set post_wt;run;

title5 'Checks for enrid=6919';
proc print data=OUT.post_wt;
var ENRID O_CACSMP ADJ_CELL CACSMP DCATCH;
where ENRID='6919';
run;

title5 "Contents of OUT.post_wt";
proc contents data=OUT.post_wt;
run;

*****
* Calculate poststratified weight based on user-specified parameters.
*****;
%MEND PROCESS;

%PROCESS(adj_cell,A,adjwt);

```

G.9 Q4_2004\PROGRAMS\WEIGHTING\PROCCOPA.SAS - Create XPORT version from Database - Quarterly.

```
*****
*
* PROGRAM: PROCCOPA.SAS
* PURPOSE: Create XPORT file from SD2
* WRITTEN April 26, 2000 BY Keith Rathbun
* TASK: 2004 Quarterly DoD Database Development (6077-300)
*
* INPUTS: 1) HCSyyq_v.SD2 - DoD Quarterly HCSDB for Adults dataset
*
* OUTPUTS: 1) HCSyyq_v.XPT - DoD Quarterly HCSDB for Adults dataset (XPORT)
*           where yy = 2-digit year
*           q = Quarter Number
*           v = Version Number
*
* NOTES: 1) Be sure to update the global parameters for the current
*          quarter (QTR) with the appropriate dataset name (DSN)
*          prior to running this program.
*
*****
* Define global parameters
*****;
%LET DSN = HCS044_1;
%LET QTR = ..\..\..\Q4_2004\;
*****
* Define SAS libraries and options
*****;
LIBNAME IN V612 "&QTR.DATA\AFINAL";
*****
* Define SAS Transport file
*****;
LIBNAME OUT XPORT "&QTR.DATA\AFINAL\&DSN..XPT";
*****
* Generate SAS Transport file
*****;
PROC COPY IN=IN OUT=OUT ; * Converts input file to transport file;
        SELECT &DSN;      * Selects SD2 file to copy;
RUN;
```

G.10.A - ..\WEIGHTING\ADJWT.SAS - Calculate Adjusted Weights - Annual.

```

*****
*** Project: DoD Quarterly Sampling - Nonresponse adjustments
***
*** Program: \DOD\2004\Programs\weighting\adjwt.sas,
***
*** TASK: 2004 QUARTERLY DOD HEALTH CARE SURVEY
*** PURPOSE: CALCULATE THE FINAL WEIGHT FOR Q1-Q3 with trickles
***
*** Created: 12/23/2003 by Esther M. Friedman
*** Updated: 02/10/2004 by Xiaojing Lin for 2004 Annual weighting
*** NOTE: Q3 2003 contains the addition of trickles AND web responses
        Both of which were not included in the original dataset
*** INPUTS: selectq.SD2
*** OUTPUTS: adjwt.SD2
*****
*
/*commented out on 02/10/05 for 2004 weighting*/
*title1 "Q3 web indicator, check that web responses are added into dataset";
*Proc freq data="M:\Q3_2004t\Data\Afinal\selectq.sd2";
* tables web ontime web*ontime/list;
*run;

%macro doit;
    %do qtr=1 %to 3;
LIBNAME IN_f v6 "..\..\..\Q&qtr._2004\Data\Afinal"; /* framea.sd2,
sampla01 */;
LIBNAME IN v6 "..\..\..\Q&qtr._2004t\Data\Afinal"; /* selectq.sd2 */;
LIBNAME INKEITH v6 "..\..\..\Q&qtr._2004\Data\Afinal"; /* selectq.sd2 --
before trickles */;
LIBNAME OUT v6 "..\..\..\Q&qtr._2004t\data\afinal"; /* adjwt.sd2 */;
LIBNAME Q4 v6 "..\..\..\Q4_2004\Data\Afinal"; /* TMA spreadsheet */

OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=1 NOCENTER spool mlogic symbolgen mprint;

*program calculates design effects for domains of interest;
%include "design_effects_unequal_weights.sas";

title1 "DoD Quarterly Survey of Health Beneficiaries --- Quarter &qtr. with trickles";
title2 'Calculate the Final Weights With Trickles';
title3 'Program: adjwt.SAS ';

*****
*** Use cacsmp1 collapsements from q4 framea.sas to recreate
*** consistent definition of cacsmp1 for all four quarters of 2004
*****
* Geocell assignment;

*****
*Commented out by Xiaojing Lin on 02/10/05. Since these collapsements codes
are already included in frame_coll.inc file;

*data frame(keep=dcatch geocell pcm enrid mprid);
* set in_f.extract;
* if pcm='MTF' then do;
* if ('1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or
( '6991' <= enrid <= '6994' ) or ( '6501' <=enrid <='6512' ) or
( '7166' <= enrid <= '7195' ) or ( '6700' <= enrid <= '6881' )
then geocell=dcatch; *administrative assignment 1976-1980 added q4 2002--6700-6881 added
q1 2004*;
* else if enrid = '6919' then geocell = dcatch; **Managed care contractor;
* else if ('3031' <= enrid <= '3057')
then geocell = dcatch; ***On the Ship***;
* else if enrid in ('0002', '5208', '0250', '0449', '0626', '0012') /* '0626' added q2 2003,
0012 added q4 2003*/
then geocell = dcatch; ***Inactive***;
*****
* else if ('0190' <= enrid <='0199') then geocell = dcatch;**BYDON;
*****
*****

```

```

*      else if enrid in ('4919', '6138', '6691') then geocell=dcatch;

* Above was added by Haixia on 07/13/04 for Q4, 2004. Remember to remove this next quarter!!!
* Since there are three records in frame, but not in TMA in terms of geocell,
* we hard-code geocell for those three records as dcatch.
* Those three records have geocell in ('4919', '6138', '6691') and PCM='MTF' ;
*****;

*      else geocell = enrid;
*      end;
*      else geocell=dcatch;
%RUN;
*****;
*****;
/*just read in extract.sd2 is enough*/
data frame(keep=dcatch pcm enrid mprid);
  set in_f.extract;
run;

%MACRO PROCESS2(TMA, outdata);

* Read in TMA spreadsheet from Q4;
data TMA (keep = geocell d_par d_fac d_instal d_health);
  set q4.TMA;
rename facilit1=d_fac installa=d_instal;

length d_par $4.;
d_par = DMIS_PAR;

length geocell $4.;
geocell = DMIS_ID;

length d_health $2.;
d_health = HEALTH_S;
run;

proc sort data=TMA;
by geocell;
run;

*****
Commented our on 02/10/05 by Xiaojing Lin, since those codes are already
included in frame_coll.inc file

*proc sort data=frame;
*by geocell;
*run;

*data frame2;
*merge frame (in=a) TMA (in=b);
*by geocell;
*if a;
*run;

* Bring in q4 framea.sas cacsmp1 collapsements for small cells;
*data frame2;
* set frame2;

%include "..\..\..\Q4_2004\Programs\frame_coll.inc";

*run;

*****
***** end of code from framea.sas *****
*****;

%MACRO PROCESS(DOMAIN,CAC, FORM,INPT);

*****
* Calculate final weight based on user-specified domains.
*****;
*** merge ebg_com back into selectq. ***;
data selectq;
set in.selectq;

```

```

format _all_;
run;

data sampla01 (keep= mprid ebg_com);
set in_f.sampla01;
format _all_;
run;

proc sort data=selectq;
by mprid;
run;

proc sort data=sampla01;
by mprid;
run;

data out.merged;
merge selectq (in=a) sampla01 (in=b);
by mprid;
if a and b;
format _all_;
run;

*****
*Added on 02/10/05 by Xiaojing for 2004 grouping consistent
FNSTATUS=30 just like FNSTATUS=31
*****;
data out.merged;set out.merged;
if FNSTATUS=30 then FNSTATUS=31;
run;
/*End of added code*/

* merge back com_geo and ebsmpl created above from framea.sas code;
proc sort data=&outdata out=frame3 (keep=mprid com_geo);
by mprid;
run;

Proc sort data=out.&inpt.;
by mprid;
run;

data &inpt.;
merge frame3 (in=a) out.&inpt. (in=b);
by mprid;
if b;
run;

*program collapses enrollment beneficiary groups based on q4;
data &inpt. ;
set &inpt.;
%include "..\..\..\Q4_2004\programs\ebg_coll.inc";
run;

*** Initial Information. ***;

title5 'FRAMEA.SD2 Count';

proc freq data=in_f.framea;
table enbgsmpl ebg_com/ list missing;
run;

title5 'mergeq.SD2 Counts -- before addition of trickles';
proc freq data=inKeith.selectq;
table fnstatus / list missing;
run;

title5 'mergeq.SD2 Counts -- with trickles';
proc freq data=&inpt.;
table enbgsmpl ebg_com fnstatus ONTIME fnstatus*ontime/ list missing;
run;

title5 'mergeq.SD2 Counts with trickles Using BWT as the Weight';
proc freq data=&inpt.;
table enbgsmpl ebg_com fnstatus/ list missing;

```

```

weight bwt;
run;

*program collapses weighting adjustments cells due to small number of responses;
data &inpt. ;
  *set &inpt. ( keep = MPRID FNSTATUS BWT ebg_com enbgsmpl XREGION stratum &cac. com_geo
  cacsmpl); *before modification;
  set &inpt. ( keep = MPRID FNSTATUS BWT ebg_com enbgsmpl tnexreg stratum &cac. com_geo cacsmpl);
*modified on 02/10/05;
%include "..\..\..\Q4_2004\Programs\cac_coll.inc";
run;

PROC SORT DATA=&inpt. OUT=&INPT.;
BY &DOMAIN.;
RUN;

*****
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
*****;
Data cellsal (keep=sumbwt sumg1-sumg4 a1 cellcnt cntg1-cntg4 &domain.)
  mpridsal (keep=mprid fnstatus bwt &domain. ebg_com &cac.)
  ;
SET &INPT.;
BY &DOMAIN;

IF FIRST.&DOMAIN. THEN DO;
  CELLCNT = 0;
  cntg1 = 0;
  cntg2 = 0;
  cntg3 = 0;
  cntg4 = 0;
  SUMBWT = 0.0;
  SUMG1 = 0.0;
  SUMG2 = 0.0;
  SUMG3 = 0.0;
  SUMG4 = 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;

*****
* Accumulate group 4 weight sum
*****;

ELSE IF FNSTATUS = 32 THEN
    do;
        SUMG4 + BWT;
        cntg4 + 1;
    end;

RETAIN SUMBWT SUMG1-SUMG4 A1 CELLCNT cntg1-cntg4 MPRID;

IF LAST.&DOMAIN. THEN DO;
    A1 = (SUMG1 + SUMG2 + SUMG3)/(SUMG1 + SUMG2);
    OUTPUT CELLSA1;
END;

OUTPUT MPRIDSAL;

RUN;

title5 'Check for CELLSA1 Data Set';

proc print data=cellsal;
var &domain. cntg1-cntg4 cellcnt sumg1-sumg4 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 cntg4 sumbwt sumg1 sumg2 sumg3 sumg4;
run;

proc print data=cellsal;
*where ( a1 > 7 ) or ( cntg1 + cntg2 < 15 );*before modification;
where ( a1 > 7 ) or ( cntg1 + cntg2 < 10 ); *modified on 02/15/05 to be consistent with q1,q2;
var &domain. cntg1-cntg4 cellcnt sumg1-sumg4 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 cntg4 sumbwt sumg1 sumg2 sumg3 sumg4;
run;

proc univariate data=cellsal normal ;
var a1;
run;

proc sort data=mpridsal;
by &domain.;
run;

proc sort data=cellsal;
by &domain.;
run;

data adj_one;
merge mpridsal cellsal;
by &domain.;
if fnstatus in (11,12,20,31) then adj1 = a1;
    else if fnstatus = 32 then adj1 = 1;
    else adj1 = 0;
adj_wt1 = adj1 * bwt;
run;

title5 'Checks for ADJ_ONE Data Set';

proc freq data=adj_one;
table &domain.*fnstatus*adj1/ list missing;
run;

proc means data=adj_one n sum NOPRINT;
class fnstatus;
var adj_wt1;
output out=print sum=sum;
run;

Proc print data=print;
sum _freq_ sum;

```

```

where _type_=1;
run;

proc means data=adj_one n sum NOPRINT;
class ebg_com;
var adj_wt1;
output out=print sum=sum;
run;

Proc print data=print;
sum _freq_ sum;
where _type_=1;
run;

*****
* Calculate adjustment factor A2 for each cell.
* This is the Nonresponse adjustment and creates the final weight (wrwt).
*****;

proc sort data=adj_one;
by &domain.;
run;

DATA CELLSA2 (KEEP= &domain. NUMER DENOM numercnt denomcnt A2);
  set adj_one ;
  BY &domain.;

  IF FIRST.&domain. 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
  do;
    NUMER + adj_wt1;
    numercnt + 1;
  end;

  IF FNSTATUS = 11 THEN
  do;
    DENOM + adj_wt1;
    denomcnt + 1;
  end;

  IF LAST.&domain. THEN DO;
    A2 = NUMER/DENOM;
    OUTPUT CELLSA2;
  END;

RUN;

title5 'Check for CELLSA2 Data Set';

proc print data=cellsa2;
var &domain. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

proc print data=cellsa2;
*where ( a2 > 7 ) or ( denomcnt < 15 );*before modification;
where ( a2 > 7 ) or ( denomcnt < 10 ); *modified on 02/15/05 to be consistent with q1,q2;
var &domain. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

proc univariate data=cellsa2 normal ;
var a2;
run;

```

```

proc sort data=adj_one;
by &domain.;
run;

proc sort data=cells2;
by &domain.;
run;

data adj_two;
merge adj_one cells2;
by &domain.;
if fnstatus = 11 then adj2 = a2;
  else if fnstatus in (31, 32) then adj2 = 1;
  else adj2 = 0;
adjwt = adj2 * adj_wt1;
label adjwt = 'Adjusted Weight';
*KEEP MPRID fnstatus adj1 adj2 adjwt &domain. ebg_com ; * before the modification;
KEEP MPRID fnstatus adj1 adj2 adjwt &domain. ebg_com a1 a2 adj_wt1 ; *modified on 12/29/2003;

run;

title5 'Check for ADJ_TWO Data Set';

proc freq data=adj_two;
table &domain.*fnstatus*adj2 / list missing;
run;

proc means data=adj_two 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;

proc means data=adj_two n sum NOPRINT;
class ebg_com;
var adjwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

data adj_two;
set adj_two(drop=fnstatus ebg_com );
run;

*****
* Sort the original data
*****;

PROC SORT DATA=&INPT. OUT=&INPT.;
BY MPRID;
RUN;

*****
* Sort the ADJ_TWO data set
*****;

PROC SORT DATA=adj_two;
BY MPRID;
RUN;

*****
* Append final weight variable (adjwt)
*****;
DATA out.adjwt;

```

```

MERGE adj_two &INPT.;
BY MPRID;
RUN;

title5 'Sum of Adjwt By Final Status';

proc means data=out.adjwt 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;

title5 'Sum of Adjwt By ADJ_CELL';
proc freq data=OUT.adjwt noprint;
tables &domain./missing list out=adjwtCNT(rename=(count=adjwtCNT) drop=percent);
weight adjwt;
run;

proc sort data=out.adjwt out=chk;
by &domain. fnstatus;
run;

data sub_chk;
set chk(keep = &cac. stratum &domain. fnstatus bwt adj1 adj2 adjwt);
by &domain. 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;
var &domain. fnstatus bwt adj1 adj2 prodadjs adjwt cellcnt sumadjwt;
sum cellcnt sumadjwt;
run;

proc univariate data=sub_chk normal ;
where fnstatus=11;
var prodadjs;
run;

title5 "individual level adjwt";
proc univariate data=out.adjwt normal ;
where fnstatus=11;
var adjwt;
run;

*****
/**Added on 12/29/2003 after Amang's QA**/
Find the individuals with the largest adjwt
copy from Q4 2004
*****;
title5 " Checking the individuals with the largest adjwt";
proc sort data=out.adjwt out=sorted;
by descending adjwt;
run;

data sorted;
set sorted;
prodadjs=a1*a2;

```

```

run;

proc print data=sorted (obs=200);
var stratum adj_cell BWT fnstatus a1 adj1 adj_wt1 a2 adj2 adjwt prodadjs;
run;

data OUT.adjwt;
set OUT.adjwt;
drop a1 a2 adj_wt1;
run;
**End of the modification**;

*****
*don not need xregion, see tnexreg for 2004
*****;
*tnexreg;
proc sort data=out.adjwt;
by tnexreg;
run;

title5 "Distribution of weights by tnexreg";
proc means data=out.adjwt 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 ;
run;

proc print data=out_tnex;
sum n;
run;
*****;
*** Calculate the Design Effects ***;
*****;

*create dataset of completes only;
data adjwt_fnl;
set out.adjwt;
where fnstatus=11;
run;

/*commented out on 10/02/2005, do not need xregion
*Remove XREGIONS of missing from design effects;
data adjwt_reg;
set adjwt_fnl;
where XREGION=.;
run;
*/
%design_effects_unequal_weights ( adjwt_fnl, &cac., adjwt, deff_overall, deff_cac );
%design_effects_unequal_weights ( adjwt_fnl, ebg_com, adjwt, deff_overall, deff_ebg );
%design_effects_unequal_weights ( adjwt_fnl, enbgsmpl, adjwt, deff_overall, deff_enb );*commented
out on 02/10/05;
%design_effects_unequal_weights ( adjwt_reg, XREGION, adjwt, deff_overall, deff_reg );*commented
out on 02/10/05;
%design_effects_unequal_weights ( adjwt_fnl, tnexreg, adjwt, deff_overall, deff_tnexreg ); *Add on
02/10/05;

title5 'Design Effects Overall';
proc print data = deff_overall;
run;

*** For Catchment Area ***;

title5 "Design Effects for &cac.";
proc print data= deff_cac;
run;

*** For Enrollee/Beneficiary Groups ***;

title5 'Design Effects for ebg_com';
proc print data= deff_ebg;
run;

*** For ENBGSMPL Groups ***;

```

```
/*
title5 'Design Effects for ENBGSMPL';
proc print data= deff_enb;
run;

*** For XREGION Groups ***;

title5 'Design Effects for XREGION';
proc print data= deff_reg;
run;
*/

*** For TNEXREG Groups ***;

title5 'Design Effects for TNEXREG';
proc print data= deff_tnexreg;
run;

%MEND PROCESS;
%PROCESS(adj_cell,com_geo,A,merged);
RUN;

%MEND process2;
%PROCESS2(TMA, t_framea);
RUN;

%end; *end of do for each quarter;
%mend doit;
%doit;
```

G.10.B - ..\WEIGHTING\REPWT.SAS - Calculate Replicated Weights - Annual.

```

*****
* PROGRAM: DOD\2004\Programs\Weighting\repwt.SAS
* TASK: 2004 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE REPLICATE WEIGHTS FOR DOD SURVEY.
* WRITTEN: 12/30/1999 BY KEITH RATHBUN
* Updated: 12/30/2003 by Esther M Friedman
* Updated: 02/11/2005 by Xiaojing Lin for 2004 weighting
*
* INPUTS: adjwt.SD2 - Final Weights file
*
* OUTPUTS: repwt.SD2 - Replicate Weights File
*
*****
*;

%macro doit;
  %do qtr=1 %to 3;

LIBNAME IN v6 "..\..\..\Q&qtr._2004t\data\afinal";
LIBNAME OUT v6 "..\..\..\Q&qtr._2004t\data\afinal";

OPTIONS PS=79 LS=132 COMPRESS=YES errors=0 NOCENTER /*mlogic mprint symbolgen*/;

TITLE1 "Q&qtr. 2004 DoD Final/Replicated Weights with Trickle";

%MACRO PROCESS(DOMAIN1,DOMAIN2,CAC, reps);

*****
* Sort the final weights file by user-specified domains
*****;

PROC SORT DATA=IN.adjwt(KEEP=FNSTATUS MPRID BWT &DOMAIN1. &DOMAIN2. stratum) OUT=adjwt;
  BY stratum &DOMAIN2.;
RUN;

*****
* Append SUBSET index (I) to each observation
*****;
DATA SUBSETS;
  SET adjwt;
  BY stratum &DOMAIN2.;

  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;

/*change the grouping on 02/11/2005 by Xiaojing Lin for 2004 weighting*/
*****
* 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-SUMG4 A1 CELLCNT cntg1-cntg4 &domain1. )
  MPRIDSA1 (KEEP=MPRID FNSTATUS BBWT &DOMAIN1. )
  ;
  SET subset;
  BY &DOMAIN1.;

  IF FIRST.&DOMAIN1. THEN DO;
    CELLCNT = 0;
    cntg1   = 0;
    cntg2   = 0;
    cntg3   = 0;
    cntg4   = 0;
    SUMBBWT = 0.0;
    SUMG1   = 0.0;
    SUMG2   = 0.0;
    SUMG3   = 0.0;
    SUMG4   = 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;
      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;

  *****
  * Accumulate group 4 weight sum
  *****;

  ELSE IF FNSTATUS =32 THEN
    do;
      SUMG4 + BBWT;
      cntg4 + 1;
    end;

  RETAIN SUMBBWT SUMG1-SUMG4 A1 CELLCNT cntg1-cntg4 MPRID;

  IF LAST.&DOMAIN1. THEN DO;

```

```

        A1 = (SUMG1 + SUMG2 + SUMG3)/(SUMG1 + SUMG2);
        OUTPUT CELLSA1;
    END;

    OUTPUT MPRIDSAL;

RUN;

proc sort data=mpridsal;
by &domain1.;
run;

proc sort data=cellsal;
by &domain1.;
run;

data adj_one;
merge mpridsal cellsal;
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 &domain1.;
run;

DATA CELLSA2 (KEEP= &domain1. NUMER DENOM numercnt denomcnt A2);
set adj_one;
BY &domain1.;

IF FIRST.&domain1. 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
do;
    NUMER + adj_wt1;
    numercnt + 1;
end;

IF FNSTATUS = 11 THEN
do;
    DENOM + adj_wt1;
    denomcnt + 1;
end;

IF LAST.&domain1. THEN DO;
    A2 = NUMER/DENOM;
    OUTPUT CELLSA2;
END;

RUN;

proc sort data=adj_one;
by &domain1.;
run;

proc sort data=cells2;

```

```

by &domain1.;
run;

data subset&i.;
merge adj_one cellsa2;
by &domain1.;
if fnstatus = 11 then adj2 = a2;
  else if fnstatus in (31, 32) then adj2 = 1;
  else adj2 = 0;
jkweight = adj2 * adj_wt1;
subset = &i.;
KEEP MPRID subset jkweight;
run;

proc sort data=subset&i.;
by mprid;
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) = JKWEIGHT;
  IF LAST.MPRID THEN OUTPUT;
  KEEP MPRID wrwt1-wrwt&reps. SUBSET;
RUN;

*****
* Sort the original data, get the final weight (WRWT), append the
* JackKnife/Replicated weights (WRWT1-WRWT60), and label variables.
*****;
PROC SORT DATA=IN.adjwt
  OUT=adjwt;
  BY MPRID;
RUN;

proc sort data=allsets;
by mprid;
run;

DATA OUT.repwt ;
MERGE adjwt 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;

TITLE2 "Checks for the Replicate Weights";
proc sort data=OUT.repwt out=sorted;
by stratum &domain2.;
run;

proc print data=sorted (obs=500);
var stratum &domain2. SUBSET fnstatus wrwt1-wrwt5;
run;

PROC CONTENTS DATA=OUT.repwt;
run;

```

```

PROC MEANS DATA=OUT.repwt n sum;
VAR adjwt WRWT1-WRWT&reps.;
RUN;

PROC SORT DATA=OUT.repwt;
BY MPRID;
RUN;

DATA OUT.repwt;
SET OUT.repwt;
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 adjwt WRWT1-WRWT&reps. fnstatus &domain1. &cac. &domain1.;
RUN;

PROC MEANS DATA=OUT.repwt n sum;
VAR adjwt wrwt1-wrwt&reps.;
output out=sums sum(adjwt wrwt1-wrwt&reps.) = adjwt wrwt1-wrwt&reps.;
RUN;

proc transpose data=sums out=t_sums;
var adjwt wrwt1-wrwt&reps.;
run;

proc univariate data=t_sums normal ;
var coll;
run;

**added for Amang q4 2002;
data repwt2;
set out.repwt;
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 wrwt1-wrwt60;
output out = amang sum= / autoname;
run;

proc print data = amang;
run;

*****
* Rename adjwt to wrwt
*****;

data out.repwt (drop = adjwt);
set in.repwt;
wrwt = adjwt;
label &domain1. = 'Final Adjusted Cell';
label &cac. = 'Catchment Area';
label wrwt = 'Final Weight';
run;

PROC CONTENTS DATA=OUT.repwt;
run;

%MEND process;

```

```
%PROCESS(adj_cell, mprid, com_geo, 60);
```

```
%end; *end of do for each quarter;
```

```
%mend doit;
```

```
%doit;
```

G.10.C - ..\WEIGHTING\design_effects_unequal_weights.SAS - Compute design effects.

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 calculate 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.

```

*****;

%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;

```

G.11.A - ..\RESPONSE_RATE\TABLE02.SAS - Calculate Response Rates.

```

*****
*
* PROGRAM: TABLE02.SAS
* TASK: 2004 DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* 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.
* 6) 03/15/2005, Keith Rathbun - Updated for 2004 annual.
*
* INPUT: 1) MERGEQ.SD2 (All quarters)
* 2) SAMPLA01.SD2 (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 NOFMTER;
LIBNAME Q1 V612 "..\..\Q1_2004\DATA\AFINAL"; * Q1 Samplea01;
LIBNAME Q2 V612 "..\..\Q2_2004\DATA\AFINAL"; * Q2 Samplea01;
LIBNAME Q3 V612 "..\..\Q3_2004\DATA\AFINAL"; * Q3 Samplea01;
LIBNAME Q4 V612 "..\..\Q4_2004\DATA\AFINAL"; * Q4 Samplea01;
LIBNAME Q1t V612 "..\..\Q1_2004t\DATA\AFINAL"; * Q1 mergeq with late response;
LIBNAME Q2t V612 "..\..\Q2_2004t\DATA\AFINAL"; * Q2 mergeq with late response;
LIBNAME Q3t V612 "..\..\Q3_2004t\DATA\AFINAL"; * Q3 mergeq with late response;
LIBNAME LIBRARY V612 "..\..\DATA\FMTLIB";

TITLE1 "Program: TABLE02.SAS";
TITLE2 "Purpose: Compute response rates by DOMAIN";

%LET OFILES = ..\..\DATA\Response_Rate\;
%LET QUARTER = 2004 Combined Annual;

*****
* Merge sampla01 and comb2004 files to add ebg_com
*****;
DATA COMB2004;
SET Q1t.MERGEQ Q2t.MERGEQ Q3t.MERGEQ Q4.MERGEQ ;
RUN;

PROC SORT DATA=COMB2004; BY MPRID; RUN;

PROC FORMAT;
VALUE $EBGFMT
"01" = 'Active duty'
"02" = 'Active duty family member,prime enrollee'
"03" = 'Active duty family member,nonenrollee'
"04" = 'Retired/fmly mbr of rtree,<65,prm enrlee'
"05" = 'Retired/fmly mbr of rtree,<65,nonenrollee'
"06" = 'Retired/fmly mbr of rtree, 65/older'

```

```

;
VALUE TNEX
. = 'Missing Data'
1 = 'North'
2 = 'South'
3 = 'West'
4 = 'Overseas'
;
RUN;

DATA SAMPLA01 (KEEP=MPRID EBG_COM);
SET Q1.SAMPLA01 Q2.SAMPLA01 Q3.SAMPLA01 Q4.SAMPLA01;
RUN;

PROC SORT DATA=SAMPLA01; BY MPRID; RUN;

DATA MERGERR;
MERGE SAMPLA01(in=A) COMB2004(in=B);
BY MPRID;
IF FNSTATUS = 30 THEN FNSTATUS = 31; *Added to conform with Q3 update to FNSTATUS;
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;
FORMAT EBG_COM $EBGFMT.;
FORMAT XTNEXREG TNEX.;
IF A AND B;
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;
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;
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 "&FILES.TABLE02&FORM..OUT" RECFM=V LRECL=9999;
PUT; PUT; PUT;
PUT @001 "TABLE 2: OVERALL RESPONSE RATES SUMMARY";
PUT @001 "11-17-2004, TASK: 6077-300";
PUT;
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
*****;
%PROCESS1(DOMAIN1=xregion, INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=conus, INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=ssexsmpl, INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=ebg_com, 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=cacsmp1, INPT=mergeRR, FORM="FORM A");

*****
* PROCESS TRIPLE DOMAIN RESPONSE RATE TABULATION - FORM A
*****;
*%PROCESS3(DOMAIN1=xxxxxxxx, DOMAIN2=xxxxxxxx, DOMAIN3=xxxxxxxx, 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";
      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:r999c5";
  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=XREGION, NUMDOM=1);
%CREATXLS(DSN=CONUS, NUMDOM=1);
%CREATXLS(DSN=SEXSMPL, NUMDOM=1);
%CREATXLS(DSN=EBG_COM, 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);

*****
* Quit spreadsheet application.
*****;
FILENAME CMDS DDE "EXCEL|SYSTEM";
DATA _NULL_;
  FILE CMDS;
  PUT '[SAVE]';
  PUT '[QUIT]';
RUN;

```


G.11.B - ..\RESPONSE_RATE\ANNUAL_RR.SAS - Combine Q1-Q4 Response Rates into one file.

```
*****
*
* PROGRAM: ANNUAL_RR.SAS
* TASK: 2004 DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE: Combine Q1-Q4 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-Q4 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.
*
*****;
OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=1 NOXWAIT NOCENTER;

LIBNAME LIBRARY V612 "..\..\DATA\FMTLIB";

TITLE1 "Program: ANNUAL_RR.SAS";
TITLE2 "Purpose: Combine Q1-Q4 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 DSN3 = CONUS;
%LET DSN4 = SEXSMPL;
%LET DSN5 = EBG_COM;
%LET DSN6 = CACSMPL;
%LET DSN7 = PATCAT;
%LET DSN8 = SERVAFF;
%LET DSN9 = SVCSMPL;
%LET DSN10 = XTNEXREG;
%LET DSN11 = PATCATSVCSMPL;
%LET DSN12 = PATCATSEXSMPL;
%LET DSN13 = XTNEXREGCACSMPL;

*****
* Assign Q1-Q4 and annual spreadsheet file names and year.
*****;
%LET FILE1 = ..\..\Q1_2004t\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE2 = ..\..\Q2_2004t\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE3 = ..\..\Q3_2004t\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE4 = ..\..\Q4_2004\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE5 = RESPONSE_RATES.XLS;
%LET YEAR = 2004;

*****
* Macro used to read Q1-Q4 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 MISSEVER 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-Q4 and annual spreadsheet files.
*****;
%MACRO READIT;
  %GLOBAL I;
  %DO I = 1 %TO 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=2);
    %READXLS(DSN=&DSN12, NUMDOM=2);
    %READXLS(DSN=&DSN13, NUMDOM=2);

    *****
    * 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-Q4 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-Q4 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=2);
%MERGEIT(DSN=&DSN12, NUMDOM=2);
%MERGEIT(DSN=&DSN13, NUMDOM=2);

*****
* 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";
    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";
  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";
  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=2);
%WRITEXLS(DSN=&DSN12, NUMDOM=2);
%WRITEXLS(DSN=&DSN13, NUMDOM=2);

*****

```

```
* Quit spreadsheet application.
*****;
FILENAME CMDS DDE "EXCEL|SYSTEM";
DATA _NULL_;
  FILE CMDS;
  PUT '[SAVE]';
  PUT '[QUIT]';
RUN;
```

G.11.C - ..\RESPONSE_RATE\TABLE02.IN1 - Include file1 used to Calculate 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 "11-17-2004, TASK: 6077-300";
  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;
  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;
END;

DROP I;
RETAIN
  SN
  SN1
  SN11
  SN12
  SN2
  SN31
  SN4
  SN41
  SN42
  WN
  WN1
  WN11
  WN12
  WN2
  WN31
  WN4
  WN41
  WN42
;

```

G.11.D - ..\RESPONSE_RATE\TABLE02.IN2 - Include file2 used to Calculate 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
;
```

G.12 - ..\WEIGHTING\COMB2004.SAS - Combine quarterly datasets into one annual file.

```

*****
*
* PROGRAM: COMB2004.SAS
* TASK: ANNUAL DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE: Combine quarterly datasets into one annual file.
*
* WRITTEN: 12/23/2002 BY KEITH RATHBUN.
* MODIFIED: 02/14/2005 BY LUCY LU. ADD CODE IN STEP1Q.INC TO CREATE
* REPORT VERSION OF CACSMPL
*
* INPUTS: 1) MERGEQ.SD2 - Q1-Q4 DOD HCS Analysis files (No Weights Added)
* 2) XWALK.SD2 - Most recent XWALK file
*
* OUTPUT: 1) COMB200Y.SD2 - 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.
*
*****;
OPTIONS PS=80 LS=132 COMPRESS=YES NOCENTER NOFMTERR;

%LET YEAR = 2004; * Year to process;
%LET YR = 04; * Year to process;

****CHANGE THE DIRECTORY OF QUARTERLY FILES TO RUN XCATCH.INC****;

%LET DATAQ1=..\..\..\Q1_&YEAR.t\data\afinal; * Location HCSDB Q1 file;
%LET DATAQ2=..\..\..\Q2_&YEAR.t\data\afinal; * Location HCSDB Q2 file;
%LET DATAQ3=..\..\..\Q3_&YEAR.t\data\afinal; * Location HCSDB Q3 file;
%LET DATAQ4=..\..\..\Q4_&YEAR.\Data\AFinal; * Location of Q4 file;

LIBNAME INQ1 V612 "&DATAQ1.";
LIBNAME INQ2 V612 "&DATAQ2.";
LIBNAME INQ3 V612 "&DATAQ3.";
LIBNAME INQ4 V612 "&DATAQ4.";
LIBNAME OUT V612 "....\DATA";
LIBNAME LIBRARY V612 "....\Data\fmtlib";

%MACRO PROCESS;
*****
* Create libnames foe years 2002, 2003 and 2004 in XCATCH.inc.
*****;
%DO QTR = 1 %TO 4; * Do for each quarter;

%IF &YEAR = 2004 %THEN %DO;

PROC SORT DATA=INQ&QTR..HCS&YR.&QTR._1(KEEP=MPRID PCM ENRID DCATCH D_PAR D_FAC D_HEALTH
CACSMPL XREGION)
OUT=HCSDB&QTR;
BY MPRID; RUN;
%END;

****THIS CODE IS FOR ADDING VARIABLE ENRID FOR YEAR 2002 AND 2003****;

%IF &YEAR = 2002 %THEN %DO;

LIBNAME IN1T V612 "....\..\Q&QTR._&YEAR\data\afinal"; * Location of frame file;
LIBNAME IN2T V612 "....\..\Q&QTR._&YEAR.t\data\afinal"; * Location HCSDB file;

PROC SORT DATA=IN1T.FRAMEA(KEEP=MPRID D_PAR D_FAC D_HEALTH CACSMPL) OUT=FRAME&QTR; BY MPRID;
RUN;

```

```

PROC SORT DATA=IN1T.EXTRACT(KEEP=MPRID PCM ENRID DCATCH) OUT=EXTRACT&QTR; BY MPRID; RUN;

%IF &QTR = 4 %THEN %DO;

PROC SORT DATA=IN1T.HCS&YR.&QTR._1(KEEP=MPRID XREGION) OUT=HCSDB&QTR; BY MPRID; RUN;

DATA HCSDB&QTR;
MERGE FRAME&QTR(IN=IN1) EXTRACT&QTR(IN=IN2) HCSDB&QTR(IN=IN3);
BY MPRID;
IF IN3; *Keep only respondents;
RUN;
%END;

%ELSE %DO;

PROC SORT DATA=IN2T.HCS&YR.&QTR._1(KEEP=MPRID XREGION) OUT=HCSDB&QTR; BY MPRID; RUN;

DATA HCSDB&QTR;
MERGE FRAME&QTR(IN=IN1) EXTRACT&QTR(IN=IN2) HCSDB&QTR(IN=IN3);
BY MPRID;
IF IN3; *Keep only respondents;
RUN;
%END;
%END;

%IF &YEAR = 2003 %THEN %DO;

%IF &QTR = 4 %THEN %DO;
LIBNAME IN1T V612 "..\..\..\Q&QTR.&YEAR\data\afinal"; * Location of frame file;

PROC SORT DATA=IN1T.FRAMES(KEEP=MPRID D_PAR D_FAC D_HEALTH CACSMPL)
OUT=FRAME; BY MPRID; RUN;
PROC SORT DATA=IN1T.HCS&YR.&QTR._2(KEEP=MPRID PCM ENRID DCATCH XREGION)
OUT=HCSDB; BY MPRID; RUN;

DATA HCSDB&QTR;
MERGE FRAME(IN=IN1) HCSDB(IN=IN3);
BY MPRID;
IF IN3; *Keep only respondents;
RUN;
%END;

%ELSE %DO;

LIBNAME IN2T V612 "..\..\..\Q&QTR.&YEAR.t\data\afinal"; * Location HCSDB file;

PROC SORT DATA=IN2T.HCS&YR.&QTR._1(KEEP=MPRID XREGION) OUT=HCSDB&QTR; BY MPRID; RUN;
%END;

%END;

%END;
%MEND;

%PROCESS;

%INCLUDE "..\Consumerwatch\XCATCH.INC"/SOURCE2;

*****
* Combine quarterly datasets with all of the "trickle" data into one file.
*****

DATA COMB&YEAR;
SET INQ1.HCS&YR.1_1
INQ2.HCS&YR.2_1
INQ3.HCS&YR.3_1
INQ4.HCS&YR.4_1
;

```

```

BY MPRID;

LABEL FIELDAGE = "Age at start of fielding period"
      DAGQY    = "Age at time of data collection"
      ;
RUN;

*****
* Sort by MPRID and check for duplicates.  There should not be duplicates.
*****;
PROC SORT DATA=COMB&YEAR.(DROP=E1-E16) NODUPKEY; BY MPRID; RUN;

*****
* Get eligibility indicators from most recent Q4 XWALK file and append
* them to the combined annual dataset.
*****;
PROC SORT DATA=INQ4.XWALK OUT=ELIG(KEEP=MPRID E1-E16) NODUPKEY; BY MPRID; RUN;

DATA OUT.COMB&YEAR;
MERGE ELIG(IN=IN1) COMB&YEAR.(IN=IN2) TEMP(IN=IN3);
BY MPRID;
LABEL
E1      = "Elig ind for pd=1 (as of 31 July 2001)"
E2      = "Elig ind for pd=2 (as of 30 Sept 2001)"
E3      = "Elig ind for pd=3 (as of 31 Jan 2002)"
E4      = "Elig ind for pd=4 (as of 31 Mar 2002)"
E5      = "Elig ind for pd=5 (as of 31 Aug 2002)"
E6      = "Elig ind for pd=6 (as of 30 Nov 2002)"
E7      = "Elig ind for pd=7 (as of 28 Feb 2003)"
E8      = "Elig ind for pd=8 (as of 31 May 2003)"
E9      = "Elig ind for pd=9 (as of 31 Aug 2003)"
E10     = "Elig ind for pd=10 (as of 30 Nov 2003)"
E11     = "Elig ind for pd=11 (as of 28 Feb 2004)"
E12     = "Elig ind for pd=12 (as of 31 May 2004)"
E13     = "Elig ind for pd=13 (as of 30 Sept 2003)"
E14     = "Elig ind for pd=14 (as of 30 Dec 2003)"
E15     = "Elig ind for pd=15 (as of 31 Mar 2004)"
E16     = "Elig ind for pd=16 (as of 16 June 2004)"
      ;
IF IN1 AND IN2;
RUN;

TITLE1 "Annual DOD Health Care Survey Database (6077-300)";
TITLE2 "Program Inputs: XWALK.SD2 and HCS&YR.q_1.SD2 - Q1-Q4 DOD HCS Sample and Analysis files";
TITLE3 "Program Output: COMB&YEAR..SD2 - Combined quarterly datasets in one annual file";

PROC CONTENTS; RUN;

proc freq data=out.comb&year;
tables PCM*enrid*d_par*d_fac*dcatch*cacsmpl/list;
where xcatch <0;
run;

```

G.13 - ..\WEIGHTING\ADDWGTS.SAS - Merge Weights onto Data File - Annual.

```

*****
*
* PROGRAM:  ADDWGTS.SAS
* TASK:    2004 DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* 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: Updated for 2004 annual survey.
*            -- Create macro variables and eliminate macro program,
*            -- update the length statement for year 2004.
*
* INPUTS:  1) CREPWT.SD2 - Final/Replicated Weights file - FORM A
*            2) COMB2004.SD2 - Combined Q1-Q4 FORM A Questionnaire/Sample File
*
* OUTPUTS: 1) HCSyyA_n.SD2 - 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
*
* NOTES:   1) This program combines all of the quarterly input datasets
*            including trickles with the annual weights file.
*
*****;

LIBNAME OUT      V612 "..\..\DATA";
LIBNAME LIBRARY V612 "..\..\Data\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER NOFMterr;

%LET DSNI_1 = CREPWT;
%LET DSNI_2 = COMB2004;
%LET DSNO   = HCS04A_1;

*****
* Merge the final weights file with the final Questionnaire/Sample file
*****;
PROC SORT DATA=OUT.&DSNI_1 OUT=&DSNI_1; BY MPRID; RUN;
PROC SORT DATA=OUT.&DSNI_2 OUT=&DSNI_2; BY MPRID; RUN;

DATA &DSNO;
  MERGE &DSNI_2(IN=IN2 DROP=ADJ_CELL)
        &DSNI_1(IN=IN1 DROP=QUARTER CACSMPL);
  BY MPRID;

  IF FNSTATUS = 11;
  IF IN1 AND IN2;
  IF NOT (IN1 AND IN2) THEN PUT "ERROR: NO MATCHING MPRID WITH &DSNI_1..SD2 AND &DSNI_2..SD2";

  LABEL
  KEYCOUNT = "# of Key Questions Answered"
  ADJ_CELL   = "ADJ_CELL - Adjusted STRATUM cell"
  CWRWT     = "Combined Annual Weight"
  CACSMPL   = "CACSMPL - Catchment Area (Sampling)"
  ;

  FORMAT CACSMPL CAC.  WEB WEB. e1-e16 $e_.
         TRICKDUP $trckdup.
         N1  N2  N2A  N3  N4  N5  N5A  N6  N7
         N8  N9  N10  N11 N11A N11B N11C N11D
         N11E N11F N11G N11H N11I N12  N13  N14
         N15  N16  N17  N18  N18A N18B N18C N18D

```

N18E N18F N18G N19 N20A N20B N20C N21
N22 N23 notes.

XBMI xbmi.;

RUN;

DATA OUT.&DSNO (DROP=COM_GEO);

* 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	*/
/*			
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	*/
E1	\$ 1	/* sampling variable	*/
E2	\$ 1	/* sampling variable	*/
E3	\$ 1	/* sampling variable	*/
E4	\$ 1	/* sampling variable	*/
E5	\$ 1	/* sampling variable	*/
E6	\$ 1	/* sampling variable	*/
E7	\$ 1	/* sampling variable	*/
E8	\$ 1	/* sampling variable	*/
E9	\$ 1	/* sampling variable	*/
E10	\$ 1	/* sampling variable	*/
E11	\$ 1	/* sampling variable	*/
E12	\$ 1	/* sampling variable	*/
E13	\$ 1	/* sampling variable	*/
E14	\$ 1	/* sampling variable	*/
E15	\$ 1	/* sampling variable	*/
E16	\$ 1	/* sampling variable	*/
SERVAFF	\$ 1	/* DEERS variable	*/
MRTLSTAT	\$ 1	/* DEERS variable	*/
RACEETHN	\$ 1	/* DEERS variable	*/
PNSEXCD	\$ 1	/* DEERS variable	*/
LEGDDSCD	\$ 2	/* DEERS variable	*/
DAGEQY	\$ 3	/* DEERS variable	*/
PCM	\$ 3	/* 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	*/
PNLCATCD	\$ 1	/* DEERS variable	*/
FIELDAGE	\$ 3	/* DEERS variable	*/
H04001	4	/* Questionnaire variable	*/
H04002A	4	/* Questionnaire variable	*/
H04002C	4	/* Questionnaire variable	*/
H04002F	4	/* Questionnaire variable	*/
H04002G	4	/* Questionnaire variable	*/
H04002H	4	/* Questionnaire variable	*/
H04002I	4	/* Questionnaire variable	*/
H04002J	4	/* Questionnaire variable	*/

H04072	4	/* Questionnaire variable	*/
H04073	4	/* Questionnaire variable	*/
H04074	4	/* Questionnaire variable	*/
H04075	4	/* Questionnaire variable	*/
SRHGTF	4	/* Questionnaire variable	*/
SRHGTI	4	/* Questionnaire variable	*/
SRWGT	4	/* Questionnaire variable	*/
H04076	4	/* Questionnaire variable	*/
H04077	4	/* Questionnaire variable	*/
H04078	4	/* Questionnaire variable	*/
H04079	4	/* Questionnaire variable	*/
H04080	4	/* Questionnaire variable	*/
H04081	4	/* Questionnaire variable	*/
H04082	4	/* Questionnaire variable	*/
H04083	4	/* Questionnaire variable	*/
H04084	4	/* Questionnaire variable	*/
H04085	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	*/
S04F01	4	/* Q1 Supplement	*/
S04F02	4	/* Q1 Supplement	*/
S04F03	4	/* Q1 Supplement	*/
S04F04	4	/* Q1 Supplement	*/
S04F05	4	/* Q1 Supplement	*/
S04F06	4	/* Q1 Supplement	*/
S04F07	4	/* Q1 Supplement	*/
S04F08	4	/* Q1 Supplement	*/
S04F09	4	/* Q1 Supplement	*/
S04V01	4	/* Q1 Supplement	*/
S04V02	4	/* Q1 Supplement	*/
S04V04	4	/* Q1 Supplement	*/
S04V05	4	/* Q1 Supplement	*/
S04V06	4	/* Q2 Supplement	*/
S04V07	4	/* Q2 Supplement	*/
S04C01	4	/* Q2 Supplement	*/
S04C02	4	/* Q2 Supplement	*/
S04C03	4	/* Q2 Supplement	*/
S04C04	4	/* Q2 Supplement	*/
S04C05	4	/* Q2 Supplement	*/
S04C06	4	/* Q2 Supplement	*/
S04C07	4	/* Q2 Supplement	*/
S04C08	4	/* Q2 Supplement	*/
S04C09	4	/* Q2 Supplement	*/
S04C10	4	/* Q2 Supplement	*/
S04C11	4	/* Q2 Supplement	*/
S04C12	4	/* Q2 Supplement	*/
S04C13	4	/* Q2 Supplement	*/
S04C14	4	/* Q2 Supplement	*/
S04C15	4	/* Q2 Supplement	*/
S04C16	4	/* Q2 Supplement	*/
S04C17	4	/* Q2 Supplement	*/
S04C18	4	/* Q2 Supplement	*/
S04C19	4	/* Q2 Supplement	*/
S04C20	4	/* Q2 Supplement	*/
S04C21	4	/* Q2 Supplement	*/
S04C22	4	/* Q2 Supplement	*/
S04R01	4	/* Q3 Supplement	*/
S04R02	4	/* Q3 Supplement	*/
S04R03	4	/* Q3 Supplement	*/
S04R04A	4	/* Q3 supplement	*/

S04R04B	4	/* Q3 supplement	*/
S04R04C	4	/* Q3 supplement	*/
S04R04D	4	/* Q3 supplement	*/
S04R04E	4	/* Q3 supplement	*/
S04R05	4	/* Q3 supplement	*/
S04R06	4	/* Q3 supplement	*/
S04R07	4	/* Q3 supplement	*/
S04R08	4	/* Q3 supplement	*/
S04R09	4	/* Q3 supplement	*/
S04R10	4	/* Q3 supplement	*/
S04R11	4	/* Q3 supplement	*/
S04R12	4	/* Q3 supplement	*/
S04R13	4	/* Q3 supplement	*/
S04R14	4	/* Q3 supplement	*/
S04R15	4	/* Q3 supplement	*/
S04G02	4	/* Q4 Supplement	*/
S04G03	4	/* Q4 Supplement	*/
S04G04	4	/* Q4 Supplement	*/
S04G05	4	/* Q4 Supplement	*/
S04G06	4	/* Q4 Supplement	*/
S04G07	4	/* Q4 Supplement	*/
S04G08	4	/* Q4 Supplement	*/
S04G09	4	/* Q4 Supplement	*/
S04G10	4	/* Q4 Supplement	*/
S04G11	4	/* Q4 Supplement	*/
S04G12	4	/* Q4 Supplement	*/
S04G13	4	/* Q4 Supplement	*/
S04G14	4	/* Q4 Supplement	*/
S04G15	4	/* Q4 supplement	*/
S04G16	4	/* Q4 supplement	*/
S04G17	4	/* Q4 supplement	*/
S04V01	4	/* supplemental	*/
S04V02	4	/* supplemental	*/
S04V04	4	/* supplemental	*/
S04V05	4	/* supplemental	*/
S04V06	4	/* supplemental	*/
S04V07	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	*/
QUARTER	\$ 7	/* Survey fielding variable	*/
TRICKDUP	\$ 3	/* Survey Fielding variable	*/
WEB	8	/* Survey Fielding variable	*/
N1	8	/* CS flag variable	*/
N2	8	/* CS flag variable	*/
N2A	8	/* CS flag variable	*/
N3	8	/* CS flag variable	*/
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N5A	8	/* CS flag variable	*/
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N11A	8	/* CS flag variable	*/
N11B	8	/* CS flag variable	*/
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N11G	8	/* CS flag variable	*/
N11H	8	/* CS flag variable	*/
N11I	8	/* CS flag variable	*/

N12	8	/* CS flag variable	*/
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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_8	8	/* CS Count	*/
MISS_9	8	/* CS Count	*/
MISS_TOT	8	/* CS Count	*/
XTNEXREG	3	/* constructed	*/
XBMI	8	/* constructed	*/
XBMICAT	3	/* constructed	*/
XENRLMT	8	/* constructed	*/
XENR_PCM	8	/* constructed	*/
XINS_COV	8	/* constructed	*/
XREGION	3	/* constructed	*/
XCATCH	8	/* constructed	*/
CONUS	3	/* constructed	*/
OUTCATCH	8	/* constructed	*/
XSEXA	8	/* constructed	*/
XBNFGRP	8	/* constructed	*/
KDISENRL	8	/* constructed	*/
KMILOFFC	8	/* constructed	*/
KCIVOFFC	8	/* constructed	*/
KBGPRB1	8	/* constructed	*/
KBGPRB2	8	/* constructed	*/
KMILOPQY	8	/* constructed	*/
KCIVOPQY	8	/* constructed	*/
KCIVINS	8	/* constructed	*/
KBRSTCR	8	/* constructed	*/
HP_PRNTL	8	/* constructed	*/
HP_MAMOG	8	/* constructed	*/
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HP_PAP	8	/* constructed	*/
HP_BP	8	/* constructed	*/
HP_FLU	8	/* constructed	*/
HP_PROS	8	/* constructed	*/
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HP_CHOL	8	/* constructed	*/
HP_SMOKE	8	/* constructed	*/
HP_SMOKH	8	/* constructed	*/
HP_CESS	8	/* constructed	*/
ADJ_CELL	8	/* constructed	*/
BWT	8	/* weights	*/
WRWT	8	/* weights	*/
WRWT1	8	/* weights	*/
WRWT2	8	/* weights	*/

WRWT3	8	/* weights	*/
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WRWT10	8	/* weights	*/
WRWT11	8	/* weights	*/
WRWT12	8	/* weights	*/
WRWT13	8	/* weights	*/
WRWT14	8	/* weights	*/
WRWT15	8	/* weights	*/
WRWT16	8	/* weights	*/
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WRWT19	8	/* weights	*/
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WRWT24	8	/* weights	*/
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WRWT27	8	/* weights	*/
WRWT28	8	/* weights	*/
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WRWT60	8	/* weights	*/
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CWRWT2	8	/* weights	*/
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CWRWT90	8	/* weights	*/
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CWRWT119	8	/* weights	*/
CWRWT120	8	/* weights	*/
CWRWT121	8	/* weights	*/
CWRWT122	8	/* weights	*/
CWRWT123	8	/* weights	*/
CWRWT124	8	/* weights	*/
CWRWT125	8	/* weights	*/
CWRWT126	8	/* weights	*/
CWRWT127	8	/* weights	*/
CWRWT128	8	/* weights	*/
CWRWT129	8	/* weights	*/
CWRWT130	8	/* weights	*/
CWRWT131	8	/* weights	*/
CWRWT132	8	/* weights	*/
CWRWT133	8	/* weights	*/
CWRWT134	8	/* weights	*/
CWRWT135	8	/* weights	*/
CWRWT136	8	/* weights	*/
CWRWT137	8	/* weights	*/
CWRWT138	8	/* weights	*/
CWRWT139	8	/* weights	*/
CWRWT140	8	/* weights	*/
CWRWT141	8	/* weights	*/
CWRWT142	8	/* weights	*/
CWRWT143	8	/* weights	*/
CWRWT144	8	/* weights	*/
CWRWT145	8	/* weights	*/
CWRWT146	8	/* weights	*/
CWRWT147	8	/* weights	*/
CWRWT148	8	/* weights	*/
CWRWT149	8	/* weights	*/
CWRWT150	8	/* weights	*/
CWRWT151	8	/* weights	*/
CWRWT152	8	/* weights	*/
CWRWT153	8	/* weights	*/
CWRWT154	8	/* weights	*/
CWRWT155	8	/* weights	*/
CWRWT156	8	/* weights	*/
CWRWT157	8	/* weights	*/
CWRWT158	8	/* weights	*/
CWRWT159	8	/* weights	*/
CWRWT160	8	/* weights	*/
CWRWT161	8	/* weights	*/
CWRWT162	8	/* weights	*/

CWRWT163	8	/* weights	*/
CWRWT164	8	/* weights	*/
CWRWT165	8	/* weights	*/
CWRWT166	8	/* weights	*/
CWRWT167	8	/* weights	*/
CWRWT168	8	/* weights	*/
CWRWT169	8	/* weights	*/
CWRWT170	8	/* weights	*/
CWRWT171	8	/* weights	*/
CWRWT172	8	/* weights	*/
CWRWT173	8	/* weights	*/
CWRWT174	8	/* weights	*/
CWRWT175	8	/* weights	*/
CWRWT176	8	/* weights	*/
CWRWT177	8	/* weights	*/
CWRWT178	8	/* weights	*/
CWRWT179	8	/* weights	*/
CWRWT180	8	/* weights	*/
CWRWT181	8	/* weights	*/
CWRWT182	8	/* weights	*/
CWRWT183	8	/* weights	*/
CWRWT184	8	/* weights	*/
CWRWT185	8	/* weights	*/
CWRWT186	8	/* weights	*/
CWRWT187	8	/* weights	*/
CWRWT188	8	/* weights	*/
CWRWT189	8	/* weights	*/
CWRWT190	8	/* weights	*/
CWRWT191	8	/* weights	*/
CWRWT192	8	/* weights	*/
CWRWT193	8	/* weights	*/
CWRWT194	8	/* weights	*/
CWRWT195	8	/* weights	*/
CWRWT196	8	/* weights	*/
CWRWT197	8	/* weights	*/
CWRWT198	8	/* weights	*/
CWRWT199	8	/* weights	*/
CWRWT200	8	/* weights	*/
CWRWT201	8	/* weights	*/
CWRWT202	8	/* weights	*/
CWRWT203	8	/* weights	*/
CWRWT204	8	/* weights	*/
CWRWT205	8	/* weights	*/
CWRWT206	8	/* weights	*/
CWRWT207	8	/* weights	*/
CWRWT208	8	/* weights	*/
CWRWT209	8	/* weights	*/
CWRWT210	8	/* weights	*/
CWRWT211	8	/* weights	*/
CWRWT212	8	/* weights	*/
CWRWT213	8	/* weights	*/
CWRWT214	8	/* weights	*/
CWRWT215	8	/* weights	*/
CWRWT216	8	/* weights	*/
CWRWT217	8	/* weights	*/
CWRWT218	8	/* weights	*/
CWRWT219	8	/* weights	*/
CWRWT220	8	/* weights	*/
CWRWT221	8	/* weights	*/
CWRWT222	8	/* weights	*/
CWRWT223	8	/* weights	*/
CWRWT224	8	/* weights	*/
CWRWT225	8	/* weights	*/
CWRWT226	8	/* weights	*/
CWRWT227	8	/* weights	*/
CWRWT228	8	/* weights	*/
CWRWT229	8	/* weights	*/
CWRWT230	8	/* weights	*/
CWRWT231	8	/* weights	*/
CWRWT232	8	/* weights	*/
CWRWT233	8	/* weights	*/
CWRWT234	8	/* weights	*/
CWRWT235	8	/* weights	*/
CWRWT236	8	/* weights	*/

```

CWRWT237      8      /* weights      */
CWRWT238      8      /* weights      */
CWRWT239      8      /* weights      */
CWRWT240      8      /* weights      */
;

SET  &DSNO;

LABEL XCATCH = "XCATCH - Catchment Area (Reporting) ";
FORMAT XCATCH CACR.;
BY MPRID;
RUN;

TITLE1 "2004 DOD Quarterly Health Care Survey (6077-300)";
*TITLE2 "Program Name: ADDWGTS.SAS By Keith Rathbun";
TITLE3 "Program Inputs: &DSNI_1..SD2 -- &DSNI_2..SD2";
TITLE4 "Program Outputs: &DSNO..SD2";
PROC CONTENTS POSITION; RUN;
PROC FREQ; TABLES HP_SMOKH HP_CESS / LIST MISSING;
RUN;

```

G.14 - ..\WEIGHTING\PROCCOPA.SAS - Create XPORT version from Database - Annual.

```
*****
*
* PROGRAM: PROCCOPA.SAS
* PURPOSE: Create XPORT file from SD2
* WRITTEN April 26, 2000 BY Keith Rathbun
* TASK: 2004 Quarterly DoD Database Development (6077-300)
*
* INPUTS: 1) HCSyyq_v.SD2 - DoD Quarterly HCSDB for Adults dataset
*
* OUTPUTS: 1) HCSyyq_v.XPT - DoD Quarterly HCSDB for Adults dataset (XPORT)
*           where yy = 2-digit year
*           q = Quarter Number
*           v = Version Number
*
* NOTES: 1) Be sure to update the global parameters for the current
*          quarter (QTR) with the appropriate dataset name (DSN)
*          prior to running this program.
*
*****
* Define global parameters
*****;
%LET DSN = HCS04A_1;
*****
* Define SAS libraries and options
*****;
LIBNAME IN V612 "..\..\DATA";
*****
* Define SAS Transport file
*****;
LIBNAME OUT XPORT "..\..\DATA\&DSN.XPT";
*****
* Generate SAS Transport file
*****;
PROC COPY IN=IN OUT=OUT ; * Converts input file to transport file;
        SELECT &DSN;      * Selects SD2 file to copy;
RUN;
```

G.15 - ..\WEIGHTING\HCS04A_2.SAS - Merge final dataset with original sample to extract variables - Annual.

```

*****
*
* PROGRAM:   HCS04A_2.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE:  MERGE THE FINAL ADULT DATASET WITH THE ORIGINAL SAMPLE TO
*           EXTRACT THE DOB, ZIP CODE, RANK AND PAY GRADE VARIABLES
*
* WRITTEN:  05/02/2002 BY KEITH RATHBUN
*
* MODIFIED: 1) 02/13/2003 BY KEITH RATHBUN, Update for 2002 survey.
*           2) 02/10/2004 BY KEITH RATHBUN, Update for 2003 survey.
*           3) 02/16/2005 BY KEITH RATHBUN, Update for 2004 survey.
*
* INPUTS:   1) SAMPLA02.SD2 - Q1-Q4 2004 Adult Sample files
*           2) HCS04A_1.SD2 - Final 2004 Public-Use Adult (Form A) Dataset
*
* OUTPUTS:  1) HCS04A_2.SD2 - Final 2004 Private-Use Adult (Form A) Dataset
*           with private-use variables (MASTCD, MAPRZIP, MAPRZIPX,
*           PNBRTHTD, PGCD, PAYPLNCD, RANKCD, and DCATCH).
*           2) HCS04A_2.XPT - Final 2004 Private-Use Adult (Form A) Dataset
*
*****;
LIBNAME IN1      V612 "..\..\data";          * Location of Annual file;
LIBNAME OUT      V612 "..\..\data";          * Output Area;
LIBNAME LIBRARY V612 "..\..\2003\data\fmtlib"; * Format Definitions;
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER nofmterr;

*****
* Assign input and output dataset names.
*****;
%LET DSNI = HCS04A_1;
%LET DSNO = HCS04A_2;

*****
* Extract private-use variables and combine quarterly samples into one file.
*****;
%MACRO PROCESS(QTR=, SLOC=);
  LIBNAME IN2 V612 "&SLOC"; * Location of quarterly Adult sample files;
  DATA &QTR;
    SET IN2.SAMPLA02;
    KEEP MPRID ENRID MASTCD MAPRZIP MAPRZIPX PNBRTHTD PGCD PAYPLNCD RANKCD DCATCH;
  RUN;
  PROC SORT DATA=&QTR; BY MPRID; RUN;
%MEND PROCESS;

%PROCESS(QTR=Q1, SLOC=..\..\Q1_2004\DATA\AFINAL); *Quarter 1 2004 Sample;
%PROCESS(QTR=Q2, SLOC=..\..\Q2_2004\DATA\AFINAL); *Quarter 2 2004 Sample;
%PROCESS(QTR=Q3, SLOC=..\..\Q3_2004\DATA\AFINAL); *Quarter 3 2004 Sample;
%PROCESS(QTR=Q4, SLOC=..\..\Q4_2004\DATA\AFINAL); *Quarter 4 2004 Sample;

DATA TEMP;
  SET Q1 Q2 Q3 Q4;
  BY MPRID;
RUN;

*****
* Append private-use variables to the 2004 annual file.
*****;
DATA OUT.&DSNO;
  MERGE IN1.&DSNI(IN=IN1) TEMP(IN=IN2);
  BY MPRID;
  IF IN1 AND IN2; *KEEP only eligible respondents;
RUN;

TITLE1 "DOD Health Survey Private-Use file Creation (6077-300)";
TITLE2 "Program Name: &DSNO..SAS By Keith Rathbun";
TITLE3 "Program Output: &DSNO..SD2";
PROC CONTENTS; RUN;

```

```
*****
* Define SAS Transport file
*****;
LIBNAME KEITH XPORT "..\..\DATA\&DSNO..XPT";

*****
* Generate SAS Transport file
*****;
PROC COPY IN=OUT OUT=KEITH; * Converts input file to transport file;
      SELECT &DSNO;        * Selects SD2 file to copy;
RUN;
```

G.16 - ..\WEIGHTING\CREPWT.SAS - Calculate combined replicate weights - Annual.

```

*****
* PROGRAM: DOD\2004\Programs\Weighting\CREPWT.SAS
* TASK: 2004 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE COMBINED ANNUAL REPLICATE WEIGHTS FOR DOD SURVEY.
* REQUESTED BY DON JANG.
* CREATED: 12/19/2001 by Esther M Friedman
* UPDATED: 02/11/2005 by Xiaojing Lin for 2004 annual weighting
* OUTPUTS: repwt.SD2 - Annual Replicate Weights File
*****
* ;
LIBNAME IN1 v6 "..\..\..\Q1_2004t\data\afinal";
LIBNAME IN2 v6 "..\..\..\Q2_2004t\data\afinal";
LIBNAME IN3 v6 "..\..\..\Q3_2004t\data\afinal";
LIBNAME IN4 v6 "..\..\..\Q4_2004\data\afinal";
LIBNAME OUT v6 "..\..\..\2004\Data";

OPTIONS PS=79 LS=132 COMPRESS=YES errors=0 NOCENTER mlogic mprint symbolgen;

Title1 "CREPWT.SAS: CREATES ANNUAL COMBINED WEIGHT AND COMBINED REPLICATED WEIGHT";
*****
* MERGE THE 4 NEW (with trickles) QUARTERLY WEIGHT FILES
*****;
data repwtq1 (keep= fnstatus bwt mprid com_geo com_samp quarter wrwt wrwt1-wrwt60);
set in1.repwt;
*****;
com_samp=adj_cell;*Added by Xiaojing, change the variable name;
*****;
quarter=1;
label quarter = 'Dod quarter indicator';
format _all_;
run;

data repwtq2 (keep= fnstatus bwt mprid com_geo com_samp quarter wrwt wrwt1-wrwt60);
set in2.repwt;
*****;
com_samp=adj_cell;*Added by Xiaojing, change the variable name;
*****;
quarter=2;
label quarter = 'Dod quarter indicator';
format _all_;
run;

data repwtq3 (keep= fnstatus bwt mprid com_geo com_samp quarter wrwt wrwt1-wrwt60);
set in3.repwt;
*****;
com_samp=adj_cell;*Added by Xiaojing, change the variable name;
*****;
quarter=3;
label quarter = 'Dod quarter indicator';
format _all_;
run;

data repwtq4 (keep= fnstatus bwt mprid com_geo com_samp quarter wrwt wrwt1-wrwt60);
set in4.repwt;
com_geo=cacsmp1;
com_samp=adj_cell;
quarter=4;
label quarter = 'Dod quarter indicator';
format _all_;
run;

*sort the new quarterly files;
proc sort data=repwtq1;
by mprid;

proc sort data=repwtq2;
by mprid;

proc sort data=repwtq3;
by mprid;

```

```

proc sort data=repwtq4;
by mprid;

*merge the new quarterly files;
data out.repwt;
set repwtq1 repwtq2 repwtq3 repwtq4;
by mprid;

*check new file;
title3 "Check the new combined file";
proc freq data=out.repwt;
tables quarter/list missing;
run;

proc contents data=out.repwt;
run;

*****
* CREATE THE ANNUAL WEIGHTS
*****;

* Use Equal Weighting Method: Divide each quarterly weight by 4;

data repwt;
  set out.repwt;
  cwrwt=wrwt/4;
  label cwrwt= 'combined annual wt';

*****
* CHECK NEW ANNUAL WEIGHTS
*****;
title3 "Weighted using wrwt";
proc freq data=repwt;
tables quarter fnstatus fnstatus*quarter/list missing;
weight wrwt;
run;

title3 "Weighted using cwrwt";
proc freq data=repwt;
tables quarter fnstatus fnstatus*quarter/list missing;
weight cwrwt;
run;

title3 "Unweighted";
proc freq data=repwt;
tables quarter fnstatus fnstatus*quarter/list missing;
run;

Proc sort data=repwt;
by mprid;
run;

title3 'Checks for cwrwt and wrwt for fnstatus=11';
Proc print data=repwt (obs=1000) noobs;
var quarter cwrwt wrwt;
where fnstatus=11;
run;

proc sort data=repwt;
by quarter;
run;

title3 'Checks for wrwt by quarter for fnstatus=11';
proc univariate data=repwt;
var wrwt;
by quarter;
where fnstatus=11;
run;

title3 'Checks for cwrwt for fnstatus=11';
proc univariate data=repwt;
var cwrwt;
where fnstatus=11;
run;

```

```

*****
* CREATE THE REPLICATE WEIGHTS
*****;

proc sort data=repwt;
by quarter;
run;

data arepwt ( drop = rep );
set repwt;
array repwt[60] wrwt1 - wrwt60;
array annual_repwt[240] cwrwt1 - cwrwt240;
do rep = 1 to 240;
if 1 <= rep <= 60 then
do;
if quarter in ( 2, 3, 4 ) then
annual_repwt[rep] = wrwt;
else
annual_repwt[rep] = repwt[rep];
end;
else if 61 <= rep <= 120 then
do;
if quarter in ( 1, 3, 4 ) then
annual_repwt[rep] = wrwt;
else
annual_repwt[rep] = repwt[rep - 60];
end;
else if 121 <= rep <= 180 then
do;
if quarter in ( 1, 2, 4 ) then
annual_repwt[rep] = wrwt;
else
annual_repwt[rep] = repwt[rep - 120];
end;
else if 181 <= rep <= 240 then
do;
if quarter in ( 1, 2, 3 ) then
annual_repwt[rep] = wrwt;
else
annual_repwt[rep] = repwt[rep - 180];
end;
annual_repwt[rep] = annual_repwt[rep]/4;
end;*replicate loop;
run;

* Label final cwrwt1-cwrwt240;
%MACRO LABWT;
%DO I = 1 %TO 240; /*DROP I*/;
LABEL CWRWT&I = "Combined Replicated Weight &I";
%END;
%MEND LABWT;
run;

data out.crepwt;
set arepwt;
IF _N_ =1 THEN %LABWT; *For efficiency only label once;
run;

* Check the new cwrwts;
title3 'Checks for the new cwrwts';
proc contents data = out.crepwt;
run;

PROC MEANS DATA=OUT.crepwt n sum;
VAR cwrwt cwrwt1-cwrwt240;
output out=sums sum(cwrwt cwrwt1-cwrwt240) = cwrwt cwrwt1-cwrwt240;
RUN;

proc transpose data=sums out=t_sums;
var cwrwt cwrwt1-cwrwt240;
run;

title3 'Checks for the sum of the new cwrwts';

```

```

proc univariate data=t_sums normal ;
var coll;
run;

*****
* Change com_samp and com_geo to numeric vars
* For use with Sudaan as per Keith
*****;
data out.crepwt;
set out.crepwt;
com_sam2=input(com_samp, 7.);
com_ge2=input(com_geo, 4.);
run;

Proc freq data=out.crepwt (obs=25);
tables com_samp*com_sam2 com_geo*com_ge2/list missing;
title3 "Check new numeric variables, as per Keith";
run;

*****
*rename com_samp and com_geo
*****;
data out.crepwt (drop=com_samp com_geo);
  set out.crepwt;
  rename com_ge2=cacsmpl;
  rename com_sam2=adj_cell;
run;

title3;
*****
* LABEL THE NEW CREPWT DATASET
*****;
/*Commented out on 02/14/05 by Xiaojing Lin*/
* Label final cwrwt1-cwrwt240;
*%MACRO LABWT;
*   %DO I = 1 %TO 240; /*DROP I*/;
*       LABEL CWRWT&I = "Combined Replicated Weight &I";
*   %END;
*%MEND LABWT;
*run;

data out.repwt;
  set out.crepwt ;
  IF _N_ =1 THEN do;
    label cwrwt      = 'Combined Annual Wt';
    label cacsmpl   = 'CACSMPL - Catchment Area';
    label adj_cell  = 'Final Adjusted Cell';
    %LABWT; *For efficiency only label once;
  end;
run;

*****
* FINAL CHECKS
*****;
title3 'Final dataset repwt.sd2 check';
proc contents data=out.repwt ;
run;

```

APPENDIX H

**SAS CODE FOR STATISTICAL AND WEB SPECIFICATION FOR
2002 TRICARE CONSUMER REPORTS**

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H.1.A Q4_2004\PROGRAMS\ReportCards\CAHPS_AdultQ42004\STEP1Q.SAS - Create and recode variables used in Adult Beneficiary Reports - 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 H04007>=2) THEN GROUP1 = 1
*          IF (XENR_PCM IN (1,2,6) AND H04007>=2) THEN GROUP2 = 1
*          IF (XENR_PCM = 3,7 AND H04007>=2) THEN GROUP3 = 1
*          IF XINS_COV IN (3,4,5) THEN GROUP4 = 1
*          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.
*
* INPUTS: 1) HCS042_1 - DoD Quarterly HCS Database /*RSG 06/16/04*/
*
* OUTPUTS: 1) GROUP1-8.SD2 - 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.
*

```

```

*****;
OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMterr NOOVP COMPRESS=YES;
LIBNAME OUT V612 "DATA";
LIBNAME IN1 V612 "..\..\..\Data\Afinal";
LIBNAME LIBRARY "..\..\..\Data\Afinal\fmtlib";

TITLE1 'Program Saved as: STEP1Q.SAS';

```

```

proc format;
value servreg 1 = 'North Army'
              2 = 'North Air Force'
              3 = 'North Navy'
              4 = 'North Other'
              5 = 'South Army'
              6 = 'South Air Force'
              7 = 'South Navy'
              8 = 'South Other'
              9 = 'West Army'
             10 = 'West Air Force'
             11 = 'West Navy'
             12 = 'West Other'
             13 = 'Overseas Army'
             14 = 'Overseas Air Force'
             15 = 'Overseas Navy'
             16 = 'Overseas Other';

```

```

DATA ENTIRE;
SET IN1.HCS044_1(KEEP= /*RSG 09/24/04 Changed to Q3 2004*/
                 MPRID
                 FIELDAGE /*MJS 01/26/04*/
                 XTNEXREG
                 SERVAFF /*KRR 04/09/04*/

                 CONUS
                 ENBGSMPL
                 SREDA
                 XSEXA
                 XBNFGRP
                 adj_cell
                 XINS_COV
                 XENR_PCM
                 WRWT
                 H04029
                 /* Getting Needed Care */
                 H04011 /*MJS 03/24/04 Changed 2003 to 2004 variable names*/
                 H04013
                 H04028
                 H04030
                 /* Getting Care Quickly */
                 H04018
                 H04023
                 H04020
                 H04031
                 /* How Well Doctors Communicate */
                 H04034
                 H04035
                 H04036
                 H04037
                 /* Courteous and Helpful Office Staff */
                 H04032

```

```

H04033
/* Customer Service */
H04045
H04047
H04053
/* Claims Processing */
H04041
H04042 /*****
H04075 /* Health Status          */
H04038 /* Health Care Rating      */
H04054 /* Health Plan Rating     */
H04009 /* Personal Doctor Rating  */
H04015 /* Specialist Rating        */
H04007 /* 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;

IF XTNEXREG = . THEN DELETE; /* RSG 02/2005 USE CACSMPL TO DELETE MISSING FIELDS*/

IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;
/* Note: use tmp_cell in step2q.sas */
LENGTH TMP_CELL XSERVREG 8;
TMP_CELL = 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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
IF XSERVAFF = 1 THEN XSERVREG = 5;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
IF XSERVAFF = 1 THEN XSERVREG = 9;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
IF XSERVAFF = 1 THEN XSERVREG = 13;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
ELSE XSERVREG = 16;
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;

* IF H02047=2 THEN H02048=1;
*****
* 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 (XINS_COV IN (1,2,6) AND H04007>=2) THEN GROUP1 = 1;
IF (XENR_PCM IN (1,2,6) AND H04007>=2) THEN GROUP2 = 1;
IF (XENR_PCM IN (3,7) AND H04007>=2) THEN GROUP3 = 1;
IF XINS_COV IN (3,4,5) THEN GROUP4 = 1;
IF XBNFGRP = 1 THEN GROUP5 = 1;
IF XBNFGRP = 2 THEN GROUP6 = 1;
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 H04029 = 2 THEN H04030=3; /* ES 4/28/04 - Change in scoring method*/
IF H04018 = 1 THEN R04018 = 1; /*MJS 03/24/04 Changed 2003 to 2004 variable names*/
ELSE IF H04018 = 2 THEN R04018 = 1;
ELSE IF H04018 = 3 THEN R04018 = 2;
ELSE IF H04018 = 4 THEN R04018 = 3;
ELSE IF H04018 < 0 THEN R04018 = .;

IF H04023 = 1 THEN R04023 = 1;
ELSE IF H04023 = 2 THEN R04023 = 1;
ELSE IF H04023 = 3 THEN R04023 = 2;
ELSE IF H04023 = 4 THEN R04023 = 3;
ELSE IF H04023 < 0 THEN R04023 = .;

IF H04020 = 1 THEN R04020 = 1;
ELSE IF H04020 = 2 THEN R04020 = 1;
ELSE IF H04020 = 3 THEN R04020 = 2;
ELSE IF H04020 = 4 THEN R04020 = 3;
ELSE IF H04020 < 0 THEN R04020 = .;

IF H04031 = 1 THEN R04031 = 1;
ELSE IF H04031 = 2 THEN R04031 = 1;
ELSE IF H04031 = 3 THEN R04031 = 2;
ELSE IF H04031 = 4 THEN R04031 = 3;
ELSE IF H04031 < 0 THEN R04031 = .;

IF H04032 = 1 THEN R04032 = 1;
ELSE IF H04032 = 2 THEN R04032 = 1;
ELSE IF H04032 = 3 THEN R04032 = 2;
ELSE IF H04032 = 4 THEN R04032 = 3;
ELSE IF H04032 < 0 THEN R04032 = .;

```

```

IF H04033 = 1      THEN R04033 = 1;
ELSE IF H04033 = 2 THEN R04033 = 1;
ELSE IF H04033 = 3 THEN R04033 = 2;
ELSE IF H04033 = 4 THEN R04033 = 3;
ELSE IF H04033 < 0 THEN R04033 = .;

IF H04034 = 1      THEN R04034 = 1;
ELSE IF H04034 = 2 THEN R04034 = 1;
ELSE IF H04034 = 3 THEN R04034 = 2;
ELSE IF H04034 = 4 THEN R04034 = 3;
ELSE IF H04034 < 0 THEN R04034 = .;

IF H04035 = 1      THEN R04035 = 1;
ELSE IF H04035 = 2 THEN R04035 = 1;
ELSE IF H04035 = 3 THEN R04035 = 2;
ELSE IF H04035 = 4 THEN R04035 = 3;
ELSE IF H04035 < 0 THEN R04035 = .;

IF H04036 = 1      THEN R04036 = 1;
ELSE IF H04036 = 2 THEN R04036 = 1;
ELSE IF H04036 = 3 THEN R04036 = 2;
ELSE IF H04036 = 4 THEN R04036 = 3;
ELSE IF H04036 < 0 THEN R04036 = .;

IF H04037 = 1      THEN R04037 = 1;
ELSE IF H04037 = 2 THEN R04037 = 1;
ELSE IF H04037 = 3 THEN R04037 = 2;
ELSE IF H04037 = 4 THEN R04037 = 3;
ELSE IF H04037 < 0 THEN R04037 = .;

IF H04041 = 1      THEN R04041 = 1;
ELSE IF H04041 = 2 THEN R04041 = 1;
ELSE IF H04041 = 3 THEN R04041 = 2;
ELSE IF H04041 = 4 THEN R04041 = 3;
ELSE IF H04041 < 0 THEN R04041 = .;

IF H04042 = 1      THEN R04042 = 1;
ELSE IF H04042 = 2 THEN R04042 = 1;
ELSE IF H04042 = 3 THEN R04042 = 2;
ELSE IF H04042 = 4 THEN R04042 = 3;
ELSE IF H04042 < 0 THEN R04042 = .;

*****
* Recode variables to one missing condition ".".
* This also renames all the "H0xxxx" to "R0xxxx".
*****;
R04011 = H04011; IF R04011 < 0 THEN R04011 = .;
R04009 = H04009; IF R04009 < 0 THEN R04009 = .;
R04013 = H04013; IF R04013 < 0 THEN R04013 = .;
R04015 = H04015; IF R04015 < 0 THEN R04015 = .;
R04028 = H04028; IF R04028 < 0 THEN R04028 = .;
R04030 = H04030; IF R04030 < 0 THEN R04030 = .;
R04038 = H04038; IF R04038 < 0 THEN R04038 = .;
R04045 = H04045; IF R04045 < 0 THEN R04045 = .;
R04047 = H04047; IF R04047 < 0 THEN R04047 = .;
R04053 = H04053; IF R04053 < 0 THEN R04053 = .;
R04054 = H04054; IF R04054 < 0 THEN R04054 = .;
R04075 = H04075; IF R04075 < 0 THEN R04075 = .;

*****
* Create region and service affiliation dummies.
*****;
IF XSERVREG NE . THEN DO;
  ARRAY REGDUMS (16) REG01 REG02 REG03 REG04 REG05 REG06 REG07 REG08
REG09 REG10 REG11 REG12 REG13 REG14 REG15 REG16;
  DO I = 1 TO 16;
    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;

ARRAY SRVDUMS (4) SRV01 SRV02 SRV03 SRV04;
DO I = 1 TO 4; /*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;

END;

RUN;

*****
* Recode item responses to proportional values using CONVERT.SAS.
*****;
%INCLUDE "CONVERT.SAS";

%CONT1(DSN=ENTIRE, NUM=7, Y=R04011 R04013 R04028 R04030 /*MJS 03/24/04 Changed 2003 to 2004
variable names*/
R04045 R04047 R04053);
%CONT2(DSN=ENTIRE, NUM=4, Y=R04038 R04054 R04009 R04015);
%CONT3(DSN=ENTIRE, NUM=12, Y=R04018 R04023 R04020 R04031
R04034 R04035 R04036 R04037
R04032 R04033 R04041 R04042);

*****
* 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
  CONUS
  ENBGSMP
  XSEX
  ADJ_CELL /*MJS 07/01/03 Changed from COM_SAMP*/
  XINS_COV
  XENR_PCM
  WRWT
  ;
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
```

```
  ENBGSMP
  XINS_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 H04011 R04011 /*MJS 03/24/04 Changed 2003 to 2004 variable names*/
      H04009 R04009
      H04013 R04013
      H04015 R04015
      H04018 R04018
      H04023 R04023
      H04020 R04020
      H04028 R04028
      H04030 R04030
      H04031 R04031
      H04032 R04032
      H04033 R04033
      H04034 R04034
      H04035 R04035
```

```
;
```

```
RUN;
```

```
PROC PRINT DATA=ENTIRE(OBS=60);
  TITLE2 'Print of recoded question variables';
  VAR H04036 R04036
      H04037 R04037
      H04038 R04038
      H04041 R04041
      H04042 R04042
      H04045 R04045
      H04047 R04047
      H04053 R04053
      H04054 R04054
      H04075 R04075
```

```
;
```

```
RUN;
```

```
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
;
RUN;

PROC PRINT DATA=ENTIRE(OBS=60);
  TITLE2 'Print of recoded service affiliation variables';
  VAR XSERVREG
      XSERVAFF
      SRV01
      SRV02
      SRV03
      SRV04
  ;
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
    H04011
    H04009
    H04013
    H04015
    H04018
    H04023
    H04020
    H04028
    H04030
    H04031
    H04032
    H04033
    H04034
    H04035
    H04036
    H04037
    H04038
    H04041
    H04042
    H04045
    H04047
    H04053
    H04054
    H04075
  ;
  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;

```

H.1.B Q4_2004\PROGRAMS\ReportCards\CAHPS_AdultQ42004\STEP2Q.SAS - Calculate CAHPS Adjusted Scores - 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
*
* Subgroup Definitions:
*
* -----
*      Seven Subgroups          Definitions
* -----
* 1. Prime enrollees           XINS_COV IN (1,2,6) AND H04007>=2
* 2. Enrollees w/mil PCM       XENR_PCM IN (1,2,6) AND H04007>=2
* 3. Enrollees w/civ PCM       XENR_PCM = 3          AND H04007>=2
* 4. Nonenrollees             XINS_COV IN (3,4,5)
* 5. Active duty               XBNFGRP = 1
* 6. Active duty dependents    XBNFGRP = 2
* 7. Retirees and dependents   XBNFGRP IN (3,4)
*
* 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.
*
*****;
OPTIONS NOCENTER LS=132 PS=79 SOURCE NOOVP COMPRESS=YES mprint mlogic;
LIBNAME IN1 V612 "DATA";
LIBNAME IN2 V612 "..\..\..\DATA\AFINAL";
LIBNAME OUT V612 "DATA";
LIBNAME OUT2 V612 "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*/

DATA SKELREG;
INPUT XSERVREG;
DATALINES;
1
2
3
4
5
6
7
8

```

```

9
10
11
12
13
14
15
16
;
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 = 23;

*****
* 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 = WRWT;
%LET IND_VAR1 = R04075; /*MJS 03/24/04 Changed 2003 to 2004 variable names*/
%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 = R04011; /*MJS 03/24/04 Changed 2003 to 2004 variable names*/
%LET DEPVAR2 = R04013;
%LET DEPVAR3 = R04028;
%LET DEPVAR4 = R04030;

*****
* GETTING NEEDED CARE QUICKLY.
*****;
%LET DEPVAR5 = R04018;
%LET DEPVAR6 = R04023;
%LET DEPVAR7 = R04020;
%LET DEPVAR8 = R04031;

*****
* HOW WELL DOCTORS COMMUNICATE.
*****;
%LET DEPVAR9 = R04034;
%LET DEPVAR10 = R04035;
%LET DEPVAR11 = R04036;
%LET DEPVAR12 = R04037;

```

```

*****
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%LET DEPVAR13 = R04032;
%LET DEPVAR14 = R04033;

*****
* CUSTOMER SERVICE.
*****;
%LET DEPVAR15 = R04045;
%LET DEPVAR16 = R04047;
%LET DEPVAR17 = R04053;

*****
* CLAIMS PROCESSING.
*****;
%LET DEPVAR18 = R04041;
%LET DEPVAR19 = R04042;

*****
* RATING ALL HEALTH CARE: 0 - 10.
*****;
%LET DEPVAR20 = R04038;

*****
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%LET DEPVAR21 = R04054;

*****
* RATING OF PERSONAL DR: 0 - 10.
*****;
%LET DEPVAR22 = R04009;

*****
* SPECIALITY CARE: 0 - 10.
*****;
%LET DEPVAR23 = R04015;

%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 'REGSRREG.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;
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(16) 8 REGcnt01- REGcnt16;
    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 <=16 THEN DO;

```

```

        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 16;
            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;
DO I = 1 TO 16;    * 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 super region area array;
* with at least ONE obs;
FILE 'REGARRAY.INC';
PUT @10 "ARRAY REGRHS(*) $8";
DO I = 1 TO 16;
  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;
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 <= 16;
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 16;
  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;
%END;

%MEND;

%MAINLOOP(&MIN_VAR,&MAX_VAR,&MIN_GRP,&MAX_GRP);

```

H.1.C Q4_2004\PROGRAMS\ReportCards\CAHPS_AdultQ42004\COMPOSIT.SAS - Calculate CAHPS Composite Scores - 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 affiliation.
*
*****;
OPTIONS NOCENTER LS=132 PS=78 SOURCE SOURCE2 MLOGIC MPRINT NOOVP COMPRESS=YES NOFMterr;
libname in v612 "data";
libname in2 v612 "data\adulthatfiles";
libname out v612 "data";
LIBNAME LIBRARY "..\..\..\DATA\AFINAL\FMTLIB";

%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>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;
%if &i~=8 %then %do;
set in2.h&i.&var1(rename=(resid&i=r_&var1));
%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;
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;
%if &i~=8 %then %do;
set in2.h&i.&var2(rename=(resid&i=r_&var2));
%end;
%else %do;
set in2.h5&var2(rename=(resid5=r_&var2)) in2.h6&var2(rename=(resid6=r_&var2))
in2.h7&var2(rename=(resid7=r_&var2));
%end;
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;
%if &i~=8 %then %do;
set in2.h&i.&var3(rename=(resid&i=r_&var3));
%end;
%else %do;
set in2.h5&var3(rename=(resid5=r_&var3)) in2.h6&var3(rename=(resid6=r_&var3))
in2.h7&var3(rename=(resid7=r_&var3));
%end;
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;
%if &i~=8 %then %do;
set in2.h&i.&var4(rename=(resid&i=r_&var4));
%end;
%else %do;
set in2.h5&var4(rename=(resid5=r_&var4)) in2.h6&var4(rename=(resid6=r_&var4))
in2.h7&var4(rename=(resid7=r_&var4));
%end;

%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 wrwt;
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 _name_="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=R04011,var2=R04013,var3=R04028,var4=R04030,qcount=4); /*MJS
03/24/04 Changed 2003 to 2004 variable names*/
%COMPOSIT (type=R,compos=2,var1=R04018,var2=R04023,var3=R04020,var4=R04031,qcount=4);
%COMPOSIT (type=R,compos=3,var1=R04034,var2=R04035,var3=R04036,var4=R04037,qcount=4);

```

```
%COMPOSIT (type=R,compos=4,var1=R04032,var2=R04033,qcount=2);  
%COMPOSIT (type=R,compos=5,var1=R04045,var2=R04047,var3=R04053,qcount=3);  
%COMPOSIT (type=R,compos=6,var1=R04041,var2=R04042,qcount=2);
```

H.2.A Q4_2004\PROGRAMS\LOADWEB\CAHPS_AdultQ42004\LOADCAHQ.SAS - Convert CAHPS Scores into WEB layout - Quarterly.

```

*****
*
* PROGRAM:   LOADCAHQ.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* 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.SD2 - 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.SD2) 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.
*
*****
* Assign data libraries and options
*****;
LIBNAME IN v612 "..\..\REPORTCARDS\CAHPS_ADULTQ42004\DATA"; /*MJS 03/23/04 Updated to Q1 2004*/
LIBNAME OUT v612 "DATA";
*LIBNAME LIBRARY "..\..\..\DATA\AFINAL\FMTLIB";
LIBNAME LIBRARY "..\..\..\Q4_2004\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 = "2004 Q4"; /*RSG 09/24/04 Updated to Q3 2004*/

*****
* 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:
*
*
* _____
* Adjusted Score      Definitions
* Group Number
* _____
* 1. Prime enrollees      XINS_COV IN (1,2,6) AND H04007>=2
* 2. Enrollees w/nil PCM  XENR_PCM IN (1,2,6) AND H04007>=2
* 3. Enrollees w/civ PCM  XENR_PCM = 3      AND H04007>=2
* 4. Nonenrollees        XINS_COV IN (3,4,5)
* 5. Active duty          XBNFGRP = 1
* 6. Active duty dependents XBNFGRP = 2
* 7. Retirees and dependents XBNFGRP IN (3,4)
*
*****;
DATA &QUESTION;
  SET IN.&QUESTION;

  LENGTH MAJGRP $30;
  LENGTH REGION $25; **RSG 01/2005 - Changed format to be large enough to include service
affiliation;
  LENGTH REGCAT $26;
  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("R04038","R04054","R04009","R04015") THEN /*MJS 03/23/04 Changed 2003 to
2004 variables names*/
    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,SERVREG.);

*****
* 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 ); /*MJS 03/23/04 Changed 2003 to 2004 variables
names*/
%PROCESS(QUESTION=R_R04011,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04013,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04028,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04030,TYPE=INDIVIDUAL);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(QUESTION=RCOMPOS2,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R04018,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04023,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04020,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04031,TYPE=INDIVIDUAL);

*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(QUESTION=RCOMPOS3,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R04034,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04035,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04036,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04037,TYPE=INDIVIDUAL);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(QUESTION=RCOMPOS4,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R04032,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04033,TYPE=INDIVIDUAL);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(QUESTION=RCOMPOS5,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R04045,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04047,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04053,TYPE=INDIVIDUAL);

*****
* COMPOSITE # 6.

```

```

* CLAIMS PROCESSING.
*****;
%PROCESS(QUESTION=RCOMPOS6,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R04041,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R04042,TYPE=INDIVIDUAL);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(QUESTION=R_R04038,TYPE=INDIVIDUAL);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(QUESTION=R_R04054,TYPE=INDIVIDUAL);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(QUESTION=R_R04009,TYPE=INDIVIDUAL);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(QUESTION=R_R04015,TYPE=INDIVIDUAL);

*****
*****
* STACK up all of the files into one final output dataset.
*****;
DATA OUT.LOADCAHQ;
  SET R_R04011
      R_R04013
      R_R04028
      R_R04030
      R_R04018
      R_R04023
      R_R04020
      R_R04031
      R_R04034
      R_R04035
      R_R04036
      R_R04037
      R_R04032
      R_R04033
      R_R04045
      R_R04047
      R_R04053
      R_R04041
      R_R04042
      R_R04038
      R_R04054
      R_R04009
      R_R04015
      RCOMPOS1
      RCOMPOS2
      RCOMPOS3
      RCOMPOS4
      RCOMPOS5
      RCOMPOS6
  ;
  IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6077-410)"; /*MJS 03/23/04 Updated
project number*/
TITLE2 "Program Name: LOADCAHQ.SAS By Keith Rathbun";
TITLE3 "Program Inputs: CAHPS Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: LOADCAHQ.SD2 - Combined CAHPS Scores Database in WEB layout";

```

```
PROC FREQ;  
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT  
      REGION*REGCAT  
      /MISSING LIST;  
RUN;
```

H.2.B Q4_2004\PROGRAMS\LOADWEB\LOADCAHQ.INC - Format definitions for converting the Scores Database into the WEB layout - Quarterly.

```

*****
*
* PROGRAM:   LOADCAHQ.INC
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* 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 BENTYPPF = 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.
*
*
* 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"
  ;
  VALUE REGIONF
    0 = "CONUS MHS  "
    1 = "North"
    2 = "South"
    3 = "West"
    4 = "Overseas"
  ;
  VALUE SERVREGF
    1 = "North Army"
    2 = "North Air Force"

```

```

3 = "North Navy"
4 = "North Other"
5 = "South Army"
6 = "South Air Force"
7 = "South Navy"
8 = "South Other"
9 = "West Army"
10 = "West Air Force"
11 = "West Navy"
12 = "West Other"
13 = "Overseas Army"
14 = "Overseas Air Force"
15 = "Overseas Navy"
16 = "Overseas Other"
17 = "CONUS ARMY"
18 = "CONUS AIR FORCE"
19 = "CONUS NAVY"
20 = "CONUS OTHER"

```

```
;
```

```
VALUE $BENTYPPF
```

```

"1998 " = "1998 "
"1999 " = "1999 "
"2000 " = "2000 "
"2001 " = "2001 "
"2002 " = "2002 "
"2003 " = "2003 "
"2004 " = "2004 "
"2000 Q1 " = "January, 2000 to December, 2000 "
"2000 Q2 " = "April, 2000 to March, 2001 "
"2000 Q3 " = "July, 2000 to June, 2001 "
"2000 Q4 " = "October, 2000 to September, 2001 "
"2002 Q1 " = "January, 2001 to December, 2001 "
"2002 Q2 " = "April, 2001 to March, 2002 "
"2002 Q3 " = "July, 2001 to June, 2002 "
"2002 Q4 " = "October, 2001 to September, 2002 "
"2003 Q1 " = "January, 2002 to December, 2002 "
"2003 Q2 " = "April, 2002 to March, 2003 "
"2003 Q3 " = "July, 2002 to June, 2003 "
"2003 Q4 " = "October, 2002 to September, 2003 "
"2004 Q1 " = "January, 2003 to December, 2003 "
"2004 Q2 " = "April, 2003 to March, 2004 "
"2004 Q3 " = "July, 2003 to June, 2004 "
"2004 Q4 " = "October, 2003 to September, 2004 "
"2005 Q1 " = "January, 2004 to December, 2004 "
"2005 Q2 " = "April, 2004 to March, 2005 "
"2005 Q3 " = "July, 2004 to June, 2005 "
"2005 Q4 " = "October, 2004 to September, 2005 "
/*****/
/* Admin. Year Defn. */
/* 2001 2002 2003 2004 */
/*****/
"R00007 ", "R02009 ", "R03009 ", "R04011" = "Problems Getting Personal Doctor/Nurse "
"R00014 ", "R02016 ", "R03013 ", "R04013" = "Problems Getting Referral to Specialist "
"R00028 ", "R02030 ", "R03027 ", "R04028" = "Problems Getting Necessary Care "
"R00029 ", "R02031 ", "R03028 ", "R04030" = "Delays in Care while Awaiting Approval "
"R00019 ", "R02021 ", "R03018 ", "R04018" = "Advice over Telephone"
"R00021 ", "R02023 ", "R03020 ", "R04023" = "Wait for Routine Visit "
"R00024 ", "R02026 ", "R03023 ", "R04020" = "Wait for Urgent Care "
"R00030 ", "R02032 ", "R03029 ", "R04031" = "Wait More than 15 Minutes Past Appointment "
/* "R00030 ", "R02032 ", "R03029 ", "R04031" = "Wait Less than 15 Minutes For Appointment "
**/
"R00033 ", "R02035 ", "R03032 ", "R04034" = "Listens Carefully "
"R00034 ", "R02036 ", "R03033 ", "R04035" = "Explains so You can Understand "
"R00035 ", "R02037 ", "R03034 ", "R04036" = "Shows Respect "
"R00036 ", "R02038 ", "R03035 ", "R04037" = "Spends Time with You "
"R00031 ", "R02033 ", "R03030 ", "R04032" = "Courteous and Respectful "
"R00032 ", "R02034 ", "R03031 ", "R04033" = "Helpful "
"R00048 ", "R02048 ", "R03044 ", "R04045" = "Problem Finding/Understanding Written Material"
"R00050 ", "R02050 ", "R03046 ", "R04047" = "Problem Getting Help from Customer Service "
"R00055 ", "R02055 ", "R03051 ", "R04053" = "Problem with Paperwork "
"R00044 ", "R02044 ", "R03040 ", "R04041" = "Claims Handled in a Reasonable Time "
"R00045 ", "R02045 ", "R03041 ", "R04042" = "Claims Handled Correctly "
"R00037 ", "R02039 ", "R03036 ", "R04038" = "Health Care "

```

```

"R00056 " , "R02056 " , "R03052 " , "R04054" = "Health Plan "
"R00009 " , "R02011 " , "R03011 " , "R04009" = "Primary Care Manager "
"R00016 " , "R02018 " , "R03015 " , "R04015" = "Specialty Care "
"PHYSIC " = "Physical "
"MENTAL " = "Mental "
;
VALUE $BENEF
"RCOMPOS1", "CCOMPOS1", "R00007", "R00014", "R00028", "R00029",
"R02009", "R02016", "R02030", "R02031",
"R03009", "R03013", "R03027", "R03028",
"R04011", "R04013", "R04028", "R04030"
= "Getting Needed Care "

"RCOMPOS2", "CCOMPOS2", "R00019", "R00021", "R00024", "R00030",
"R02021", "R02023", "R02026", "R02032",
"R03018", "R03020", "R03023", "R03029",
"R04018", "R04023", "R04020", "R04031"
= "Getting Care Quickly "

"RCOMPOS3", "CCOMPOS3", "R00033", "R00034", "R00035", "R00036",
"R02035", "R02036", "R02037", "R02038",
"R03032", "R03033", "R03034", "R03035",
"R04034", "R04035", "R04036", "R04037"
= "How Well Doctors Communicate "

"RCOMPOS4", "CCOMPOS4", "R00031", "R00032",
"R02033", "R02034",
"R03030", "R03031",
"R04032", "R04033"
= "Courteous and Helpful Office Staff "

"RCOMPOS5", "CCOMPOS5", "R00048", "R00050", "R00055",
"R02048", "R02050", "R02055",
"R03044", "R03046", "R03051",
"R04045", "R04047", "R04053"
= "Customer Service "

"RCOMPOS6", "CCOMPOS6", "R00044", "R00045",
"R02044", "R02045",
"R03040", "R03041",
"R04041", "R04042"
= "Claims Processing "
"RCOMPOS11", "COMPOS11", "MENTAL", "PHYS"
= "Health Status "
/*****
/* Admin. Year Defn. */
/* 2001 2002 2003 2004 */
*****/
"R00037", "R02039", "R03036", "R04038" = "Health Care "
"R00056", "R02056", "R03052", "R04054" = "Health Plan "
"R00009", "R02011", "R03011", "R04009" = "Primary Care Manager "
"R00016", "R02018", "R03015", "R04015" = "Specialty Care "
;
VALUE BEN
0 = 'Total' /*** 12-13 MAB ***/
1 = 'Getting Needed Care'
2 = 'Getting Care Quickly'
3 = 'Courteous and Helpful Office Staff'
4 = 'How Well Doctors Communicate'
5 = 'Customer Service'
6 = 'Claims Processing'
7 = 'Health Plan'
8 = 'Health Care'
9 = 'Primary Care Manager'
10 = 'Specialty Care'
11 = 'Preventive Care'
12 = 'Smoking Cessation';

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 = "Problems Getting Personal Doctor/Nurse"
2 = "Problems Getting Referral to Specialist"
3 = "Problems Getting Necessary Care"
4 = "Delays in Care while Awaiting Approval"
5 = "Composite";

VALUE GETCAREQ
1 = "Advice over Telephone"
2 = "Wait for Routine Visit"
3 = "Wait for Urgent Care"
4 = "Wait More than 15 Minutes Past Appointment"
5 = "Composite";

VALUE CRTSHELP
1 = "Courteous and Respectful"
2 = "Helpful"
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 = "Problem Finding/Understanding Written Material"
2 = "Problem Getting Help from Customer Service"
3 = "Problem with Paperwork"
4 = "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 = "Cholesterol Testing"
6 = "Composite";

VALUE SMOKEF
1 = "Non-Smoking Rate"
2 = "Counselled To Quit"
3 = "Composite";
RUN;
```

H.3.A Q1_2004\PROGRAMS\BENCHMARK\BENCHA01.SAS - Extract Adult CAHPS Questions from NCBD - Quarterly.

```
*****
*
* PROGRAM:   BENCHA01.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE:  Extract 2003 Adult CAHPS Questions
*
* WRITTEN:  06/02/2000 BY KEITH RATHBUN
*
* INPUTS:   1) AC2003DB.SD2 - 2003 Adult CAHPS Questions
*
* OUTPUT:   1) BENCHA01.SD2 - 2003 Adult CAHPS Questions Renamed to be
*             consistent with the 2004 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.
*
* NOTES:
*
* 1) This program will generate the input for BENCHA02.SAS.
*
*****
* Assign data libraries and options
*****;
LIBNAME IN V612 "..\..\2003AdultChildNCBD\AC"; /* KRR 04/16/2004 */
LIBNAME OUT V612 "data"; /* Updated for 2003 NCBD */
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHA01;
  SET IN.AC2003DB (RENAME=(BIRTHYY=YOB));
  FORMAT _ALL_;
  *****
  * Getting Needed Care
  *****;
  H04029 = AC25_03;
  H04011 = AC07_03;
  H04013 = AC09_03;
  H04028 = AC24_03;
  H04030 = AC26_03;
  *****
  * Getting Care Quickly
  *****;
  H04018 = AC14_03;
  H04023 = AC19_03;
  H04020 = AC16_03;
  H04031 = AC27_03;
  *****
  * How Well Doctors Communicate
  *****;
  H04034 = AC30_03;
  H04035 = AC31_03;
  H04036 = AC32_03;
  H04037 = AC33_03;
  *****
  * Courteous and Helpful Office Staff
  *****;
  H04032 = AC28_03;
  H04033 = AC29_03;
  *****
  * Customer Service
  *****;
  H04045 = AC40_03;
  H04047 = AC42_03;
  H04053 = AC48_03;
  *****
```

```

* Claims Processing
*****;
H04041 = AC36_03;
H04042 = AC37_03;
*****

* Health Care Rating
*****;
H04038 = AC34_03;
*****

* Health Plan Rating
*****;
H04054 = AC49_03;
*****

* Personal Doctor Rating
*****;
H04009 = AC05_03;
*****

* Specialist Rating
*****;
H04015 = AC11_03;
*****

* Health Status
*****;
H04075 = AC50_03;
h04008 = AC04_03;
AGEGROUP = AGE; *NEED TO USE USE THIS DIRECTLY (already grouped);
XSEXA = GENDER;
SREDHIGH = AC60_03;
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;
product=planid; /*MJS 05/06/03 was plnid now planid*/

LABEL H04011 = "AC07_03 - CAHPS variable"
H04013 = "AC09_03 - CAHPS variable"
H04028 = "AC24_03 - CAHPS variable"
H04029 = "AC25_03 - CAHPS variable"
H04030 = "AC26_03 - CAHPS variable"
H04018 = "AC14_03 - CAHPS variable"
H04023 = "AC19_03 - CAHPS variable"
H04020 = "AC16_03 - CAHPS variable"
H04031 = "AC27_03 - CAHPS variable"
H04034 = "AC30_03 - CAHPS variable"
H04035 = "AC31_03 - CAHPS variable"
H04036 = "AC32_03 - CAHPS variable"
H04037 = "AC33_03 - CAHPS variable"
H04032 = "AC28_03 - CAHPS variable"
H04033 = "AC29_03 - CAHPS variable"
H04045 = "AC40_03 - CAHPS variable"
H04047 = "AC42_03 - CAHPS variable"
H04053 = "AC48_03 - CAHPS variable"
H04041 = "AC36_03 - CAHPS variable"
H04042 = "AC37_03 - CAHPS variable"
H04038 = "AC34_03 - CAHPS variable"
H04054 = "AC49_03 - CAHPS variable"
H04009 = "AC05_03 - CAHPS variable"
H04015 = "AC11_03 - CAHPS variable"
H04075 = "AC50_03 - CAHPS variable"
AGEGROUP = "AGE - CAHPS variable"
XSEXA = "GENDER - CAHPS variable"
SREDHIGH = "AC60_03 - CAHPS variable"
;

KEEP H04011
H04013
H04028
H04029
H04030
H04018
H04023
H04020
H04031
H04034
H04035
H04036
H04037
H04032
H04033
H04045
H04047
H04053
H04041
H04042
H04038
H04054
H04009
H04015
H04075

```

```
H04034
H04035
H04036
H04037
H04032
H04033
H04045
H04047
H04053
H04041
H04042
H04038
H04054
H04009
H04015
H04075
H04008
AGEGROUP
XSEX
SREDHIGH
MODEL
PRODUCT
AC03_03
DISP
YOB
;
RUN;

TITLE1 "Extract 2003 Adult CAHPS Questions (DoD)";
TITLE2 "Program Name: BENCHA01.SAS By Keith Rathbun";
TITLE3 "Program Input: AC2003DB.sd2";
TITLE4 "Program Output: BENCHA01.sd2";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES _ALL_ /MISSING LIST;
RUN;
```

H.3.B Q1_2004\PROGRAMS\BENCHMARK\BENCHA02.SAS - Recode Adult CAHPS Questions from NCBD to be consistent with the HCSDB - Quarterly.

```

*****
*
* PROGRAM:   BENCHA02.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE:  Recode 2003 Adult CAHPS Questions
*
* WRITTEN:  06/02/2000 BY KEITH RATHBUN
*
* INPUT:    1) BENCHA01.SD2 - 2003 Adult CAHPS Questions Renamed to be
*           consistent with the 2004 MPR DOD Survey.
*
* OUTPUT:   1) BENCHA02.SD2 - Recoded 2003 Adult CAHPS Questions Renamed
*           to be consistent with the 2004 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.
*
* 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;
  nproduct=product+0;
  *****
  * 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 H04029 = 2 THEN H04030=3; /* ES 4/28/04 Change in scoring logic */
  IF H04023 = 1      THEN R04023 = 1; /*MJS 03/23/04 Changed 2003 to 2004 variables names*/
  ELSE IF H04023 = 2 THEN R04023 = 1;
  ELSE IF H04023 = 3 THEN R04023 = 2;
  ELSE IF H04023 = 4 THEN R04023 = 3;
  ELSE IF H04023 < 0 THEN R04023 = .;

  IF H04018 = 1      THEN R04018 = 1;
  ELSE IF H04018 = 2 THEN R04018 = 1;
  ELSE IF H04018 = 3 THEN R04018 = 2;
  ELSE IF H04018 = 4 THEN R04018 = 3;
  ELSE IF H04018 < 0 THEN R04018 = .;

  IF H04020 = 1      THEN R04020 = 1;
  ELSE IF H04020 = 2 THEN R04020 = 1;
  ELSE IF H04020 = 3 THEN R04020 = 2;
  ELSE IF H04020 = 4 THEN R04020 = 3;
  ELSE IF H04020 < 0 THEN R04020 = .;

  IF H04031 = 1      THEN R04031 = 1;
  ELSE IF H04031 = 2 THEN R04031 = 1;
  ELSE IF H04031 = 3 THEN R04031 = 2;
  ELSE IF H04031 = 4 THEN R04031 = 3;

```

```

ELSE IF H04031 < 0 THEN R04031 = .;

IF H04032 = 1      THEN R04032 = 1;
ELSE IF H04032 = 2 THEN R04032 = 1;
ELSE IF H04032 = 3 THEN R04032 = 2;
ELSE IF H04032 = 4 THEN R04032 = 3;
ELSE IF H04032 < 0 THEN R04032 = .;

IF H04033 = 1      THEN R04033 = 1;
ELSE IF H04033 = 2 THEN R04033 = 1;
ELSE IF H04033 = 3 THEN R04033 = 2;
ELSE IF H04033 = 4 THEN R04033 = 3;
ELSE IF H04033 < 0 THEN R04033 = .;

IF H04034 = 1      THEN R04034 = 1;
ELSE IF H04034 = 2 THEN R04034 = 1;
ELSE IF H04034 = 3 THEN R04034 = 2;
ELSE IF H04034 = 4 THEN R04034 = 3;
ELSE IF H04034 < 0 THEN R04034 = .;

IF H04035 = 1      THEN R04035 = 1;
ELSE IF H04035 = 2 THEN R04035 = 1;
ELSE IF H04035 = 3 THEN R04035 = 2;
ELSE IF H04035 = 4 THEN R04035 = 3;
ELSE IF H04035 < 0 THEN R04035 = .;

IF H04036 = 1      THEN R04036 = 1;
ELSE IF H04036 = 2 THEN R04036 = 1;
ELSE IF H04036 = 3 THEN R04036 = 2;
ELSE IF H04036 = 4 THEN R04036 = 3;
ELSE IF H04036 < 0 THEN R04036 = .;

IF H04037 = 1      THEN R04037 = 1;
ELSE IF H04037 = 2 THEN R04037 = 1;
ELSE IF H04037 = 3 THEN R04037 = 2;
ELSE IF H04037 = 4 THEN R04037 = 3;
ELSE IF H04037 < 0 THEN R04037 = .;

IF H04041 = 1      THEN R04041 = 1;
ELSE IF H04041 = 2 THEN R04041 = 1;
ELSE IF H04041 = 3 THEN R04041 = 2;
ELSE IF H04041 = 4 THEN R04041 = 3;
ELSE IF H04041 < 0 THEN R04041 = .;

IF H04042 = 1      THEN R04042 = 1;
ELSE IF H04042 = 2 THEN R04042 = 1;
ELSE IF H04042 = 3 THEN R04042 = 2;
ELSE IF H04042 = 4 THEN R04042 = 3;
ELSE IF H04042 < 0 THEN R04042 = .;

IF H04075 = 1      THEN R04075 = 5;
ELSE IF H04075 = 2 THEN R04075 = 4;
ELSE IF H04075 = 3 THEN R04075 = 3;
ELSE IF H04075 = 4 THEN R04075 = 2;
ELSE IF H04075 = 5 THEN R04075 = 1;
ELSE IF H04075>5|H04075<1 THEN R04075 = .;

*****
* Recode variables to one missing condition "."
* This also makes all the "H000xx" to "R000xx".
*****;
R04011 = H04011; IF R04011 < 0 THEN R04011 = .; /*MJS 03/23/04 Changed 2003 to 2004
variables names*/
R04009 = H04009; IF R04009 < 0|r04009>10 THEN R04009 = .;
R04013 = H04013; IF R04013 < 0 THEN R04013 = .;
R04015 = H04015; IF R04015 < 0|r04015>10 THEN R04015 = .;
R04028 = H04028; IF R04028 < 0 THEN R04028 = .;
R04030 = H04030; IF R04030 < 0 THEN R04030 = .;
R04038 = H04038; IF R04038 < 0|r04038>10 THEN R04038 = .;
R04045 = H04045; IF R04045 < 0 THEN R04045 = .;
R04047 = H04047; IF R04047 < 0 THEN R04047 = .;
R04053 = H04053; IF R04053 < 0 THEN R04053 = .;
R04054 = H04054; IF R04054 < 0|r04054>10 THEN R04054 = .;

```

```

LABEL R04011 = "AC07_03 - Recoded CAHPS variable" /*MJS 05/06/03 Changed _01 to _02*/
R04009 = "AC05_03 - Recoded CAHPS variable"
R04013 = "AC09_03 - Recoded CAHPS variable"
R04015 = "AC11_03 - Recoded CAHPS variable"
R04018 = "AC14_03 - Recoded CAHPS variable"
R04023 = "AC19_03 - Recoded CAHPS variable"
R04020 = "AC16_03 - Recoded CAHPS variable"
R04028 = "AC24_03 - Recoded CAHPS variable"
R04030 = "AC26_03 - Recoded CAHPS variable"
R04031 = "AC27_03 - Recoded CAHPS variable"
R04032 = "AC28_03 - Recoded CAHPS variable"
R04033 = "AC29_03 - Recoded CAHPS variable"
R04034 = "AC30_03 - Recoded CAHPS variable"
R04035 = "AC31_03 - Recoded CAHPS variable"
R04036 = "AC32_03 - Recoded CAHPS variable"
R04037 = "AC33_03 - Recoded CAHPS variable"
R04038 = "AC34_03 - Recoded CAHPS variable"
R04045 = "AC40_03 - Recoded CAHPS variable"
R04047 = "AC42_03 - Recoded CAHPS variable"
R04053 = "AC48_03 - Recoded CAHPS variable"
R04054 = "AC49_03 - Recoded CAHPS variable"
R04075 = "AC50_03 - Recoded CAHPS variable"
R04041 = "AC36_03 - Recoded CAHPS variable"
R04042 = "AC37_03 - Recoded CAHPS variable"

nPRODUCT = "Product ID - CAHPS variable";
;
drop product;
RUN;

TITLE1 "Recode 2003 Adult CAHPS Questions (6077-410)"; /*MJS 03/21/03*/
TITLE2 "Program Name: BENCHA02.SAS By Keith Rathbun"; /*MJS 03/23/04 Updated project number*/
TITLE3 "Program Input: BENCHA01.SD2";
TITLE4 "Program Output: BENCHA02.SD2";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES AGEGROUP
XSEX
SREDHIGH
MODEL
R04011 * H04011 /*MJS 03/23/04 Changed 2003 to 2004 variables names*/
R04009 * H04009
R04013 * H04013
R04015 * H04015
R04018 * H04018
R04023 * H04023
R04020 * H04020
R04028 * H04028
R04030 * H04030
R04031 * H04031
R04032 * H04032
R04033 * H04033
R04034 * H04034
R04035 * H04035
R04036 * H04036
R04037 * H04037
R04038 * H04038
R04045 * H04045
R04047 * H04047
R04053 * H04053
R04054 * H04054
R04075 * H04075
R04041 * H04041
R04042 * H04042
/MISSING LIST;
RUN;

```

H.3.C Q4_2004\PROGRAMS\BENCHMARK\BENCHA03.SAS - Calculate CAHPS Benchmark data for HCSDB - Quarterly.

```
*****
*
* PROGRAM:  BENCHA03.SAS
* TASK:    2004 DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE: Adjust 2003 Adult CAHPS Benchmarks
*
* WRITTEN: June 2000 BY ERIC SCHONE
*
* INPUTS:  1) BENCHA02.SD2 - 2003 Adult CAHPS Questions Renamed to be
*           consistent with the 2004 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, replace XREGION with XTNEXREG
*
* 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
*****;
libname in V612 'Data';
libname in2 V612 '..\ReportCards\CAHPS_AdultQ42004\Data';
libname out V612 'Data';
LIBNAME LIBRARY  "..\..\..\Q4_2004\DATA\AFINAL\FMTLIB";

%let wgt=wrwt;

OPTIONS MLOGIC MPRINT NOCENTER 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;

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;

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**0.5)/&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));
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;
run;
%INCLUDE "..\REPORTCARDS\CAHPS_AdultQ42004\CONVERT.SAS";

%CONT1(DSN=SETUP, NUM=7, Y=R04011 R04013 R04028 R04030 /*MJS 03/23/04 Changed 2003 to 2004
variables names*/
  R04045 R04047 R04053);
%CONT2(DSN=SETUP, NUM=4, Y=R04038 R04054 R04009 R04015);
%CONT3(DSN=SETUP, NUM=12, Y=R04018 R04023 R04020 R04031
  R04034 R04035 R04036 R04037
  R04032 R04033 R04041 R04042);
/* GETTING NEEDED CARE */
%adjust(r04011,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04013,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04028,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04030,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(1,r04011,r04013,r04028,r04030);

/* GETTING NEEDED CARE QUICKLY */
%adjust(r04018,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04023,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04020,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04031,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(2,r04018,r04023,r04020,r04031);

/* HOW WELL DOCTORS COMMUNICATE */
%adjust(r04034,age1824 age2534 age3544 age4554 age5564 age6574 r04075);

```

```

%adjust(r04035,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04036,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04037,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(3,r04034,r04035,r04036,r04037);

/* COURTEOUS AND HELPFUL OFFICE STAFF */
%adjust(r04032,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04033,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(4,r04032,r04033);

/* CUSTOMER SERVICE */
%adjust(r04045,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04047,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04053,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(5,r04045,r04047,r04053);

/* CLAIMS PROCESSING */
%adjust(r04041,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04042,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(6,r04041,r04042);

/* RATING ALL HEALTH CARE: 0 - 10 */
%adjust(r04038,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(7,r04038);

/* RATING OF HEALTH PLAN: 0 - 10 */
%adjust(r04054,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(8,r04054);

/* RATING OF PERSONAL DR: 0 - 10 */
%adjust(r04009,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(9,r04009);

/* SPECIALTY CARE */
%adjust(r04015,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(10,r04015);

```

H.3.D Q4_2004\PROGRAMS\BENCHMARK\BENCHA04.SAS - Convert the Benchmark Scores Database into the WEB layout - Quarterly.

```
*****
*
* PROGRAM:  BENCHA04.SAS
* TASK:    Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* 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 and to use
*XTNEXREG vs XREGION.
*
* 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.SD2) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
*****
* Assign data libraries and options
*****;
LIBNAME IN V612 "DATA";
LIBNAME OUT V612 "DATA";
LIBNAME LIBRARY "..\..\Q4_2004\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES 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 Group Number	Definitions
1. Prime enrollees	XINS_COV IN (1,2,6) AND H04007_R>=7
2. Enrollees w/mil PCM	XENR_PCM IN (1,2,6) AND H04007_R>=7
3. Enrollees w/civ PCM	XENR_PCM = 3 AND H04007_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 = "2004 Q4"; /*RSG 09/2004 UPDATED TO Q3 2004*/

*****;

* Convert benchmark scores datasets into WEB layout.

*****;

DATA COMP&CNUM._&Gnum;

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 = "Courteous and Helpful Office Staff";

ELSE IF &CNUM = 5 THEN BENEFIT = "Customer Service";

ELSE IF &CNUM = 6 THEN BENEFIT = "Claims Processing";

ELSE IF &CNUM = 7 THEN BENEFIT = "Health Care";

ELSE IF &CNUM = 8 THEN BENEFIT = "Health Plan";

ELSE IF &CNUM = 9 THEN BENEFIT = "Primary Care Manager";

ELSE IF &CNUM = 10 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;

*****;

* Assign composite score and SEMEAN

*****;

SCORE = TOTADJ;

SEMEAN = SDE;

```

*****
* Output composite score record for each REGION
*****;
OUTPUT;

*****
* Now, output the individual score records
*****;
IF &NVAR GT 1 THEN DO;
  ARRAY ITEMS &VARS;
  ARRAY SE      &SE;
  LENGTH NAME $8;
  DO I = 1 TO DIM(ITEMS); DROP I;
    CALL VNAME(ITEMS(I),NAME);
    NAME = SUBSTR(NAME,1,6);
    SCORE = ITEMS(I);
    SEMEAN = SE(I);
    BENTYPE = PUT(NAME,$BENTYPF.);
    TIMEPD = PUT(&YEAR,$BENTYPF.);    ***MJS 07/03/03 Added;
    OUTPUT;
  END;
END;

KEEP MAJGRP
  REGION
  REGCAT
  BENTYPE
  BENEFIT
  TIMEPD /*MJS 07/03/03 Added*/
  SEMEAN
  SCORE
  SIG
;
RUN;

%MEND;

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=8, NVAR=4, VARS=r04011_8 R04013_8 R04028_8 R04030_8, /*MJS 03/23/04 Changed
2003 to 2004 variables names*/
  SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=8, NVAR=4, VARS=R04018_8 R04023_8 R04020_8 R04031_8,
  SE=S_R04018 S_R04023 S_R04020 S_R04031);
*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=8, NVAR=4, VARS=R04034_8 R04035_8 R04036_8 R04037_8,
  SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=8, NVAR=2, VARS=R04032_8 R04033_8, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=8, NVAR=3, VARS=R04045_8 R04047_8 R04053_8,
  SE=S_R04045 S_R04047 S_R04053);
*****

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```

* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=8, NVAR=2, VARS=R04041_8 R04042_8, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=8, NVAR=1, VARS=R04038_8, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=8, NVAR=1, VARS=R04054_8, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=8, NVAR=1, VARS=R04009_8, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=8, NVAR=1, VARS=R04015_8, SE=S_R04015);

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=3, NVAR=4, VARS=r04011_3 R04013_3 R04028_3 R04030_3,
SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=3, NVAR=4, VARS=R04018_3 R04023_3 R04020_3 R04031_3,
SE=S_R04018 S_R04023 S_R04020 S_R04031);

*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=3, NVAR=4, VARS=R04034_3 R04035_3 R04036_3 R04037_3,
SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=3, NVAR=2, VARS=R04032_3 R04033_3, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=3, NVAR=3, VARS=R04045_3 R04047_3 R04053_3,
SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=3, NVAR=2, VARS=R04041_3 R04042_3, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=3, NVAR=1, VARS=R04038_3, SE=S_R04038);

```

```

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=3, NVAR=1, VARS=R04054_3, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=3, NVAR=1, VARS=R04009_3, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=3, NVAR=1, VARS=R04015_3, SE=S_R04015);

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=4, NVAR=4, VARS=r04011_4 R04013_4 R04028_4 R04030_4,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=4, NVAR=4, VARS=R04018_4 R04023_4 R04020_4 R04031_4,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);

*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=4, NVAR=4, VARS=R04034_4 R04035_4 R04036_4 R04037_4,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=4, NVAR=2, VARS=R04032_4 R04033_4, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=4, NVAR=3, VARS=R04045_4 R04047_4 R04053_4,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=4, NVAR=2, VARS=R04041_4 R04042_4, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=4, NVAR=1, VARS=R04038_4, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=4, NVAR=1, VARS=R04054_4, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;

```

```

%PROCESS(CNUM=9, GNUM=4, NVAR=1, VARS=R04009_4, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=4, NVAR=1, VARS=R04015_4, SE=S_R04015);

*****
*****;
*****;
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=5, NVAR=4, VARS=r04011_5 R04013_5 R04028_5 R04030_5,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=5, NVAR=4, VARS=R04018_5 R04023_5 R04020_5 R04031_5,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);
*****
*
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=5, NVAR=4, VARS=R04034_5 R04035_5 R04036_5 R04037_5,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=5, NVAR=2, VARS=R04032_5 R04033_5, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=5, NVAR=3, VARS=R04045_5 R04047_5 R04053_5,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=5, NVAR=2, VARS=R04041_5 R04042_5, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=5, NVAR=1, VARS=R04038_5, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=5, NVAR=1, VARS=R04054_5, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=5, NVAR=1, VARS=R04009_5, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=5, NVAR=1, VARS=R04015_5, SE=S_R04015);

```

```

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=6, NVAR=4, VARS=r04011_6 R04013_6 R04028_6 R04030_6,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=6, NVAR=4, VARS=R04018_6 R04023_6 R04020_6 R04031_6,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);
*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=6, NVAR=4, VARS=R04034_6 R04035_6 R04036_6 R04037_6,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=6, NVAR=2, VARS=R04032_6 R04033_6, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=6, NVAR=3, VARS=R04045_6 R04047_6 R04053_6,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=6, NVAR=2, VARS=R04041_6 R04042_6, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=6, NVAR=1, VARS=R04038_6, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=6, NVAR=1, VARS=R04054_6, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=6, NVAR=1, VARS=R04009_6, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=6, NVAR=1, VARS=R04015_6, SE=S_R04015);

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=7, NVAR=4, VARS=r04011_7 R04013_7 R04028_7 R04030_7,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;

```

```

%PROCESS(CNUM=2, GNUM=7, NVAR=4, VARS=R04018_7 R04023_7 R04020_7 R04031_7,
SE=S_R04018 S_R04023 S_R04020 S_R04031);
*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=7, NVAR=4, VARS=R04034_7 R04035_7 R04036_7 R04037_7,
SE=S_R04034 S_R04035 S_R04036 S_R04037);
*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=7, NVAR=2, VARS=R04032_7 R04033_7, SE=S_R04032 S_R04033);
*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=7, NVAR=3, VARS=R04045_7 R04047_7 R04053_7,
SE=S_R04045 S_R04047 S_R04053);
*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=7, NVAR=2, VARS=R04041_7 R04042_7, SE=S_R04041 S_R04042);
*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=7, NVAR=1, VARS=R04038_7, SE=S_R04038);
*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=7, NVAR=1, VARS=R04054_7, SE=S_R04054);
*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=7, NVAR=1, VARS=R04009_7, SE=S_R04009);
*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=7, NVAR=1, VARS=R04015_7, SE=S_R04015);
*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=2, NVAR=4, VARS=r04011_2 R04013_2 R04028_2 R04030_2,
SE=s_r04011 S_R04013 S_R04028 S_R04030);
*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=2, NVAR=4, VARS=R04018_2 R04023_2 R04020_2 R04031_2,
SE=S_R04018 S_R04023 S_R04020 S_R04031);
*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=2, NVAR=4, VARS=R04034_2 R04035_2 R04036_2 R04037_2,
SE=S_R04034 S_R04035 S_R04036 S_R04037);
*****
* COMPOSITE # 4.

```

```

* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=2, NVAR=2, VARS=R04032_2 R04033_2, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=2, NVAR=3, VARS=R04045_2 R04047_2 R04053_2,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=2, NVAR=2, VARS=R04041_2 R04042_2, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=2, NVAR=1, VARS=R04038_2, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=2, NVAR=1, VARS=R04054_2, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=2, NVAR=1, VARS=R04009_2, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=2, NVAR=1, VARS=R04015_2, SE=S_R04015);

*****
*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=1, NVAR=4, VARS=r04011_1 R04013_1 R04028_1 R04030_1,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=1, NVAR=4, VARS=R04018_1 R04023_1 R04020_1 R04031_1,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);

*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=1, NVAR=4, VARS=R04034_1 R04035_1 R04036_1 R04037_1,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=1, NVAR=2, VARS=R04032_1 R04033_1, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=1, NVAR=3, VARS=R04045_1 R04047_1 R04053_1,
        SE=S_R04045 S_R04047 S_R04053);

```

```

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=1, NVAR=2, VARS=R04041_1 R04042_1, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=1, NVAR=1, VARS=R04038_1, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=1, NVAR=1, VARS=R04054_1, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=1, NVAR=1, VARS=R04009_1, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=1, NVAR=1, VARS=R04015_1, SE=S_R04015);

*****
* 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
      COMP10_1 COMP10_2 COMP10_3 COMP10_4 COMP10_5 COMP10_6 COMP10_7 COMP10_8
  ;
  IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6077-410)"; /*MJS 03/23/04 Updated
project number*/
TITLE2 "Program Name: BENCHA04.SAS By Keith Rathbun";
TITLE3 "Program Inputs: Benchmark Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: BENCHA04.SD2 - Combined Benchmark Scores Database in WEB layout";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES TIMEPD BENEFIT BENTYPE MAJGRP REGION REGCAT /*MJS 07/18/03 Added TIMEPD*/
      REGION*REGCAT
      /MISSING LIST;
RUN;

```

H.4.A Q4_2004\PROGRAMS\ReportCards\MPR_AdultQ42004\PRVCOMPQ.SAS - Calculate Preventive Care Composite Scores - 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 2005, replace XTNEXREG with XSERVREG
*
* Purpose: Calculate MPR Preventive Care Composites
* Input: HCS044_1.SD2
* Output: RFINAL.SD2
* CFINAL.SD2
* MFINAL.SD2
* SFINAL.SD2
*
* 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;

```

```

LIBNAME IN v612 "..\..\..\DATA\AFINAL";
LIBNAME IN2000 v612 "..\..\..\2000\DATA";
LIBNAME OUT v612 ".";
LIBNAME LIBRARY "..\..\..\DATA\AFINAL\FMTLIB";

```

```

%LET WGT=WRWT;
%LET DEBUG=Y; /* Set to Y for Debug print of datasets */
%LET INDATA=HCS044_1; /*RSG 09/2004 Changed to Q4 2004*/

```

```

%LET YRDATA=HCS044_1; /*RSG 09/2004 Changed to Q4 2004*/

```

```

/***** The following parameters are used in the Variance *****/
/***** calcuation macro for region and catchment area *****/

```

```

%LET GRPNUM=8; /* number of groups */
%LET COMPNUM=8; /* number of variables */

```

```

%LET REGNUM=16;      /** number of regions          **/ /* RSG - 01/2005 CHANGED TO FIT THE 16
CATEGORIES OF XSERVREG */
%LET CATCHNUM=9999; /** number of catchment areas **/

%LET CMPNUM1=5;     /** number of variables in first composite **/ /*MJS 04/30/03 Changed CMPNUM1
from 4 to 5*/
%LET CMPNUM2=3;     /** 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 ;
**** note -- these are the hp 2000 goals          ;

%LET GOALVAR1= .90; /** HP Goal for prenatal care          **/
%LET GOALVAR2= .70; /** HP Goal for Mammography          **/
%LET GOALVAR3= .90; /** HP Goal for Papsmear              **/
%LET GOALVAR4= .95; /** HP Goal for Blood Pressure check **/
%LET GOALVAR5= .90; /** HP Goal for Cholesterol check    **/ /*MJS 04/01/03*/
%LET GOALVAR6= .90; /** access goals                      **/
%LET GOALVAR7= .90;
%LET GOALVAR8= .98;

%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";      ***MJS 07/23/03 Removed ..\PROGRAMS\;

*****
* Beneficiary group note
*   Eight groups          Definitions
*   _____;
* 1. Prime enrollees     XINS_COV IN (1,2,6) AND H04007>=2
* 2. Enrollees w/mil PCM XENR_PCM IN (1,2,6) AND H04007>=2
* 3. Enrollees w/civ PCM XENR_PCM IN (3,7) AND H04007>=2
* 4. Nonenrollees        XINS_COV IN (3,4,5)
* 5. Active duty          XBNFGRP = 1
* 6. Active duty dependents XBNFGRP = 2
* 7. Retirees             XBNFGRP IN (3,4)
* 8. All beneficiaries   ALL
*****

/**** note -- output all data to a single dataset for macro */
/**** call*/
/**** MACROS are no longer called for catchment areas          */

DATA normDATA(KEEP= XTNEXREG XSERVREG CACSMPL XSERVAFF cwrWT
PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
DENV1-DENV&COMPNUM);

SET IN2000.hcs00a_1(KEEP=XINS_COV HP_CHOL HP_BP HP_MAMOG HP_PAP HP_PRNTL
/*MJS 04/01/03*/ h00023 h00031 h00020
XREGION XENR_PCM XBNFGRP ENBGSMP L cwrWT CACSMPL SERVAFF
ADJ_CELL); /*MJS 03/21/03*/
* IF _N_ LE 100; /*MJS 04/30/03*/

*****
* 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 XREGION IN (1,2,5) THEN XTNEXREG=1;
IF XREGION IN (3,4,6) THEN XTNEXREG=2;
IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG=3;
IF XREGION IN (13,14,15) THEN XTNEXREG=4;

IF XTNEXREG = . THEN DELETE;

```

```

IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;

PRVVAR1=HP_PRNTL;          /** prenatal care **/
PRVVAR2=HP_MAMOG;        /** mammography **/
PRVVAR3=HP_PAP;          /** papsmear **/
PRVVAR4=HP_BP;           /** blood pressure **/
PRVVAR5=HP_CHOL;         /** cholesterol **/ /*MJS 04/01/03*/
PRVVAR6=H00023;          /** access var 1 **/ /*MJS 03/24/04 Changed */
PRVVAR7=H00020;          /** access var 2 **/ /*MJS 02/02/04*/
PRVVAR8=H00031;          /** access var 3 **/ /*MJS 02/02/04*/

/**** 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 &COMPNUM1 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 &COMPNUM1 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;

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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 5;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
  ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 9;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
  ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 13;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
  ELSE XSERVREG = 16;
END;

run;

DATA &YRDATA(KEEP=BGROUP MHS CONUS XSERVAFF CACSMPL &WGT TMP_CELL
  PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
  DENV1-DENV&COMPNUM XTNEXREG XSERVREG);

SET IN.&INDATA(KEEP=XINS_COV HP_CHOL HP_BP XTNEXREG HP_MAMOG HP_PAP HP_PRNTL /*MJS 04/01/03*/
  XREGION SERVAFF XENR_PCM XBNFGRP ENBGSMPL &WGT CACSMPL
  ADJ_CELL H04023 H04020 H04031 H04007 D_HEALTH D_PAR); /*MJS
03/21/03*/
* IF _N_ LE 100; /*MJS 04/30/03*/
/*RSG 08/20/04 ADDED D_HEALTH D_PAR TO MAP
XREGION CORRECTLY*/

```

```

*****
* 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;

  CELLP=1;
  LENGTH TMP_CELL 8;
  TMP_CELL=ADJ_CELL; /* make COM_SAMP a numeric variable */ /*MJS 04/30/03*/

  IF XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;

  PRVVAR1=HP_PRNTL;      /** prenatal care **/
  PRVVAR2=HP_MAMOG;     /** mammography **/
  PRVVAR3=HP_PAP;       /** papsmear **/
  PRVVAR4=HP_BP;        /** blood pressure **/
  PRVVAR5=HP_CHOL;      /** cholesterol **/ /*MJS 04/01/03*/
  PRVVAR6=H04023;       /** access var 1 **/
  PRVVAR7=H04020;       /** access var 2 **/
  PRVVAR8=H04031;       /** access var 3 **/

  /**** 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 */

  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 XSERVREG = 4;
  END;

  IF XTNEXREG = 2 THEN DO;
    IF XSERVAFF = 1 THEN XSERVREG = 5;
    ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
    ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
    ELSE XSERVREG = 8;
  END;

  IF XTNEXREG = 3 THEN DO;
    IF XSERVAFF = 1 THEN XSERVREG = 9;
    ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
    ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
    ELSE XSERVREG = 12;
  END;

```

```

IF XTNEXREG = 4 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 13;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
  ELSE XSERVREG = 16;
END;

*****
* Assign indicator of CONUS based on XREGION. CONUS stands for
* Contential United States it but includes both Alaska and Hawaii.
*****
IF XTNEXREG IN (1,2,3) THEN CONUS=1;          /*RSG 01/2005 OVERALL CONUS*/

ELSE IF XTNEXREG = 4 THEN CONUS=2;

* Prime enrollees      *;

IF (XINS_COV IN (1,2,6) AND H04007>=2) THEN DO;
  BGROUP=1;
  OUTPUT;
END;

* Enrollees with military PCMs *;

IF (XENR_PCM IN (1,2,6) AND H04007>=2) THEN DO;
  BGROUP=2;
  OUTPUT;
END;

* Enrollees with civilian PCMs *;

IF (XENR_PCM IN (3,7) AND H04007>=2) THEN DO;
  BGROUP=3;
  OUTPUT;
END;

* Nonenrollees *;

IF XINS_COV IN (3,4,5) THEN DO;
  BGROUP=4;
  OUTPUT;
END;

* Active duty      *;

IF XBNFGRP = 1 THEN DO;
  BGROUP=5;
  OUTPUT;
END;

* Active duty dependents *;

IF XBNFGRP = 2 THEN DO;
  BGROUP=6;
  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        ****
**** (REGION, CACSMPL, MHS)                        ****
**** Note: 7/10/2000 use CONUS for MHS              ****
**** Note: there are 8 variables and 8 groups       ****
*****;

%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)=CONUS %THEN %LET PREF=C;          /** dataset prefix for catchment
area data **/

%ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
  %LET ENDNUM=4;          /** RSG 01/2005 Change level of conus to 4 **/
  %LET PREF=M;
%END;

%DO I=1 %TO &GRPNUM;          /** 8 groups **/

  %DO J=1 %TO &COMPNUM;          /** 8 variables **/

    DATA INDATA&I.&J(KEEP=&WGT MHS CONUS 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 > 4 OR XSERVAFF = . THEN DELETE;          /*RSG 01/2005 Delete Conus greater
than 4 which are not conus */
    %END;
    %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
      IF CONUS 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 ****;

%IF %UPCASE(&TABLEVAR) NE CONUS %THEN %DO;

  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;

```

```

%END;
%ELSE %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;

**** No tables, levels, or subgroups needed ****;

PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
WEIGHT &WGT;
SETENV DECWIDTH=4;
NEST TMP_CELL / MISSUNIT;
VAR NUMV&J;
OUTPUT SEMEAN/ TABLECELL=DEFAULT
FILENAME=&PREF.GRP&I.V&J;
RUN;

%END;

***** 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;
%IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
CONUS=1;
%END;
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 (CONUS);
%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)=CONUS %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 <= 4;    /** RSG 0/2005 Change conus values to keep to
be between 1-4 **/
%END;
%IF %UPCASE(&BYVAR)=CONUS %THEN %DO;
WHERE BGROUP=&I AND CONUS = 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;

*** 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(CONUS);
%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)=CONUS %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 cwrwt;
        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 <= 4; /** RSG 01/2005 Change conus values to keep to be between
1-4 **/
        %END;
        %ELSE %IF &PREF=C %THEN %DO;
            WHERE CONUS = 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;
    GOALVAR7=&GOALVAR7;
    GOALVAR8=&GOALVAR8;

** 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&compnum1);
    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&COMPNUM1);
    CPBMK2=SUM(OF WTDV&START-WTDV&COMPNUM);
    comp1=sum(of cmpv1-cmpv&compnum1);
    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(CONUS);
%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 *****
*** Region, Catchment, MHS *****
*****;

PROC FORMAT; /*RSG 02/2005 - hardcoded in prog to have caps vs format in loadcahq.inc*/
    VALUE REGIONF
        0 = "CONUS MHS "
        1 = "NORTH"
        2 = "SOUTH"
        3 = "WEST"
        4 = "OVERSEAS"
    ;
%MACRO GETSIG(BYVAR);

    %LET START = %EVAL(&COMPNUM1+1);
    %LET NEXT = %EVAL(&COMPNUM1+2);

    %IF &BYVAR=XSERVREG %THEN %LET PREF=R;
    %ELSE %IF &BYVAR=CONUS %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&COMPNUM CP1SE CP2SE
        CSCOR1-CSCOR&COMPNUM CPBMK1-CPBMK&COMPNUM
        SERRV1-SERRV&COMPNUM CP1SE CP2SE
        COMP1 COMP2 PROPV1-PROPV&COMPNUM
        DFSCR1-DFSCR&COMPNUM DF_CP1 DF_CP2
        NOBSV1-NOBSV&COMPNUM CPOBS1-CPOBS&COMPNUM
        DENV1-DENV&COMPNUM CPDEN1-CPDEN&COMPNUM);

    FORMAT MAJGRP $30. REGION $25. REGCAT $26.;
    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="CONUS MHS";
      REGCAT="CONUS MHS";
%END;
%ELSE %IF &PREF=R %THEN %DO;
      REGION=PUT(XSERVREG, SERVREGF.);
      REGCAT=PUT(XSERVREG, SERVREGF.);
%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, degrees 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 significant **;

    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(CONUS);
%GETSIG(XTNEXREG);
%GETSIG(XSERVREG);
%GETSIG(XSERVAFF);

ENDSAS;

```

H.4.B Q4_2004\PROGRAMS\ReportCards\MPR_AdultQ42004\SMOKING.SAS - Calculates smoking cessation
measures - Quarterly.

```

*****
*
* Project: DoD Reporting and Analysis 6077-410
* Program: SMOKING.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:
*
* Input: Q4 2004 Survey data:
*        Q4_2004\Data\Afinal\HCS044_1.SD2
*        2000\DATA\HCS00A_1.SD2
*
* Output: SMOKE.SD2
*
*****;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMterr
        MPRINT MLOGIC;

LIBNAME INDAT v612 "..\..\Data\Afinal";
LIBNAME INNORM v612 "..\..\Data\2000\Data";
LIBNAME OUT V612 ".";
LIBNAME LIBRARY '..\..\Data\Afinal\fmtlib';

*LIBNAME INDAT v612 "F:\Q4_2004\Data\Afinal";
*LIBNAME INNORM v612 "F:\2000\Data";
*LIBNAME OUT V612 "F:\Q4_2004\Programs\ReportCards\MPR_AdultQ42004";
*LIBNAME LIBRARY 'F:\Q4_2004\Data\Afinal\fmtlib';

%LET DSN=HCS044_1; /*RSG 01/2005 Quarterly data used for smoking information*/
%LET DSN_NORM=HCS00A_1; /*RSG 01/2005 2000 data to use to calculate weights*/
%LET REGNUM = 16; /*RSG 01/2005 Number of Regions (with serv affiliation)*/
%LET CONNUM = 4; /*RSG 01/2005 Number of Conus level (with serv
affiliation)*/
%LET CURRENT = October, 2003 to September, 2004;

%INCLUDE "..\..\LoadWeb\LOADCAHQ.INC";
*%INCLUDE "F:\Q4_2004\Programs\LoadWeb\LOADCAHQ.INC";

PROC FORMAT;
VALUE AGEF
LOW - 17 = 1
18 - 24 = 2
25 - 34 = 3
35 - 44 = 4
45 - 54 = 5
55 - 64 = 6
65 - 74 = 7
75 - HIGH = 8;

DATA NORMDATA (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF
TOTCON GROUP XSEX WRWT);
SET INNORM.&DSN_NORM.;
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

TMP_CELL=ADJ_CELL;
AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);

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

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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 5;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
  ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 9;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
  ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 13;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
  ELSE XSERVREG = 16;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG = 4 THEN TOTCON=2;

IF XTNEXREG = . THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;

* prime enrollees;
IF XINS_COV IN (1,2,6) AND H00002>=2 THEN DO;
  GROUP=1;
  OUTPUT;
END;

* enrollees with military pcms;
IF XENR_PCM IN (1,2,6) AND H00002>=2 THEN DO;
  GROUP=2;
  OUTPUT;
END;

* enrollees with civilian pcms;
IF XENR_PCM = 3 AND H00002>=2 THEN DO;
  GROUP=3;
  OUTPUT;
END;

* nonenrollees;
IF XINS_COV IN (3,4,5) THEN DO;
  GROUP=4;
  OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 THEN DO;
  GROUP=5;
  OUTPUT;
END;

* active duty dependents;

```

```

IF XBNFGRP = 2 THEN DO;
  GROUP=6;
  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 WRWT);
SET INDAT.&DSN.;
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

TMP_CELL=ADJ_CELL;
AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);

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 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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 5;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
  ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 9;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
  ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 13;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
  ELSE XSERVREG = 16;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG=4 THEN TOTCON=2;

IF XTNEXREG = . THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;

IF HP_SMOKH IN (1,2) THEN DO;
  SM_RATE = 0;
  IF HP_SMOKH = 2 THEN SM_RATE=1;
  SM_RTDN=1;
END;

```

```

IF HP_cess >0 THEN DO;
  SM_CESS = 0;
  IF HP_CESS = 1 THEN SM_CESS=1;
  SM_CSDN=1;
END;

* prime enrollees;
IF XINS_COV IN (1,2,6) AND H04007>=2 THEN DO;
  GROUP=1;
  OUTPUT;
END;

* enrollees with military pcms;
IF XENR_PCM IN (1,2,6) AND H04007>=2 THEN DO;
  GROUP=2;
  OUTPUT;
END;

* enrollees with civilian pcms;
IF XENR_PCM = 3 AND H04007>=2 THEN DO;
  GROUP=3;
  OUTPUT;
END;

* nonenrollees;
IF XINS_COV IN (3,4,5) THEN DO;
  GROUP=4;
  OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 THEN DO;
  GROUP=5;
  OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 THEN DO;
  GROUP=6;
  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 PEF=R;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
  %LET ENDNUM=&CONNUM;
  %LET PEF=M;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
  %LET ENDNUM=&CONNUM;
  %LET PEF=S;
%END;

```

```

%ELSE %IF %UPCASE(&TABLEVAR)=TOTCON %THEN %LET PREF=C;

%DO I = 1 %TO 8;

DATA INDAT&I.(KEEP=WRWT XSERVAFF XSERVREG AGE_GRP XSEXA
&SMOKEVAR. &DEN. TMP_CELL XTNEXRREG);

SET SMOKE;
WHERE XSERVREG > 0 AND GROUP=&I. AND &DEN. >= 0;
%IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
%END;
%IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
IF TOTCON NE 1 THEN DELETE;
%END;
%IF %UPCASE(&TABLEVAR) = XTNEXRREG %THEN %DO;
IF XTNEXRREG NOTIN (1,2,3,4) THEN DELETE;
%END;

RUN;

%IF %UPCASE(&SMOKE) NE CS %THEN %DO;

DATA NORMDAT&I.(KEEP=WRWT XSERVAFF XSERVREG AGE_GRP XSEXA
TMP_CELL XTNEXRREG);
SET NORMDATA;
WHERE XSERVREG > 0 AND GROUP=&I.;
%IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
%END;
%IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
IF TOTCON NE 1 THEN DELETE;
%END;
%IF %UPCASE(&TABLEVAR) = XTNEXRREG %THEN %DO;
IF XTNEXRREG 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 WRWT;
SETENV DECWIDTH=4;
NEST TMP_CELL / missunit;
VAR SM_RATE;
TABLES AGE_GRP*XSEXA*&TABLEVAR.;
SUBGROUP AGE_GRP XSEXA &TABLEVAR.;
LEVELS 8 2 &ENDNUM.;
OUTPUT SEMEAN MEAN wsum nsum
/ TABLECELL=DEFAULT
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 WRWT;
SETENV DECWIDTH=4;
NEST TMP_CELL / missunit;
VAR SM_RATE;
TABLES AGE_GRP*XSEXA;
SUBGROUP AGE_GRP XSEXA;
LEVELS 8 2;
OUTPUT SEMEAN MEAN wsum nsum
/ TABLECELL=DEFAULT
FILENAME=&PREF.GRP&I.&SMOKE.;
RUN;

%END;

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 2000 DATA*/
proc summary data=normdat&i. nway;
  var wrwt;
  class age_grp xsex;
  output out=norm_&i. sum=normwt;

  proc sort data=&pref.ser_&i.&smoke.;
  by age_grp xsex;

  data &pref.ser_&i.&smoke.;
  merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
  by age_grp xsex;
  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._RATE;
  SET &PREF.SERT&I.&SMOKE.;
  RUN;
%END;
%ELSE %DO;

  DATA &PREF._RATE;
  SET &PREF._RATE &PREF.SERT&I.&SMOKE.;
  RUN;

  PROC SORT DATA=&PREF._RATE;
  BY GROUP;
  RUN;

%END;

%END;

%ELSE %IF %UPCASE(&SMOKE) = CS %THEN %DO;

  %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
  PROC DESCRIPT DATA=INDAT&I DESIGN=STRWR NOPRINT;
  WEIGHT WRWT;
  SETENV DECWIDTH=4;
  NEST TMP_CELL / MISSUNIT;
  VAR &SMOKEVAR;
  TABLES &TABLEVAR;
  SUBGROUP &TABLEVAR;
  LEVELS &ENDNUM;
  OUTPUT SEMEAN MEAN wsum nsum
  / TABLECELL=DEFAULT
  FILENAME=&PREF.GRP&I.&SMOKE.;
  RUN;

```

```

%END;

%IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;

PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
WEIGHT WRWT;
SETENV DECWIDTH=4;
NEST TMP_CELL / missunit;
VAR &SMOKEVAR.;
OUTPUT SEMEAN MEAN wsum nsum
/ TABLECELL=DEFAULT
FILENAME=&PREF.GRP&I.&SMOKE.;

RUN;

%END;

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 SEMEAN MEAN wsum nsum;
%END;
%IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
TOTCON=1;
KEEP TOTCON GROUP SEMEAN MEAN wsum nsum;
%END;
RUN;

%IF &I. = 1 %THEN %DO;

DATA &PREF._CESS;
SET &PREF.SER_&I.&SMOKE.;
RUN;
%END;
%ELSE %DO;

DATA &PREF._CESS;
SET &PREF._CESS &PREF.SER_&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(XSERVREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XTNEXREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XTNEXREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(TOTCON,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(TOTCON,CS,SM_CESS,SM_CSDN);

%MACRO ADDIT(PREF, TYPE);

DATA &PREF._&TYPE;
SET &PREF._&TYPE;
LENGTH BENEFIT $34. BENTYPE $50.;

BENEFIT="Smoking Cessation";
%IF &TYPE=RATE %THEN %DO;
BENTYPE="Non-Smoking Rate";
%END;
%IF &TYPE=CESS %THEN %DO;
BENTYPE="Counselled To Quit";

```

```

%END;

RUN;

%MEND;

%ADDIT(C,RATE);
%ADDIT(C,CESS);
%ADDIT(M,RATE);
%ADDIT(M,CESS);
%ADDIT(R,RATE);
%ADDIT(R,CESS);
%ADDIT(S,RATE);
%ADDIT(S,CESS);

%MACRO MAKEDATA(PREF, TABLEVAR);
  DATA &PREF._SMOKE;
  SET &PREF._RATE
      &PREF._CESS
  ;

  LENGTH MAJGRP $30. REGION REGCAT $25.;

  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';
  %END;

  %IF &TABLEVAR = XSERVREG %THEN %DO;
    REGION = PUT(XSERVREG,SERVREGF.);
  %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 = "CONUS MHS";
  %END;

  REGCAT=REGION;

  IF &TABLEVAR NE 0;

  DROP GROUP &TABLEVAR;

  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;
RENAME MEAN=SCORE wsum=n_wgt nsum=n_obs;
RUN;

```

```

/* CALCULATE COMPOSITE SCORE - AVERAGE RATE AND CESSATION*/

PROC SORT DATA=SMOKE;
BY MAJGRP REGION;
RUN;

DATA COMP (DROP=L_MEAN L_SE RENAME=(S_MEAN=SCORE S_SE=SEMEAN l_sum=n_wgt l_obs=n_obs));
SET SMOKE;
BY MAJGRP REGION;

L_MEAN=LAG(SCORE);
L_SE =LAG(SEMEAN);
l_sum=lag(n_wgt);
l_obs=lag(n_obs);
IF LAST.REGION THEN DO;
  S_MEAN=SUM(L_MEAN,SCORE)/2;
  S_SE=SUM(L_SE,SEMEAN)/2;
  BENTYPE="Composite";
  DROP SCORE SEMEAN n_wgt n_obs;
  OUTPUT;
END;
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=0.75;
  SEMEAN=. ;
  REGION="Benchmark";
  REGCAT="Benchmark";
  DROP N_WGT N_OBS;
  OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
  SCORE=0.88;
  SEMEAN=. ;
  REGION="Benchmark";
  REGCAT="Benchmark";
  DROP N_WGT N_OBS;
  OUTPUT;
  SCORE=(0.75 + 0.88)/2;
  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=0.75;
  SEMEAN=. ;
  MAJGRP="Benchmark";
  DROP N_WGT N_OBS;
  OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
  SCORE=0.88;
  SEMEAN=. ;
  MAJGRP="Benchmark";

```

```

DROP N_WGT;
OUTPUT;
SCORE=(0.75+0.88)/2;
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-0.88)/SEMEAN;
  ELSE TSTAT=.;
  IF N_OBS > 0 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 > 0.88 THEN SIG = 1;
    ELSE IF SCORE < 0.88 THEN SIG = -1;
  END;
END;
IF BENTYPE='Counselled To Quit' THEN DO;
  IF SEMEAN > 0 THEN TSTAT=(SCORE-0.75)/SEMEAN;
  ELSE TSTAT=.;
  IF N_OBS > 0 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 > 0.75 THEN SIG = 1;
    ELSE IF SCORE < 0.75 THEN SIG = -1;
  END;
END;
IF BENTYPE='Composite' THEN DO;
  IF SEMEAN > 0 THEN TSTAT=(SCORE-0.815)/SEMEAN;
  ELSE TSTAT=.;
  IF N_OBS > 0 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 > 0.815 THEN SIG = 1;
    ELSE IF SCORE < 0.815 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 ;
RUN;

```

H.4.C Q4_2004\PROGRAMS\ReportCards\MPR_AdultQ42004\LOADMPRQ.SAS - Convert the MPR Scores Database into the WEB layout - 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
*
* Input: RFINAL.SD2
*        CFINAL.SD2
*        MFINAL.SD2
*        SFINAL.SD2
*        SMOKE.SD2
*
* Output: loadmprq.sd2
*
* Note: ***CHECK COMPNUM AND CMPNUM1 ASSIGNMENTS AND UPPER LIMIT OF DO LOOPS***
*
*****;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2;

LIBNAME INLIB V612 ".";
LIBNAME OUT V612 ".";
LIBNAME LIBRARY "..\..\Q4_2004\Data\Afinal\fmtlib";

%LET COMPNUM=8; /** number of questions in both composites **/
%LET CMPNUM1=5; /** number of questions in first composite **/ /*MJS 04/30/03 Changed 4 to 5*/

%LET PERIOD=October, 2003 to September, 2004; /*RSG 09/2004 Changed period*/
%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";

*****;
*** Note -- take out access to care questions and composite ***;
*****;

data mfinal(keep=cpbmk1);
  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 $25. REGCAT $26.    /** RSG 01/2005 Increase region format to
accommodate service affiliation **/
            BENEFIT $34. BENTYPE $50. TIMEPD $35.;    ***MJS 06/23/03 Added TIMEPD;
    SET MFINAL;

    ARRAY BENCHMK{*} GOALVAR1-GOALVAR&CMPNUM1 CPBMK1;
    DO I = 1 TO 6;    ***MJS 04/30/03 Changed 5 to 6;
        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";    ***MJS 04/30/03 Added Cholesterol;
        ELSE IF I = 6 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 16; DROP REG;
            MAJGRP = "Benchmark";
            REGION = PUT(REG,SERVREGF.);
            REGCAT = PUT(REG,SERVREGF.);
            OUTPUT;
        END;
        DO SERV = 1 TO 4; DROP SERV;
            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 SCORES(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG N_OBS N_WGT);
  FORMAT MAJGRP $30. REGION $25. REGCAT $26. /** RSG 01/2005 Increase region format to
  accommodate service affiliation **/
  BENEFIT $34. BENTYPE $50. TIMEPD $35.; ***MJS 06/23/03 Added TIMEPD;
  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 6; ***MJS 04/30/03 Changed 5 to 6;
  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";
  ELSE IF I = 5 THEN BENTYPE = "Cholesterol Testing"; ***MJS 04/30/03 Added Cholesterol;
  ELSE IF I = 6 THEN BENTYPE = "Composite"; ***MJS 06/23/03 Changed &PERIOD to Composite;
  TIMEPD = "&PERIOD"; ***MJS 06/23/03 Added line;
  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;

```

H.5.A Q4_2004\PROGRAMS\LOADWEB\FAKEQ.SAS - Generate the WEB layout/template file - 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
*
* INCLUDES: 1) CACRPT.INC - Report Card Catchment Definitions
*           2) CATREP.INC - Report Card Catchment Format Defns
*
*****;
%LET NUMQTR = 5;    ***MJS 06/18/03 Changed 4 to 5;
%LET PERIOD1 = January, 2003 to December, 2003;          ***RSG 09/2004 Updated periods for Q3 2004;
%LET PERIOD2 = April, 2003 to March, 2004;
%LET PERIOD3 = July, 2003 to June, 2004;
%LET PERIOD4 = October, 2003 to September, 2004;
%LET PERIOD5 = Trend;    ***MJS 06/18/03 Added line;

%INCLUDE "LOADCAHQ.INC";    ***MJS 07/07/03 Added;
LIBNAME OUT V612 ".";
LIBNAME IN V612 "..\..\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.HCS044_1;    ***RSG 09/2004 Updated to Q3 2004;
  CELLP=1;
  *****
  * CALCULATE CACSMPL FOR REPORT CARD BASED ON CELLP
  *****;
  %INCLUDE "CACRPT.INC";
  *****
  * CODE FOR XSERVREG FROM XTNEXREG
  *****;
  IF SERVAFP='A' THEN XSERVAFP=1;          *Army;
```

```

ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
ELSE XSERVAFF=4;

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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 5;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
  ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 9;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
  ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 13;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
  ELSE XSERVREG = 16;
END;

IF XTNEXREG = . THEN DELETE;

RUN;

*****
* CACSMPL FORMAT DEFINITIONS FOR REPORT CARD
*****;
%INCLUDE "CATREP.INC";

proc freq;
table xservreg*cacsmpl/ noprint out=temp;
run;

*data temp2;
DATA TEMP4;
length cafmt $26;
set temp end=last;
by xservreg;
  caf=0;
where cacsmpl ne 9999;
  if first.xservreg then do; /* took out condition for xregion= 8 since using 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 */
    xservreg=17;
    caf=1;
    cafmt = 'ARMY';
    output;
    xservreg=18;
    cafmt = 'AIR FORCE';
    output;
    xservreg=19;
    cafmt = 'NAVY';

```

```

output;
xservreg=20;
cafmt = 'OTHER';
    output;
xservreg=21;
cafmt = 'NORTH';
output;
xservreg=22;
cafmt = 'SOUTH';
output;
xservreg=23;
cafmt = 'WEST';
output;
xservreg=24;
cafmt = 'OVERSEAS';
output;
xservreg=25;
cafmt = 'CONUS MHS';
output;
end;
run;

proc sort;
by xservreg caf cafmt;
run;

data temp5;
set temp4 end=last;

start=_n_;
label=cafmt;
type='N';
fmtname='ROWMAT';
if last then call symput('x',_n_);

run;

proc format cntlin=temp5;

proc print data=temp5;
run;

%MACRO FAKE;
DATA FAKE;

    KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD I K;    ***MJS 06/18/03 Added TIMEPD;

LENGTH MAJGRP $ 30
        REGION $ 25    /*RSG 01/2005 lengthen format to fit service affiliation*/
        REGCAT $ 26
        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 ('CONUS','North','South','West ','NORTH','SOUTH','WEST') OR
        REGCAT IN ('ARMY','AIR FORCE','NAVY','OTHER') THEN REGION=REGCAT;

DO K=0 TO 12;        ** 12 Benefits **;    /*** 12-13 MAB ***/

    BENEFIT=PUT(K,BEN.);

```

```

IF K=0 THEN DO;          /*** 12-13 MAB ***/
  BENTYPE = "Composite";  ***MJS 06/18/03 Set BENTYPE to Composite;
  TIMEPD = "&PERIOD4";    ***MJS 06/18/03 Added TIMEPD;
  OUTPUT;

  /*%DO Q = &NUMQTR %TO &NUMQTR;
    BENTYPE = "&&PERIOD&Q"; OUTPUT;    ***02-01-2001 KRR;
  %END;*/
END;
ELSE IF K=1 THEN DO;
  DO L=1 TO 5;          ***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 5;          ***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 3;          ***MJS 06/18/03 Added L loop and BENTYPE PUT;
    BENTYPE=PUT(L,CRTSHELP.);  ***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 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=5 THEN DO;
  DO L=1 TO 4;          ***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=6 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=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 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=11 THEN DO;
        DO L=1 TO 6;    ***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=12 THEN DO;    ***RSG 02/2005 Added for smoking scores.;
        DO M=1 TO 3;
        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;
```

H.5.B Q4_2004\PROGRAMS\LOADWEB\MERGFINQ.SAS - Merge the final CAHPS and MPR Scores Databases into the WEB layout - 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.SD2 - MPR Scores Database
*          - LOADCAHQ.SD2 - CAHPS Scores Database
*          - BENCH04.SD2 - 2001 CAHPS Benchmark Database
*          - FAKEQ.SD2   - WEB Layout in Column order
*
* OUTPUT:  1) MERGFINQ.SD2 - 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
*
* 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
* - BENCH01-04.SAS - Convert 2000 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
*****;
LIBNAME IN1 v612 ".";
LIBNAME IN2 v612 "CAHPS_AdultQ42004\Data";
LIBNAME IN3 v612 "..\ReportCards\MPR_AdultQ42004";
LIBNAME IN4 v612 "..\Benchmark\Data";
LIBNAME OUT v612 ".";
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 print data=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 16; DROP REG;
        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 4; DROP SERV;    ****RSG 02/2005 Add in serv affiliation;
        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 = '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 = 'CONUS MHS';
        REGCAT = 'CONUS 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 (6077-410)"; /*MJS 03/24/04 Updated
project number*/
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.SD2 - Merged Final Scores Database for input to MAKEHTML.SAS";

TITLE5 "MERGFINQ.SD2 Data source counts";
PROC FREQ DATA=OUT.MERGFINQ;
TABLES SOURCE FLAG SVCAHPQ SVMPRQ SVBENQ
        SVCAHPQ*SVMPRQ*SVBENQ
        /MISSING LIST;
RUN;

TITLE5 "MERGFINQ.SD2 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.SD2 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.SD2)";  
PROC PRINT DATA=MISSING;  
VAR MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD; ***MJS 07/23/03 Added TIMEPD;  
RUN;
```

H.6 Q4_2004\PROGRAMS\LOADWEB\CONUS_Q.SAS - Generate CAHPS CONUS scores and perform significance tests - 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 functionality.
*
* 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.
*
* INPUTS: 1) MERGFINQ.SD2 - Scores Database in WEB Layout
* 2) FAKEQ.SD2 - Scores Database WEB Layout
* 3) CONUS_Q.SD2 - Previous Quarters Combined CAHPS/MPR Scores Database in WEB layout
*
* OUTPUT: 1) CONUS_Q.SD2 - Combined CAHPS/MPR Scores Database in WEB layout
* 2) LT30Q.SD2 - Records with <= 30 observations
*
* 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
* - MERGFINQ.SAS - Merge the final CAHPS and MPR Scores Databases
*
*****
* Assign data libraries and options
*****;
LIBNAME IN1 V612 ".";
LIBNAME OUT V612 ".";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*****;
* Define GLOBAL parameters for last CONUSQ.SD2, rolling quarters, and
* input dataset name.
*
* IMPORTANT: Update these GLOBALS each quarter prior to rerunning program.
*****;
%LET LSTCONUS = ..\..\Q3_2004T\Programs\SERVICEREGION\DATA; ***RSG 02/2005 Updated to
Q2 2004;
%LET PERIOD1 = January, 2003 to December, 2003;
%LET PERIOD2 = April, 2003 to March, 2004;
%LET PERIOD3 = July, 2003 to June, 2004;
%LET PERIOD4 = October, 2003 to September, 2004;
%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","CONUS") AND
      SUBSTR(REGCAT,1,5) NOT IN("Bench","CONUS") AND
      REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
  %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","CONUS") AND
      SUBSTR(REGCAT,1,5) NOT IN("Bench","CONUS") AND
      REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
  %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,7,9)='Army' THEN SERVICE=1;
    ELSE IF SUBSTR(REGION,7,9)='Air Force' THEN SERVICE=2;
    ELSE IF SUBSTR(REGION,7,9)='Navy' THEN SERVICE=3;
    ELSE SERVICE=4;
  END;
  ELSE IF SUBSTR(REGION,1,4)='West' THEN DO;
    REGCON=3;
    TOTCON=1;
    IF SUBSTR(REGION,6,9)='Army' THEN SERVICE=1;
    ELSE IF SUBSTR(REGION,6,9)='Air Force' THEN SERVICE=2;
    ELSE IF SUBSTR(REGION,6,9)='Navy' THEN SERVICE=3;
    ELSE SERVICE=4;
  END;
  ELSE IF SUBSTR(REGION,1,8)='Overseas' THEN DO;
    IF SUBSTR(REGION,10,5)='Army' THEN SERVICE=1;
    ELSE IF SUBSTR(REGION,10,9)='Air Force' THEN SERVICE=2;
    ELSE IF SUBSTR(REGION,10,4)='Navy' THEN SERVICE=3;
    ELSE SERVICE=4;
    REGCON=4;
    TOTCON=2;
  END;
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 = "CONUS";
  FLAG = "CONUS";
  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";
  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";
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 *;
*****;
PROC SORT DATA=TEMP;
BY TOTCON;
DATA TEMP4;
  SET TEMP END=FINISHED;
  length key $200;
  IF _N_ = 1 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;
*****
* Skip over the Non-CONUS
*****;
IF TOTCON NE 2 THEN DO;
  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;
END;
IF FINISHED THEN GOTO FINISHED;
RETURN;

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;

FINISHED:
  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 = "CONUS";
  FLAG = "CONUS";
  REGION = "CONUS MHS";
  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;
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=Advice over Telephone,MAJGRP=Active Duty, TYPE=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 and Respectful ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);

```

```

*****
* Create CONUS for Active Duty Dependents - Individual
*****;
%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Active Duty Dependents, TYPE=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 and Respectful ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);

```

```

%PROCESS(BENTYPE=Problems Getting Referral to Specialist      ,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 Urgent Care ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment      ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit      ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);

```

```

* Create CONUS for Enrollees with Civilian PCM - Individual
*****;
%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Enrollees with Civilian PCM, TYPE=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 and Respectful      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful      ,MAJGRP=Enrollees with Civilian PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully      ,MAJGRP=Enrollees with Civilian PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist      ,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 Urgent Care ,MAJGRP=Enrollees with Civilian PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment      ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit      ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);

```

```

* Create CONUS for Enrollees with Military PCM - Individual
*****;
%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Enrollees with Military PCM, TYPE=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 and Respectful      ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval      ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand      ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful      ,MAJGRP=Enrollees with Military PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully      ,MAJGRP=Enrollees with Military PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service      ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork      ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care      ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse      ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist      ,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 Urgent Care ,MAJGRP=Enrollees with Military PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);

```

* Create CONUS for Non-enrolled Beneficiaries - Individual

*****;

```

%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Non-enrolled Beneficiaries, TYPE=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 and Respectful ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=Non-enrolled Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=Non-enrolled Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care ,MAJGRP=Non-enrolled Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,MAJGRP=Non-enrolled Beneficiaries,
TYPE=INDIVIDUAL);

```

* Create CONUS for Prime Enrollees - Individual

*****;

```

%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Prime Enrollees, TYPE=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 and Respectful ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);

*****
* Create CONUS for Retirees and Dependents - Individual
*****;
%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Retirees and Dependents, TYPE=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 and Respectful ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);

*****
* Create CONUS for All Beneficiaries - Individual
*****;
%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=All Beneficiaries, TYPE=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 and Respectful ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);

```

```
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,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 Courteous and Helpful Office Staff - Quarterly
*****;
```

```
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff); ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
```

```
*****
* 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 = "CONUS_Q";
FLAG = "CONUS_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;
    SET IN2.CONUS_Q;
    IF timepd IN ("&PERIOD1",&PERIOD2",&PERIOD3") AND
      (REGION = REGCAT) AND
      BENEFIT IN ("Getting Needed Care",
        "Getting Care Quickly",
        "How Well Doctors Communicate",
        "Courteous and Helpful Office Staff",
        "Customer Service",
        "Claims Processing",
        "Health Care",
        "Health Plan",
        "Primary Care Manager",
        "Specialty Care",
        "Preventive Care",
        "Smoking Cessation") & TIMEPD NE "Trend";  ***MJS 07/23/03 Changed from
bentype not in ("Trend","Flu Shot");

    ***MJS 07/08/03 Added TIMEPD creation and setting until RUN;
    LENGTH TIMEPD $ 35;

  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;

data trend(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)*(semear**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;
end;

```

```

if region="Benchmark"|majgrp="Benchmark" then output btrend;
output trend;
end;
proc sort data=trend; by majgrp benefit bentye;
proc sort data=btrend; by majgrp benefit bentye;
data trend(rename=(trend=score));
merge trend btrend(rename=(trend=btrend serr=bserr));
by majgrp benefit bentye;
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=trend(drop=t_obs twgt a_score a_period t_score t_se t_period serr
bserr btrend ttrend order); by key;
data trend ;
merge trend(in=din) fakeq(in=cin); by key;
if din;

data combine;
set combine trend;
proc sort; by key;
data combine dupe;
set combine; by key;
if ^(first.key & last.key) then output dupe;
output combine;
proc print data=dupe;run;

*****
* Create place holders for missing records
*****;
DATA FAKEONLY;
MERGE COMBINE(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 COMBINE;
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 OUT=OUT.CONUS_Q; BY ORDER; RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6077-410)"; /*MJS 03/23/04 Updated
project number*/

```

```
TITLE2 "Program Name: CONUS_Q.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MERGFINDQ.SD2 - Scores Database in WEB Layout";
TITLE4 "Program Outputs: CONUS_Q.SD2 - CONUS 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;
```

H.7 Q4_2004\PROGRAMS\LOADWEB\TOTAL_Q.SAS - Calculate CAHPS total scores and perform significance tests - Quarterly.

```
*****
*
* PROGRAM: TOTAL_Q.SAS
* TASK: Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE: Generate TOTAL scores and perform significance tests.
*
* WRITTEN: 12/15/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) May 2001 BY ERIC SCHONE, Modified calculations for
* Total Score.
* 2) July 2002 BY MIKE SCOTT, Updated PERIOD for Q2 2002 survey.
* 3) February 2003 BY MIKE SCOTT, Added code to change "Primary Care
* Manager" in BENEFIT to "Personal Doctor".
* 4) May 2003 BY MIKE SCOTT, Updated for Q1 2003.
* Added code to remove Civilian PCM.
* 5) July 2003 BY MIKE SCOTT, Updated for Q2 2003. Changed BENTYPE to
* TIMEPD when equal to PERIOD. Added TIMEPD to KEEP, SORT, MERGE,
* and FREQ statements and KEY assignments.
* 6) October 2003 BY MIKE SCOTT, Updated for Q3 2003.
* 7) January 2004 BY MIKE SCOTT, Updated for Q4 2003.
* 8) March 2004 BY MIKE SCOTT, Updated for Q1 2004.
* 9) June 2004 BY REGINA GRAMSS, Updated for Q2 2004.
* 10) Aug 2004 BY Regina Gramss, changed/renamed program to use
* conusq_r.sd2 to deal with trend data.
* 11) Oct 2004 BY REGINA GRAMSS, Adjusted to use XTNEXREG vs XREGION
* 12) Jan 2005 BY REGINA GRAMSS, Changed codes to use XSERVREG vs XTNEXREG
*
* INPUTS: 1) CONUS_Q.SD2 - Scores Database in WEB Layout
* 2) FAKEQ.SD2 - Scores Database WEB Layout
* 3) FACTCOMP.SD2 - Total Scores (Part 1)
*
* OUTPUT: 1) TOTAL_Q.SD2 - Combined CAHPS/MPR/TOTAL 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 1-8
* - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
* - MERGFINQ.SAS - Merge the final CAHPS and MPR Scores Databases
* - CONUS_Q.SAS - Generate CAHPS CONUS scores and perform significance tests.
* - FACTCOMP.SAS - Calculate total scores (Part 1)
*
*****
* Assign data libraries and options
*****;
LIBNAME IN1 V612 ".";
LIBNAME OUT V612 ".";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*****;
* Define GLOBAL parameters for current quarter reference period and
* input dataset name.
*
* IMPORTANT: Update the PERIOD parameter each quarter prior to rerunning
* this program.
*****;
%LET PERIOD = October, 2003 to September, 2004;
%LET DSN = CONUS_Q;

*****
* 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;
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;

*****
* Combine previously created records with the new file
*****;
DATA COMBINE OUT.LT30Q_R;
SET IN1.&DSN;
*****
* Remove N_OBS < 30 OR N_WGT < 200
*****;
IF (N_OBS < 30 OR N_WGT < 200) AND (REGION NE "Benchmark")
  and (MAJGRP NE "Benchmark")
  THEN OUTPUT OUT.LT30Q_R;
ELSE OUTPUT COMBINE;
RUN;

PROC SORT DATA=COMBINE;
BY KEY;
RUN;

*****
* Create place holders for missing records
*****;
DATA FAKEONLY;
MERGE COMBINE(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 TOTAL_Q;
SET FAKEONLY COMBINE;
BY KEY;
IF BENEFIT = "Total" THEN DO;
DELETE; /*RSG 02/2005 - Total scores will not be included in reports*/
*SIG = 0;
*IF REGION = "Benchmark" OR MAJGRP = "Benchmark" THEN SCORE = .A;
END;
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*/
IF MAJGRP="Enrollees with Civilian PCM" THEN DELETE; ***MJS 05/14/03 Removed Civilian PCM;
RUN;

PROC SORT DATA=TOTAL_Q OUT=OUT.TOTAL_Q; BY ORDER; RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6077-410)"; /*MJS 0324/04 Updated
project number*/
TITLE2 "Program Name: TOTAL_Q.SAS By Keith Rathbun";
TITLE3 "Program Inputs: FAKEQ.SD2, FACTCOMP.SD2, CONUS_Q.SD2 - CONUS Scores Database in WEB
Layout";
TITLE4 "Program Outputs: TOTAL_Q.SD2 - TOTAL Scores Database in WEB layout";

PROC FREQ;
TABLES SIG FLAG SOURCE BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD /*MJS 07/31/03 Added TIMEPD*/
REGION*REGCAT
/MISSING LIST;
RUN;

```



```

*           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 ;
*           ;
* NOTE: Update only SRCYR1, SRCYR2, PERIOD1/2/3, and CURRENTPERIOD. ;
*=====;

```

```

%LET SRCYR1 = 2003;   *** Previous year;   /*MJS 03/24/04 Added macro variables*/
%LET SRCYR2 = 2004;   *** Current year;

```

```

/*** Added macro variables for previous periods (MAB 6-19-2002) ***/
%LET PERIOD1 = January, 2003 to December, 2003; /*RSG 10/07/04 Updated periods for Q3 2004*/
%LET PERIOD2 = April, 2003 to March, 2004;
%LET PERIOD3 = July, 2003 to June, 2004;

```

```

/** Change name of macro variable from PERIOD (MAB 6-19-2002) */
%LET CURRENTPERIOD = October, 2003 to September, 2004; /** Current Period of these reports */
%LET QTRS=4; /** Qtr of these reports */
%LET QTRNO=4; /**RSG 02/2005 - The quarter of the year (1st, 2nd, 3rd, 4th)*/

OPTIONS NOXWAIT MPRINT; /** 2000/11: added noxwait*/

%LET HTMLSP=%NRSTR(&nbsp;); /**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 hcolor=%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-benefit heading */
/** 1=headings, 0=no headings */

/*****
/***** Macro for putting notes at bottom of table *****/
/*****
%MACRO BOTTOM_NOTES();

%IF &QTRNO NE 4 %THEN %DO;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";    **MJS
03/24/04 C
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";

    PUT "</td></tr>";
%END;
%ELSE %DO;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
&SRCYR2 Health Care Survey of DOD Beneficiaries</font>";    **MJS 03/24/04 Changed hard-coded year
to m
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";
%END;

/* RSG - 02/2005 - Commented out following sections - bottom notes should be the same for all
pages now:

```

```

%if &seppage. ne 2 %then %do;
  %if &var3. =7 %then %do;    ***MJS 4/23/03 Changed 8 to 7;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";    ***MJS
03/24/04 C
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";

    PUT "</td></tr>";
  %end;

  %else %if &var3. =8 %then %do;    ***MJS 4/23/03 Changed 9 to 8;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";    ***MJS
03/24/04 C
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";

    PUT "</td></tr>";
  %end;

  %else %if &var3. =9 %then %do;    ***MJS 4/23/03 Changed 10 to 9;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";    ***MJS
03/24/04 C
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";

    PUT "</td></tr>";
  %end;

  %else %if &var3. =10 %then %do;    ***MJS 4/23/03 Changed 11 to 10;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";    ***MJS
03/24/04 C
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";

```

```

    PUT "</td></tr>";
%end;

%else %do;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
&SRCYR2 Health Care Survey of DOD Beneficiaries</font>";    ***MJS 03/24/04 Changed hard-coded year
to m
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";
%end;
%end;
%else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
(&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
(&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";    ***MJS
03/24/04 C
    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 Quarterly rate of
change adjusted to remove shift in score due to change in wording of question</font><br>";
    PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'>*** Indicates suppressed due to
small sample size</font><br>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";
    PUT "</td></tr>";
%end;

%else %do;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";    ***MJS
03/24/04 C
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";
    PUT "</td></tr>";
%end;
*/

%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>);

```



```

ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP2=22;
ELSE IF UPCASE(REGION) = 'OVERSEAS ARMY' THEN LINEUP2=23;
ELSE IF UPCASE(REGION) = 'OVERSEAS NAVY' THEN LINEUP2=24;
ELSE IF UPCASE(REGION) = 'OVERSEAS AIR FORCE' THEN LINEUP2=25;
ELSE IF UPCASE(REGION) = 'OVERSEAS OTHER' 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(Standard/Extra Users);    ***MJS 05/04/03 Removed Civilian PCM;
%if &var1.=4 %then %let major=%STR(Active Duty);    ***(&var1.=3), and changed 4-8 to 3-7;
%if &var1.=5 %then %let major=%STR(Active Duty Dependents);
%if &var1.=6 %then %let major=%STR(Retirees and Dependents);
%if &var1.=7 %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,1,5)="CONUS" 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;
TEMPLATE=COMPRESS("Templates\Template&var3..xls");
%end;
%else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
    (&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
    (&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
    TEMPLATE=COMPRESS("Templates\Template_trend2.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=7 or &var3=8 or &var3=9 or &var3=10 %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)="CONUS MHS";
    %let sub_regs=%STR(CONUS 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)="NORTH";
    %let sub_regs=%STR(NORTH);
  %end;
  %else %if &var2.=7 %then %do;
    IF UPCASE(REGION)="NORTH ARMY";
    %let sub_regs=%STR(North Army);
  %end;
  %else %if &var2.=8 %then %do;
    IF UPCASE(REGION)="NORTH NAVY";
    %let sub_regs=%STR(North Navy);
  %end;

  %else %if &var2.=9 %then %do;
    IF UPCASE(REGION)="NORTH AIR FORCE";
    %let sub_regs=%STR(North Air Force);
  %end;
  %else %if &var2.=10 %then %do;
    IF UPCASE(REGION)="NORTH OTHER";
    %let sub_regs=%STR(North Other);
  %end;
  %else %if &var2.=11 %then %do;
    IF UPCASE(REGION)="SOUTH";
    %let sub_regs=%STR(SOUTH);
  %end;
  %else %if &var2.=12 %then %do;
    IF UPCASE(REGION)="SOUTH ARMY";
    %let sub_regs=%STR(South Army);
  %end;

  %else %if &var2.=13 %then %do;
    IF UPCASE(REGION)="SOUTH NAVY";
    %let sub_regs=%STR(South Navy);
  %end;
  %else %if &var2.=14 %then %do;
    IF UPCASE(REGION)="SOUTH AIR FORCE";
    %let sub_regs=%STR(South Air Force);
  %end;
  %else %if &var2.=15 %then %do;
    IF UPCASE(REGION)="SOUTH OTHER";
    %let sub_regs=%STR(South Other);
  %end;
  %else %if &var2.=16 %then %do;

```

```

        IF UPCASE(REGION)="WEST";
            %let sub_regs=%STR(WEST);
        %end;

    %else %if &var2.=17 %then %do;
        IF UPCASE(REGION) = "WEST ARMY";
            %let sub_regs=%STR(West Army);
        %end;
    %else %if &var2.=18 %then %do;
        IF UPCASE(REGION) = "WEST NAVY";
            %let sub_regs=%STR(West Navy);
        %end;
    %else %if &var2.=19 %then %do;
        IF UPCASE(REGION) = "WEST AIR FORCE";
            %let sub_regs=%STR(West Air Force);
        %end;
    %else %if &var2.=20 %then %do;
        IF UPCASE(REGION) = "WEST OTHER";
            %let sub_regs=%STR(West Other);
        %end;
    %else %if &var2.=21 %then %do;
        IF UPCASE(REGION) = "OVERSEAS";
            %let sub_regs=%STR(OVERSEAS);
        %end;
    %else %if &var2.=22 %then %do;
        IF UPCASE(REGION) = "OVERSEAS ARMY";
            %let sub_regs=%STR(Overseas Army);
        %end;
    %else %if &var2.=23 %then %do;
        IF UPCASE(REGION) = "OVERSEAS NAVY";
            %let sub_regs=%STR(Overseas Navy);
        %end;
    %else %if &var2.=24 %then %do;
        IF UPCASE(REGION) = "OVERSEAS AIR FORCE";
            %let sub_regs=%STR(Overseas Air Force);
        %end;
    %else %if &var2.=25 %then %do;
        IF UPCASE(REGION) = "OVERSEAS OTHER";
            %let sub_regs=%STR(Overseas Other);
        %end;
    %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(5+&qtrs.);
    %end;
    %else %if &var3.=2 %then %do;    ***MJS 4/23/03 Changed 3 to 2;
        IF BENEFIT="Getting Care Quickly";
        %let columns=%EVAL(5+&qtrs.);
    %end;
    %else %if &var3.=3 %then %do;    ***MJS 4/23/03 Changed 4 to 3;
        IF BENEFIT="Courteous and Helpful Office Staff";
        %let columns=%EVAL(3+&qtrs.);
    %end;
    %else %if &var3.=4 %then %do;    ***MJS 4/23/03 Changed 5 to 4;
        IF BENEFIT="How Well Doctors Communicate";
        %let columns=%EVAL(5+&qtrs.);
    %end;
    %else %if &var3.=5 %then %do;    ***MJS 4/23/03 Changed 6 to 5;
        IF BENEFIT="Customer Service";
        %let columns=%EVAL(4+&qtrs.);
    %end;
    %else %if &var3.=6 %then %do;    ***MJS 4/23/03 Changed 7 to 6;

```

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        IF BENEFIT="Claims Processing";
        %let columns=%EVAL(3+&qtrs.);
    %end;
%else %if &var3.=7 %then %do;    ***MJS 4/23/03 Changed 8 to 7;
    IF BENEFIT="Health Plan";
    %let columns=%EVAL(2+&qtrs.);    ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
%end;
%else %if &var3.=8 %then %do;    ***MJS 4/23/03 Changed 9 to 8;
    IF BENEFIT="Health Care";
    %let columns=%EVAL(2+&qtrs.);    ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
%end;
%else %if &var3.=9 %then %do;    ***MJS 4/23/03 Changed 10 to 9;
    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.=10 %then %do;    ***MJS 4/23/03 Changed 11 to 10;
    IF BENEFIT="Specialty Care";
    %let columns=%EVAL(2+&qtrs.);    ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
%end;
%else %if &var3.=11 %then %do;    ***MJS 4/23/03 Changed 12 to 11;
    IF BENEFIT="Preventive Care";    ***MJS 04/30/03 Changed from 5+ to 6+ because Cholesterol
Testing was added;
    %let columns=%EVAL(6+&qtrs.);    ***DKB CHANGED FROM 6+ to 5+ because removed flu shot 5/7/02;
%end;
%else %if &var3.=12 %then %do;    /*** MAB Added 2/11/2005 ***/
    IF BENEFIT="Smoking Cessation";
    %let columns=%EVAL(3+&qtrs.);
%end;

/*** Set macro variable ***/
%if &var3.=0 %then %do;
    %let sub_ben=%STR(&currentperiod. Composite Scores);
    %let columns=13;
%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 BENEFIT="Courteous and Helpful Office Staff" AND
        BENTYPE="Composite" THEN WIDTH3=70;    ***DKB ADDED TREND 4/30/2002***;
        ***MJS 07/03/03 Changed from BENTYPE IN any period and Est. Quarterly Rate
of Change;

    %if &var3.=0 %then %do;
        WIDTH_COL1=.;

```

```

WIDTH3=40;
%end;

    /** Added 5-7-2001 mab **/
    %if &prefix.=p %then %do;
        WIDTH3=.;
    %end;

RUN;

OPTIONS LS=152;
PROC PRINT;
VAR BENEFIT BENTYPE TIMEPD REGION REGCAT MAJGRP;    ***MJS 07/03/03 Added TIMEPD;
RUN CANCEL;
PROC PRINT;
VAR BENEFIT BENTYPE REGION REGCAT MAJGRP;    ***MJS 07/03/03 Added TIMEPD;
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.7-0-0-0.htm");    ***MJS 05/06/03 Changed 8-0-0 to 7-0-0;
%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.=3 OR &var3.=6 OR &var3.=12 %then %do;    ***MJS 4/23/03 Changed 4&7 to 3&6;
    ***RSG 02/2005 Added var3=12;
        %let splitpixel=181;
    %end;
    %else %if &var3.=4 %then %do;    ***MJS 4/23/03 Changed 5 to 4;
        %let splitpixel=196;
    %end;
    %else %if &var3.=5 %then %do;    ***MJS 4/23/03 Changed 6 to 5;
        %let splitpixel=221;
    %end;
    %else %if &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
        %let splitpixel=158;    ***MJS 4/23/03 Changed 8/9/10/11 to 7/8/9/10;
    %end;
    %else %if &var3.=11 %then %do;    ***MJS 4/23/03 Changed 12 to 11;

```

```

        %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 */
/*-----*/

```



```

        PUT "<tr bgcolor= &hdcclr.>";
        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=4><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>Smoking</b></font></td>";
        PUT "</tr>";
        PUT "<tr bgcolor= &hdcclr.>";
    %end;

    /** Print out 1st column of 4th row **/
    /** ÔÔ FRAMES SECTION ÔÔ **/
    %if &prefix=f %then %do;
        PUT "<td width=80>&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='7%'><font face='&fontface.'>&htmlsp.</font></td>";
    %end;

    /** MAB 2/11/2005 **/
    bennum=1; /** index to all 12 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 **/
/** ÔÔ FRAMES SECTION ÔÔ **/
%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='7%' align='center' valign='bottom'><font
face='&fontface.'size='1'>" &HEADVAR. "</font></td>";
    ELSE PUT "<td width='7%' align='center' valign='bottom'><font face='&fontface.'size='1'><a
href="" HREF +(-1) "" &target.>" &HEADVAR. "</a></font></td>";
%end;

```



```

PUT "</tr>";

/**** Sub_head macro variable added C.Rankin 10/25/2001 ****/

%if &sub_head.=1 %then %do;
  /** 3rd Row ***/
  /** ÔÔ FRAMES SECTION ÔÔ ***/
  %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;
%end;

/**** 4th Row start (column 1) ****/
/**** ÔÔ FRAMES SECTION ÔÔ ***/
%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 "%&mpres('&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*/

```



```

    /** 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 ***/
    /*** ÔÔ FRAMES SECTION ÔÔ ***/
    %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) ***/
    /*** ÔÔ FRAMES SECTION ÔÔ ***/
    %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;

```



```

%else %if &var4. = 2 %then %do;
    IF 6 <= _N_ <= 10;
%end;
%else %if &var4. = 3 %then %do;
    IF 11 <= _N_ <= 15;
%end;
%else %if &var4. = 4 %then %do;
    IF 16 <= _N_ <= 20;
%end;
%else %if &var4. = 5 %then %do;
    IF 21 <= _N_ <= 25;
%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 ****/
/**** 00 FRAMES SECTION 00 ****/
/****PUT "<td></td>"****/

/**** 4th Row start (column 1) ****/
/**** 00 FRAMES SECTION 00 ****/

%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*/

*****;

/** 4th Row (columns 2+) ***/
/** If quarter column then HREF link is different ****/
/** ÔÔ FRAMES SECTION ÔÔ ***/

*LENGTH HREF $250;

%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=HREFf4;
ELSE IF _N_=5 THEN HREF=HREFf5;
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=HREFp5;

/*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>";
/** 2-2 MAB removed scale row ***/
END;

RUN;

%end;

/** ÔÔ FRAMES SECTION ÔÔ ***/
%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.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
    ***MJS 4/23/03 Changed 8/9/10/11 to 7/8/9/10;
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 = "Problems Getting Personal Doctor/Nurse";
        %end;
        %else %if &var4. = 2 %then %do;
            IF BENTYPE = "Problems Getting to See Specialist";    ***MJS 5/7/04 Changed
label;
        %end;
        %else %if &var4. = 3 %then %do;
            IF BENTYPE = "Problems Getting Necessary Care";
        %end;
        %else %if &var4. = 4 %then %do;
            IF BENTYPE = "Delays in Care while Awaiting Approval";
        %end;
    %end;
%else %if &var3. = 2 %then %do;
    %if &var4. = 1 %then %do;
        IF BENTYPE = "Advice over Telephone";
    %end;
    %else %if &var4. = 2 %then %do;
        IF BENTYPE = "Wait for Routine Visit";
    %end;
    %else %if &var4. = 3 %then %do;
        IF BENTYPE = "Wait for Urgent Care";
    %end;
    %else %if &var4. = 4 %then %do;

```

```

                IF BENTYPE = "Wait in Doctor's Office";    ***MJS 5/7/04 Changed label;
            %end;
%end;
%else %if &var3. = 3 %then %do;
    %if &var4. = 1 %then %do;
        IF BENTYPE = "Courteous and Respectful";
    %end;
    %else %if &var4. = 2 %then %do;
        IF BENTYPE = "Helpful";
    %end;
%end;
%else %if &var3. = 4 %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;
%end;
%else %if &var3. = 5 %then %do;
    %if &var4. = 1 %then %do;
        IF BENTYPE = "Problem Finding/Understanding Written Material";
    %end;
    %else %if &var4. = 2 %then %do;
        IF BENTYPE = "Problem Getting Help from Customer Service";
    %end;
    %else %if &var4. = 3 %then %do;
        IF BENTYPE = "Problem with Paperwork";
    %end;
%end;
%end;
%else %if &var3. = 6 %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;
%end;
%else %if &var3. = 11 %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;
    %else %if &var4. = 5 %then %do;
        IF BENTYPE = "Cholesterol Testing";
    %end;
%end;
%end;
%else %if &var3. = 12 %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;
%end;
%end;
%end;

```

```

RUN;
Rate of Change;
***MJS 07/03/03 Changed from BENTYPE IN any period and Est. Quarterly
%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="Standard/Extra Users" THEN MAJNUM=3; ***MJS 05/04/03 Removed Civilian PCM;
  IF MAJGRP="Active Duty" THEN MAJNUM=4;          ***(MAJNUM=3), and changed 4-8 to 3-7;
  IF MAJGRP="Active Duty Dependents" THEN MAJNUM=5;
  IF MAJGRP="Retirees and Dependents" THEN MAJNUM=6;
  IF MAJGRP="All Users" THEN MAJNUM=7;

  /*** 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,1,5)="CONUS" 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 12; ***RSG 02/2005 Changed 11 to 12 for 12 Benefits;
        %if &i.^=7 AND &i.^=8 AND &i.^=9 AND &i.^=10 %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"); /*** 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 ***/
  END;

```

```

    /** Column 1 / Row 1 **/
    /** ÔÛ FRAMES SECTION ÔÛ **/
    %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>";
        END;
    END;

```

```

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 '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;
%if &var3.=0 %then %do;
FILE XLSDATA;
PUT; PUT;
PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries"; ***MJS 03/24/04 Changed
hard-coded year to macro variable;
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";
%end;
%else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
(&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
(&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
FILE XLSDATA;
PUT; PUT;
PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
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";
%end;
%else %if &var3.ne 0 %then %do;
FILE XLSDATA;
PUT; PUT;

```

```

        PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
        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";
    %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 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 12; ***RSG 02/2005 changed 11 to 12 since we now have 12 benefits;
                %if &i.^=7 AND &i.^=8 AND &i.^=9 AND &i.^=10 %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;

                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;

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 ***/
/** ÔÔ FRAMES SECTION ÔÔ ***/
%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="CONUS MHS" then do;
    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="CONUS MHS" then do;
    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;
%end;
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,1,5) = "CONUS" 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+ ***/
/***/
/***/
/***/
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;
    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;
    %if &var3.=0 %then %do;
      FILE XLSDATA;
      PUT; PUT;
      PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries"; ***MJS 03/24/04 Changed
hard-coded year to macro variable;
      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";
    %end;
    %else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
      (&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
      (&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
      FILE XLSDATA;
      PUT; PUT;
      PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
      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";
    %end;
    %else %if &var3.ne 0 %then %do;
      FILE XLSDATA;
      PUT; PUT;
      PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
      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";
    %end;
%end;
/*-----*/
/* 2000/11: end xls code */
/*-----*/

END;

RUN;

%end;

/* Single Regions */
/* 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,1,5) = "CONUS" 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,1,5) = "CONUS") 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 '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;
%if &var3.=0 %then %do;
FILE XLSDATA;
PUT; PUT;
PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries"; ***MJS 03/24/04 Changed
hard-coded year to macro variable;
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";
%end;
%else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
(&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
(&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
FILE XLSDATA;
PUT; PUT;
PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
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";
%end;
%else %if &var3.ne 0 %then %do;
FILE XLSDATA;
PUT; PUT;
PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
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";
%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.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");    ***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");
    majgrp6=COMPRESS("&prefix.6-&var2.-&var3.-&var4.&q..htm");
    majgrp7=COMPRESS("&prefix.7-&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.^=5 and &var1.^=6 and &var2.^=0 %then %do;    ***MJS 05/04/03 Removed
Civilian PCM (&var1.^=3), changed 4,6,7 to 3,5,6,;
        ***and changed MAJGRP 5&8 below to 4&7;
            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="" MAJGRP4 +(-1) "" &target.><font face='&fontface.' size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
            PUT "<a href="" MAJGRP7 +(-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'>Standard/Extra
Users</font></a>&htmlsp.&htmlsp.";    ***MJS 05/04/03 Removed Civilian PCM;
        PUT "<a href="" MAJGRP4 +(-1) "" &target.><font face='&fontface.' size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";    *** (MAJGRP5), and changed 4-8 to 3-7;
        PUT "<br>";
        PUT "<a href="" MAJGRP5 +(-1) "" &target.><font face='&fontface.' size='2'>Active Duty
Dependents</font></a>&htmlsp.&htmlsp.";
        PUT "<a href="" MAJGRP6 +(-1) "" &target.><font face='&fontface.' size='2'>Retirees and
Dependents</font></a>&htmlsp.&htmlsp.";
        PUT "<a href="" MAJGRP7 +(-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;
  FILENAME CMDS DDE 'excel|system';

  /* Align 2 titles */
  DATA _NULL_;
    FILE CMDS;
    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 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;

    /** Increment Row and Column pointers ***/
    /* COLUMN=COLUMN+1;
    IF &var3.in (0,7,8,9,10) and COLUMN>&columns. THEN DO;   ***MJS 4/23/03 Changed 8/9/10/11 to
7/8/9/10;
      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 ***/

```



```

%DO K=1 %TO 12;      * 12 Sub-benefits ;          /*** MAB Changed to 12
2/11/2005 ***/
      %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.^=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 There are different number of
          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. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2;
          %MKHTML(&J.,0,&K.,2,&L.);
          %END;
          %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;
          %MKHTML(&J.,0,&K.,2,&L.);
          %END;
          %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
          %MKHTML(&J.,0,&K.,2,&L.);
          %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 12;

%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 "L" for different number;
%MKHTML(0,&J.,&K.,2,&L.);
*number of sub-benefit trend pages for each benefit;
%END;
%ELSE %IF &K. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2; /*** MAB Added
2/11/2005 ***/
%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;
%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;
*/

/*****
/**** Create macros to call MKHTML macro ****/
/**** Need special macros for Excel files ****/
/*****/

/**** Create 7 HTML pages (7 Majgrps / All Regions / All Benefits)****/
%MACRO EXCEL1();
    %MKHTML(1,0,0,0,0);
    %MKHTML(2,0,0,0,0);
    %MKHTML(4,0,0,0,0);
    %MKHTML(7,0,0,0,0);
    %MKHTML(3,0,0,0,0);    ***MJS 05/04/03 Removed Civilian PCM (Majgrp 3), and changed 4-8
to 3-7;
    %MKHTML(5,0,0,0,0);    ***RSG 08/07/03 Added fourth dimension page number (var4);
    %MKHTML(6,0,0,0,0);
%MEND EXCEL1;

/**** Create 322 HTML pages (7 Majgrps / All Regions / 12 Benefits)****/
%MACRO EXCEL2();
    %DO J = 1 %TO 7;
        %DO K=1 %TO 12;    * 11 Sub-benefits ;    ***MJS 4/23/03 Changed 2 to 1 and 12 to 11;
            %MKHTML(&J.,0,&K.,1,0);
            ***MJS 05/04/03 Removed Civilian PCM (Majgrp
3), and changed 4-8 to 3-7;
            ***RSG 08/07/03 Added fourth dimension page
number (var4);
            %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 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. = 3 OR &K. = 6 OR &K. = 12 %THEN %DO L = 0 %TO 2;
                ***RSG 02/2005 - ADDED 12TH BENEFIT;
                %MKHTML(&J.,0,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;

```

```

                %MKHTML(&J.,0,&K.,2,&L.);
            %END;
            %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
            %MKHTML(&J.,0,&K.,2,&L.);
            %END;
        %END;
    %END;
    %END;
    %MEND EXCEL2;

    /** Create 25 HTML pages (All Majgrps / 25 Regions / All Benefits) ***/
    %MACRO EXCEL3();
        %DO J=1 %TO 25;                * 25 Regions ;
            %MKHTML(0,&J.,0,0,0);
        %END;
    %MEND EXCEL3;

    /** Create ??? HTML pages (All Majgrps / 25 Regions / 12 Benefits) ***/
    %MACRO EXCEL4();
        ***RSG 8/7/03 Made changes to add 5th parameter to macro;
        %DO J=1 %TO 25;
            %DO K=1 %TO 12;    ***RSG 02/2005 CHANGED TO 25 REGIONS/12 BENEFIT (FROM 4, 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 "L" for different number;
                    %MKHTML(0,&J.,&K.,2,&L.);
                    *number of sub-benefit trend pages for each benefit;
                    %END;
                    %ELSE %IF &K. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2;    ***RSG 02/2005
ADDED 12TH BENEFIT;
                    %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 EXCEL4;

    /**RSG 02/2005 CONUS NOW TREATED AS ANOTHER REGION - SECTION COMMENTED OUT**/
    /** Create 1 HTML pages (All Majgrps / 1 Region-ConusMHS / All Benefits) ***/
    /*%MACRO EXCEL5();
        %DO K=17 %TO 20;
            %MKHTML(0,&K.,0,0,0);
        %END;
    %MEND EXCEL5;
    */

    /** Create 11 HTML pages (All Majgrps / 1 Region-ConusMHS / 11 Benefits) ***/
    /*%MACRO EXCEL6();
        ***MJS 4/23/03 Changed 2 to 1 and 12 to 11;
        ***RSG 8/7/03 Made changes to add 5th parameter in macro;
        %DO J=17 %TO 20;
            %DO K=1 %TO 11;
                %MKHTML(0,&J.,&K.,1,0);
            %END;
        %END;
    /*
        /** 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 %THEN %DO L = 0 %TO 2;
            %MKHTML(0,&J.,&K.,2,&L.);
            %END;
            %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;

```


H.9.A - ..\ReportCards\CAHPS_Adult2004\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 H03007>=2) THEN GROUP1 = 1
*           IF (XENR_PCM IN (1,2,6) AND H03007>=2) THEN GROUP2 = 1
*           IF (XENR_PCM = 3,7 AND H03007>=2) THEN GROUP3 = 1
*           IF XINS_COV IN (3,4,5) THEN GROUP4 = 1
*           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 H03072 (new health status variable), deleted
*           code to recode S02S01 to H00077, and changed H00077/R00077
*           rename/recode to H03072/R03072 rename/recode. The Hispanic/
*           Latino variable is not present.
*           7) January 2004 By Mike Scott, Updated for 2004 survey, variable
*           and data set names.
*           8) January 2004 By Keith Rathbun, Added STEP1Q.INC to recreate
*           CACSMPL for more detailed reporting purposes. Use FIELDAGE
*           (instead of DAGEQY) to defined age groups.
*           9) February 2005 By Regina Gramss, STEP1Q.INC is replaced with
*           XCATCH.INC, updated 03 variables to 04 variables, changed regions
*           to use xservreg (service affiliation by tnexreg).
*
* INPUTS: 1) HCS03A_1.SD2 - 2003 DoD Combined Q1-q4 HCS Database /* 2003 */
*
* OUTPUTS: 1) GROUP1-8.SD2 - DoD Quarterly GROUP files as defined above
*
* INCLUDES: 1) CONVERT.SAS - Convert item responses to proportional
*           values for consistency w/ TOPS
*           2) STEP1Q.INC - Recreate CACSMPL for detailed reporting purposes
*
* 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 H03072,
*           and the Hispanic/Latino variable which was H02079 is now
*           H02077.
*
*****;
OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMterr NOOVP COMPRESS=YES;
LIBNAME OUT V612 "DATA";
LIBNAME IN1 V612 "..\..\..\DATA";
LIBNAME LIBRARY "..\..\..\DATA\FMTLIB";

%LET DSN = HCS04a_1; /**RSG 02/2005 Included macro variable for annual dataset name**/
%LET YEAR = 2004; /**RSG 02/2005 Added to use with XCATCH.INC**/

TITLE1      'Program Saved as: STEP1Q.SAS';

/**RSG 02/2005 - Changed STEP1Q.INC TO XCATCH.IN - add in libname and &YR macro var for XCATCH
program**/
%LET YR = 04;
LIBNAME INQ1 V612 "..\..\..\Q1_&YEAR.T\DATA\AFINAL";
LIBNAME INQ2 V612 "..\..\..\Q2_&YEAR.T\DATA\AFINAL";
LIBNAME INQ3 V612 "..\..\..\Q3_&YEAR.T\DATA\AFINAL";
LIBNAME INQ4 V612 "..\..\..\Q4_&YEAR.T\DATA\AFINAL";

LIBNAME IN1T V612 "..\..\..\Q1_&YEAR.T\DATA\AFINAL";
LIBNAME IN2T V612 "..\..\..\Q2_&YEAR.T\DATA\AFINAL";
LIBNAME IN3T V612 "..\..\..\Q3_&YEAR.T\DATA\AFINAL";
LIBNAME IN4T V612 "..\..\..\Q4_&YEAR.T\DATA\AFINAL";

LIBNAME IN2_1T V612 "..\..\..\Q1_&YEAR.T\DATA\AFINAL";
LIBNAME IN2_2T V612 "..\..\..\Q2_&YEAR.T\DATA\AFINAL";
LIBNAME IN2_3T V612 "..\..\..\Q3_&YEAR.T\DATA\AFINAL";
LIBNAME IN2_4T V612 "..\..\..\Q4_&YEAR.T\DATA\AFINAL";

%INCLUDE "..\..\WEIGHTING\XCATCH.INC"; *Create TEMP dataset containing the detailed CACSMPL;

PROC SORT DATA=IN1.&DSN.(DROP=CACSMPL) OUT=&DSN.;
BY MPRID;
RUN;
DATA &DSN.;
MERGE TEMP &DSN.;
BY MPRID;
RENAME XCATCH=CACSMPL;
RUN;

PROC CONTENTS DATA=&DSN.; /*MJS 01/14/04 Changed data set*/
RUN;

DATA ENTIRE;
SET &DSN. (KEEP= /* Annual Version */ /*MJS 01/14/04 Changed data set*/
MPRID
DAGEQY
FIELDAGE
XREGION
XTNEXREG
SERVAFF
CACSMPL
CONUS
ENBGSMPL
SREDA
XSEXA
XBNFGRP
ADJ_CELL
XINS_COV
XENR_PCM
CWRWT
H04029
/* Getting Needed Care */
H04011
H04013
H04028
H04030
/* Getting Care Quickly */

```

```

H04018
H04023
H04020
H04031
/* How Well Doctors Communicate */
H04034
H04035
H04036
H04037
/* Courteous and Helpful Office Staff */
H04032
H04033
/* Customer Service */
H04045
H04047
H04053
/* Claims Processing */
H04041
H04042 /*****
H04075 /* Health Status */
H04038 /* Health Care Rating */
H04054 /* Health Plan Rating */
H04009 /* Personal Doctor Rating */
H04015 /* Specialist Rating */
H04007 /* 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;

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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
IF XSERVAFF = 1 THEN XSERVREG = 5;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
IF XSERVAFF = 1 THEN XSERVREG = 9;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
IF XSERVAFF = 1 THEN XSERVREG = 13;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
ELSE XSERVREG = 16;
END;

IF XTNEXREG = . THEN DELETE; /* RSG 02/2005 USE CACSMPL TO DELETE MISSING FIELDS*/

IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;
/* Note: use tmp_cell in step2q.sas */
LENGTH TMP_CELL 8;
TMP_CELL = ADJ_CELL;
WRWT=CWRWT;
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 catchment 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;
    AGE1824=0;
    AGE2534=0;
    AGE3544=0;
    AGE4554=0;
    AGE5564=0;
    AGE6574=0;
    AGE75UP=0;
    IF ( '018' <= FIELDAGE <= '024' ) THEN AGE1824=1;
    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 (XINS_COV IN (1,2,6) AND H04007>=2) THEN GROUP1 = 1;
IF (XENR_PCM IN (1,2,6) AND H04007>=2) THEN GROUP2 = 1;
IF (XENR_PCM IN (3,7) AND H04007>=2) THEN GROUP3 = 1;
IF XINS_COV IN (3,4,5) THEN GROUP4 = 1;
IF XBNFGRP = 1 THEN GROUP5 = 1;
IF XBNFGRP = 2 THEN GROUP6 = 1;
IF XBNFGRP IN (3,4) THEN GROUP7 = 1;

*****
* Reorder the codes for H03029. H03029 is in reverse order.
*****;
IF H04029 = 2 THEN H04030=3; /* ES 4/28/04 - Change in scoring method*/

*****
* 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 H04018 = 1 THEN R04018 = 1;
ELSE IF H04018 = 2 THEN R04018 = 1;
ELSE IF H04018 = 3 THEN R04018 = 2;
ELSE IF H04018 = 4 THEN R04018 = 3;
ELSE IF H04018 < 0 THEN R04018 = .;

IF H04023 = 1 THEN R04023 = 1;
ELSE IF H04023 = 2 THEN R04023 = 1;
ELSE IF H04023 = 3 THEN R04023 = 2;
ELSE IF H04023 = 4 THEN R04023 = 3;
ELSE IF H04023 < 0 THEN R04023 = .;

IF H04020 = 1 THEN R04020 = 1;
ELSE IF H04020 = 2 THEN R04020 = 1;
ELSE IF H04020 = 3 THEN R04020 = 2;
ELSE IF H04020 = 4 THEN R04020 = 3;
ELSE IF H04020 < 0 THEN R04020 = .;

IF H04032 = 1 THEN R04032 = 1;
ELSE IF H04032 = 2 THEN R04032 = 1;
ELSE IF H04032 = 3 THEN R04032 = 2;
ELSE IF H04032 = 4 THEN R04032 = 3;
ELSE IF H04032 < 0 THEN R04032 = .;

IF H04031 = 1 THEN R04031 = 1;
ELSE IF H04031 = 2 THEN R04031 = 1;
ELSE IF H04031 = 3 THEN R04031 = 2;
ELSE IF H04031 = 4 THEN R04031 = 3;
ELSE IF H04031 < 0 THEN R04031 = .;

IF H04033 = 1 THEN R04033 = 1;
ELSE IF H04033 = 2 THEN R04033 = 1;
ELSE IF H04033 = 3 THEN R04033 = 2;
ELSE IF H04033 = 4 THEN R04033 = 3;
ELSE IF H04033 < 0 THEN R04033 = .;

IF H04034 = 1 THEN R04034 = 1;
ELSE IF H04034 = 2 THEN R04034 = 1;
ELSE IF H04034 = 3 THEN R04034 = 2;
ELSE IF H04034 = 4 THEN R04034 = 3;

```

```

ELSE IF H04034 < 0 THEN R04034 = .;

IF H04035 = 1      THEN R04035 = 1;
ELSE IF H04035 = 2 THEN R04035 = 1;
ELSE IF H04035 = 3 THEN R04035 = 2;
ELSE IF H04035 = 4 THEN R04035 = 3;
ELSE IF H04035 < 0 THEN R04035 = .;

IF H04036 = 1      THEN R04036 = 1;
ELSE IF H04036 = 2 THEN R04036 = 1;
ELSE IF H04036 = 3 THEN R04036 = 2;
ELSE IF H04036 = 4 THEN R04036 = 3;
ELSE IF H04036 < 0 THEN R04036 = .;

IF H04037 = 1      THEN R04037 = 1;
ELSE IF H04037 = 2 THEN R04037 = 1;
ELSE IF H04037 = 3 THEN R04037 = 2;
ELSE IF H04037 = 4 THEN R04037 = 3;
ELSE IF H04037 < 0 THEN R04037 = .;

IF H04041 = 1      THEN R04041 = 1;
ELSE IF H04041 = 2 THEN R04041 = 1;
ELSE IF H04041 = 3 THEN R04041 = 2;
ELSE IF H04041 = 4 THEN R04041 = 3;
ELSE IF H04041 < 0 THEN R04041 = .;

IF H04042 = 1      THEN R04042 = 1;
ELSE IF H04042 = 2 THEN R04042 = 1;
ELSE IF H04042 = 3 THEN R04042 = 2;
ELSE IF H04042 = 4 THEN R04042 = 3;
ELSE IF H04042 < 0 THEN R04042 = .;

/*MJS 01/14/04 Deleted block of code for s02s01=1*/

*****
* Recode variables to one missing condition ".".
* This also renames all the "H0xxxx" to "R0xxxx".
*****;
R04009 = H04009; IF R04009 < 0 THEN R04009 = .;
R04011 = H04011; IF R04011 < 0 THEN R04011 = .;
R04013 = H04013; IF R04013 < 0 THEN R04013 = .;
R04015 = H04015; IF R04015 < 0 THEN R04015 = .;
R04028 = H04028; IF R04028 < 0 THEN R04028 = .;
R04030 = H04030; IF R04030 < 0 THEN R04030 = .;
R04038 = H04038; IF R04038 < 0 THEN R04038 = .;
R04045 = H04045; IF R04045 < 0 THEN R04045 = .;
R04047 = H04047; IF R04047 < 0 THEN R04047 = .;
R04053 = H04053; IF R04053 < 0 THEN R04053 = .;
R04054 = H04054; IF R04054 < 0 THEN R04054 = .;
R04075 = H04075; IF R04075 < 0 THEN R04075 = .;

*****
* Create region dummies.
*****;
IF XSERVREG NE . THEN DO;
  ARRAY REGDUMS (16) REG01 REG02 REG03 REG04 REG05 REG06 REG07 REG08
REG09 REG10 REG11 REG12 REG13 REG14 REG15 REG16;
  DO I = 1 TO 16;
    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;
    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";

%CONT1(DSN=ENTIRE, NUM=7, Y=R04011 R04013 R04028 R04030
        R04045 R04047 R04053);
%CONT2(DSN=ENTIRE, NUM=4, Y=R04038 R04054 R04009 R04015);
%CONT3(DSN=ENTIRE, NUM=12, Y=R04018 R04020 R04023 R04031
        R04034 R04035 R04036 R04037
        R04032 R04033 R04041 R04042);

*****
* 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
        DAGEQY
        FIELDAGE
        XSERVREG
        CONUS
        ENBGSMPLE
        XSEXA
        ADJ_CELL
        XINS_COV
        XENR_PCM
        WRWT
    ;
RUN;

*****
* Print some of the recoded records.
*****;
PROC PRINT DATA=ENTIRE(OBS=60);
    TITLE2 'Print of AGE and SEX dummies';
    VAR DAGEQY
        FIELDAGE
        AGE1824
        AGE2534
        AGE3544
        AGE4554
        AGE5564
        AGE6574
        AGE75UP

```

```

XSEXA
FEMALE

ENBGSMP
XINS_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 H04009 R04009
      H04011 R04011
      H04013 R04013
      H04015 R04015
      H04018 R04018
      H04020 R04020
      H04023 R04023
      H04028 R04028
      H04030 R04030
      H04031 R04031
      H04032 R04032
      H04033 R04033
      H04034 R04034
      H04035 R04035
  ;
RUN;

PROC PRINT DATA=ENTIRE(OBS=60);
  TITLE2 'Print of recoded question variables';
  VAR H04036 R04036
      H04037 R04037
      H04038 R04038
      H04041 R04041
      H04042 R04042
      H04045 R04045
      H04047 R04047
      H04053 R04053
      H04054 R04054
      H04075 R04075
  ;
RUN;

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
  ;
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
        H04009
        H04011
        H04013
        H04015
        H04018
        H04020
        H04023
        H04028
        H04030
        H04031
        H04032
        H04033
        H04034
        H04035
        H04036
        H04037
        H04038
        H04041
        H04042
        H04045
        H04047
        H04053
        H04054
        H04075
      ;
      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;

```

H.9.B - ..\Weighting\XCATCH.INC - Collapse Catchment areas for reporting - Annual.

```

*****
*
* PROGRAM: XCATCH-0203.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: 02/14/2005 BY LUCY LU. RENAME STEP1Q.INC TO XCATCH.INC
*
* INPUT: 1) HCSYQ_1.SD2 - Quarterly files(YE=YEAR, Q=QUARTER)
*
* OUTPUTS: 1) Temporary SAS dataset
*
* 3/10/05 LLU, REVISED PROGRAM TO RUN 2002 AND 2003 FILES
*****;

/*RSG - In program using this INC, need to define libname INQ&WTR (for each
quarter) of the year the INC is applied to, such as:
LIBNAME INQ1 V612 "..\..\..\..\Q1_&YEAR.\DATA\AFINAL"*/

%MACRO PROCESS;

*****
* Extract necessary CACSMPL-related information from the frame files.
*****;
%DO QTR = 1 %TO 4; * Do for each quarter;

%IF &YEAR = 2004 %THEN %DO;

PROC SORT DATA=INQ&QTR..HCS&YR.&QTR._1(KEEP=MPRID PCM ENRID DCATCH D_PAR D_FAC D_HEALTH
CACSMPL XREGION)
OUT=HCSDB&QTR;
BY MPRID; RUN;
%END;

****THIS CODE IS FOR ADDING VARIABLE ENRID FOR YEAR 2002 AND 2003****;

%IF &YEAR = 2002 %THEN %DO;

/*RSG 02/2005 In program using this program as INC:
CREATE LIBNAME IN1T-IN4T THAT IS TO THE QUARTERLY DATA NOT IN T FOLDER
AND IN2_1T-IN2_4T THAT IS TO THE QUARTERLY DATA IN T FOLDER*/

/* LIBNAME IN1T V612 "..\..\..\..\Q&QTR._&YEAR\data\afinal"; * Location of frame file;
LIBNAME IN2T V612 "..\..\..\..\Q&QTR._&YEAR.t\data\afinal"; * Location HCSDB file; */

PROC SORT DATA=IN&QTR.T.FRAMEA(KEEP=MPRID D_PAR D_FAC D_HEALTH CACSMPL) OUT=FRAME&QTR; BY
MPRID; RUN;
PROC SORT DATA=IN&QTR.T.EXTRACT(KEEP=MPRID PCM ENRID DCATCH) OUT=EXTRACT&QTR; BY MPRID; RUN;

%IF &QTR = 4 %THEN %DO;

PROC SORT DATA=IN&QTR.T.HCS&YR.&QTR._1(KEEP=MPRID XREGION) OUT=HCSDB&QTR; BY MPRID; RUN;

DATA HCSDB&QTR;
MERGE FRAME&QTR(IN=IN1) EXTRACT&QTR(IN=IN2) HCSDB&QTR(IN=IN3);
BY MPRID;
IF IN3; *Keep only respondents;
RUN;
%END;

%ELSE %DO;

PROC SORT DATA=IN2_&QTR.T.HCS&YR.&QTR._1(KEEP=MPRID XREGION) OUT=HCSDB&QTR; BY MPRID;
RUN;

```

```

        DATA HCSDB&QTR;
        MERGE FRAME&QTR(IN=IN1)  EXTRACT&QTR(IN=IN2) HCSDB&QTR(IN=IN3);
        BY MPRID;
        IF IN3;  *Keep only respondents;
    RUN;
%END;
%END;

%IF &YEAR = 2003 %THEN %DO;

%IF &QTR = 4 %THEN %DO;

/* RSG 02/2005 In programs using this program as INC:
   create IN1T-IN4T libname for quarterly data NOT in T folder*/

/* LIBNAME IN1T V612 "..\..\..\..\Q&QTR.&YEAR\data\afinal";  * Location of frame file;*/

PROC SORT DATA=IN&QTR.T.NEWFRAME(KEEP=MPRID D_PAR D_FAC D_HEALTH CACSMPL)
OUT=FRAME; BY MPRID; RUN;
PROC SORT DATA=IN&QTR.T.HCS&YR.&QTR._2(KEEP=MPRID PCM ENRID DCATCH XREGION)
OUT=HCSDB; BY MPRID; RUN;

DATA HCSDB&QTR;
MERGE FRAME(IN=IN1) HCSDB(IN=IN3);
BY MPRID;
IF IN3;  *Keep only respondents;
RUN;
%END;

%ELSE %DO;
PROC SORT DATA=IN&QTR.T.FRAMEA(KEEP=MPRID D_PAR D_FAC D_HEALTH CACSMPL) OUT=FRAME&QTR; BY MPRID;
RUN;
PROC SORT DATA=IN&QTR.T.EXTRACT(KEEP=MPRID PCM ENRID DCATCH) OUT=EXTRACT&QTR; BY MPRID; RUN;

/*RSG 02/2005 For programs using this as INC:
   Create libname IN2_1T-IN2_4T for quarterly data in T folder*/

/* LIBNAME IN&QTR.T V612 "..\..\..\..\Q&QTR.&YEAR.t\data\afinal"; * Location HCSDB file;*/

PROC SORT DATA=IN2_&QTR.T.HCS&YR.&QTR._1(KEEP=MPRID XREGION) OUT=HCSDB&QTR; BY MPRID; RUN;
DATA HCSDB&QTR;
MERGE FRAME&QTR(IN=IN1)  EXTRACT&QTR(IN=IN2) HCSDB&QTR(IN=IN3);
BY MPRID;
IF IN3;  *Keep only respondents;
RUN;
%END;

%END;

%END;

%END;
%MEND;

%PROCESS;

DATA TEMP(KEEP=MPRID XCATCH enrid);
SET HCSDB1 HCSDB2 HCSDB3 HCSDB4;
BY MPRID;
LENGTH XCATCH 8;
if pcm = 'MTF' then do;
    if ('1976' <= enrid <= '1980') or ('6301' <= enrid <= '6323') or
        ('6991' <= enrid <= '6994') or ('6501' <= enrid <= '6512') or
        ('7166' <= enrid <= '7195') or ('6700' <= enrid <= '6881')
        then XCATCH=INPUT(dcatch,8.); *Administrative assignment--1976-1980 added q4 2002*;
    else if enrid = '6919' then XCATCH=dcatch;  *managed care contractor;
    else if ('3031' <= enrid <= '3057')
        then XCATCH =INPUT(dcatch,8.); ***On the Ship***;
    else if enrid in ('0002', '5208', '0250', '0449', '0626','0012')

```

```

        then XCATCH = INPUT(dcatch,8.); ***Inactive***;
        *****;
Plan;
        else if ('0190' <= enrid <='0199') then XCATCH = dcatch; **uniformed Service Family Health
        *****;
        else XCATCH = INPUT(enrid,8.);
end;
else XCATCH=INPUT(dcatch,8.);
if pcm = 'MTF' then do;
    if NOT (('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='6919' or ('3031' <= enrid <= '3057') or
        enrid in ('0002', '5208', '0250', '0449', '0626', '0012')) then
            XCATCH = INPUT(d_par,8.);
end;

if d_fac = 'NONCAT' or d_fac = 'TGRO' or d_fac = 'TPR' then do;
    if d_health in ('01','02','05','17') then XCATCH = 9901;
    else if d_health in ('03','04','06','18') then XCATCH = 9902;
    else if d_health in ('07','08','09','10','11','12','19') then XCATCH = 9903;
    else if d_health in ('00','13','14','15') then XCATCH = 9904;
end;
*** If the facility is unknown then set com_geo indicates unknown facility ***;
*** '0999' added 03/15 to account for id 6992;
if CACSMPL in (9900, 999, 998, .) then XCATCH = 9999;
if xcatch in (35,100,321) then xcatch=6223;
RUN;

```

H.9.C - ..\ReportCards\CAHPS_Adult2004\STEP2Qr.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.
/*
/* SUBGROUPS
/*
/* -----
/*     Seven subgroups           Definitions           Reg or Catch   Macro
/* -----
/* 1. Prime enrollees           XINS_COV IN(1,2,6) AND H03007>=4   Catchment      SCORE1
/* 2. Enrollees w/mil PCM       XENR_PCM IN(1,2,6) AND H03007>=4   Catchment      SCORE1
/* 3. Enrollees w/civ PCM       XENR_PCM = 3 AND H03007>=4         Region         SCORE2
/* 4. Nonenrollees             XINS_COV IN(3,4,5)                 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 COMPRESS=YES;
OPTIONS NOCENTER NOFMterr LS=132 PS=78 SOURCE STIMER MPRINT MLOGIC; *NOOVP SYMBOLGEN;
LIBNAME IN1 V612 "DATA";
LIBNAME OUT V612 "DATA";
LIBNAME OUT2 V612 "DATA\ADULTTHATFILES";

*-----;
*- set the parameters here -;
*-----;
%LET DSN = HCS04a_1;

* 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 = 23;

* 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      = WRWT;
%LET IND_VAR1 = R04075;
%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 = R04011;
%LET DEPVAR2 = R04013;
%LET DEPVAR3 = R04028;
%LET DEPVAR4 = R04030;

*****
* GETTING NEEDED CARE QUICKLY.
*****;
%LET DEPVAR5 = R04018;
%LET DEPVAR6 = R04020;
%LET DEPVAR7 = R04023;
%LET DEPVAR8 = R04031;

*****
* HOW WELL DOCTORS COMMUNICATE.
*****;
%LET DEPVAR9  = R04034;
%LET DEPVAR10 = R04035;
%LET DEPVAR11 = R04036;
%LET DEPVAR12 = R04037;

*****
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%LET DEPVAR13 = R04032;
%LET DEPVAR14 = R04033;

*****
* CUSTOMER SERVICE.
*****;
%LET DEPVAR15 = R04045;
%LET DEPVAR16 = R04047;
%LET DEPVAR17 = R04053;

*****
* CLAIMS PROCESSING.
*****;
%LET DEPVAR18 = R04041;
%LET DEPVAR19 = R04042;

*****
* RATING ALL HEALTH CARE: 0 - 10.
*****;
%LET DEPVAR20 = R04038;

*****
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%LET DEPVAR21 = R04054;

*****
* RATING OF PERSONAL DR: 0 - 10.
*****;
%LET DEPVAR22 = R04009;

```

```

*****
* SPECIALITY CARE: 0 - 10.
*****;
%LET DEPVAR23 = R04015;

proc freq data=inl.group8; /*MJS 01/23/04 Changed data set*/
  tables cacsmp1 /missing list out=skelcat(keep=cacsmp1);
run;
data skelcat;
  set skelcat;
  if cacsmp1 = " " 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*/

DATA SKELREG;
  INPUT XSERVREG;
  DATALINES;
  1
  2
  3
  4
  5
  6
  7
  8
  9
  10
  11
  12
  13
  14
  15
  16
;
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 RMRGFILE = OUT.R_&&DEPVAR&IVAR;
%IF "&IGRP" = "1" %THEN %LET RMRGFILE = SKELREG;
%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;
%R_SUDAAN(OUT2.H&IGRP&&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 NEWADJUST);
  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;
    NEWADJUST=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  XSERVREG ; * 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 XSERVREG 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;
%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 *****;

* 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 'REGSRREG.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);
%_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;
  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 NEWADJUST);
  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;
    NEWADJUST=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";
  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  NEWADJUST;
  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;
DATA OUT.R_&&DEPVAR&IVAR;
    MERGE OUT.R_&&DEPVAR&IVAR(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;

proc summary nway data=in1.group8;
    class xservreg cacsmpl;
    output out=cattach;
proc sort; by cacsmpl descending _freq_;
data cattach(drop=_type_ _freq_);
    set cattach; by cacsmpl;
    if first.cacsmpl;
run;
    DATA GROUP&IGRP;
    SET IN1.GROUP&IGRP;
    IF &&DEPVAR&IVAR NOT = .;

    RUN;
proc sort; by cacsmpl;
data group&igrp;
    merge group&igrp(drop=xservreg in=gin) cattach; by cacsmpl;
    if gin;
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(16) 8 REGCNT01 - REGCNT16;
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 AGE CNT(1) + 1;
IF AGE2534 = 1 THEN AGE CNT(2) + 1;
IF AGE3544 = 1 THEN AGE CNT(3) + 1;
IF AGE4554 = 1 THEN AGE CNT(4) + 1;
IF AGE5564 = 1 THEN AGE CNT(5) + 1;
IF AGE6574 = 1 THEN AGE CNT(6) + 1;
IF AGE75UP = 1 THEN AGE CNT(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 <=16 THEN DO;
  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) " " AGE CNT(1)=;
  PUT AGENAM(2) " " AGE CNT(2)=;
  PUT AGENAM(3) " " AGE CNT(3)=;
  PUT AGENAM(4) " " AGE CNT(4)=;
  PUT AGENAM(5) " " AGE CNT(5)=;
  PUT AGENAM(6) " " AGE CNT(6)=;
  PUT AGENAM(7) " " AGE CNT(7)=;
  PUT " ";

  DO I = 1 TO 16;
    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 cacsmp1 with > 1 obs;
DO I = 1 TO LAST_REC-1;
    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 'REGSREG.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;
DO I = 1 TO 16;    * 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;
    IF CATCNT(I) > 0 THEN DO; *** rlc 4/29/00 changed "9999" to "9998";
        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 16;
    IF REGCNT(I) > 0 THEN DO; *** ems 7/12/00 changed "> 1" to "> 0";
        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;
/* PROC MEANS DATA=in1.group8;
*   where &&depvar&&ivar ne .;
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;

%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 16;
    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);

```

H.9.D - ..\ReportCards\CAHPS_Adult2004\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).
*****
OPTIONS NOCENTER NOFMterr LS=132 PS=78 SOURCE SOURCE2 MLOGIC MPRINT NOOVP COMPRESS=YES;
libname in v612 "data";
libname in2 v612 "data\adulthatfiles";
libname out v612 "data";

%LET YR = 04;

%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 wrwt;
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 _name_="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=R&YR.011,var2=R&YR.013,var3=R&YR.028,var4=R&YR.030,qcount=4);
%COMPOSIT (type=R,compos=2,var1=R&YR.018,var2=R&YR.020,var3=R&YR.023,var4=R&YR.031,qcount=4);
%COMPOSIT (type=R,compos=3,var1=R&YR.034,var2=R&YR.035,var3=R&YR.036,var4=R&YR.037,qcount=4);
%COMPOSIT (type=R,compos=4,var1=R&YR.032,var2=R&YR.033,qcount=2);
%COMPOSIT (type=R,compos=5,var1=R&YR.045,var2=R&YR.047,var3=R&YR.053,qcount=3);
%COMPOSIT (type=R,compos=6,var1=R&YR.041,var2=R&YR.042,qcount=2);

%COMPOSIT (type=C,compos=1,var1=R&YR.011,var2=R&YR.013,var3=R&YR.028,var4=R&YR.030,qcount=4);
%COMPOSIT (type=C,compos=2,var1=R&YR.018,var2=R&YR.020,var3=R&YR.023,var4=R&YR.031,qcount=4);
%COMPOSIT (type=C,compos=3,var1=R&YR.034,var2=R&YR.035,var3=R&YR.036,var4=R&YR.037,qcount=4);
%COMPOSIT (type=C,compos=4,var1=R&YR.032,var2=R&YR.033,qcount=2);
%COMPOSIT (type=C,compos=5,var1=R&YR.045,var2=R&YR.047,var3=R&YR.053,qcount=3);
%COMPOSIT (type=C,compos=6,var1=R&YR.041,var2=R&YR.042,qcount=2);

```

H.10.A - ..\LOADWEB\LOADCAHP.SAS - Convert CAHPS Scores into WEB layout - Annual.

```
*****
*
* PROGRAM:  LOADCAHP.SAS
* TASK:    2003 DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* 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
*
* INPUTS:  1) CAHPS Individual and Composite data sets with adjusted scores
*
* OUTPUT:  1) LOADCAHP.SD2 - 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.SD2) will be run through the
*   MAKEHTML.SAS program to generate the WEB pages.
*
*****
* Assign data libraries and options
*****;
LIBNAME IN V612 "..\REPORTCARDS\CAHPS_ADULT2004\DATA"; /*MJS 02/06/04*/
LIBNAME OUT V612 ".";
LIBNAME LIBRARY "..\..\DATA\FMTLIB";/*RSG 02/2005*/

*LIBNAME IN V612 "F:\2004\PROGRAMS\REPORTCARDS\CAHPS_ADULT2004\DATA"; /*MJS 02/06/04*/
*LIBNAME OUT V612 "F:\2004\PROGRAMS\LOADWEB";
*LIBNAME LIBRARY "F:\2004\DATA\FMTLIB";/*RSG 02/2005*/

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER NOFMterr MPRINT MLOGIC;

*****
* Load Format definitions for CAHPS Individual and composite data sets.
*****;
%INCLUDE "LOADCAHQ.INC";
*%INCLUDE "F:\2004\PROGRAMS\LOADWEB\LOADCAHQ.INC";
/*%INCLUDE "CATREP.INC"; RSG 02/2005 - NO LONGER USED, USE CACR FORMAT IN LIBRARY FILE*/

*****
*****
* 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 = 2004; /*MJS 02/04/04*/
```

```

*****
* 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 H99004=4
* 2. Enrollees w/mil PCM  XENR_PCM IN (1,2,6) AND H99004=4
* 3. Enrollees w/civ PCM  XENR_PCM = 3 AND H99004=4
* 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    All beneficiaries
*
*****;
DATA &QUESTION;
  SET IN.&QUESTION;

  LENGTH MAJGRP $30;
  LENGTH REGION $25; /*RSG 02/2005 Increased length to accommodate new region*/
  LENGTH REGCAT $42;
  LENGTH BENTYPE $50;
  LENGTH BENEFIT $34;
  LENGTH TIMEPD $5; /*RSG 02/2005*/

*****;
* Assign Region;
*****;
REGION = PUT(XSERVREG,SERVREGF.);
*****;
* Assign benefit and benefit type;
*****;
IF "&TYPE" = "INDIVIDUAL" THEN DO;
  IF DEPENDNT IN("R04038","R04054","R04009","R04015") THEN /*MJS 02/04/04*/
    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";

*****;
* 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,MAJGRP.F.);
SCORE = ADJ1;
SEMEAN = SEMEAN1;
N_OBS = &PREFIX.CNT1;
N_WGT = &PREFIX.WGT1;
OUTPUT;

*****;
* 2 = Enrollees with military PCM ;
*****;
MAJGRP = PUT(2,MAJGRP.F.);
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,MAJGRP.F.);
  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,MAJGRP.F.);
  SCORE = ADJ4;
  SEMEAN = SEMEAN4;
  N_OBS = &PREFIX.CNT4;
  N_WGT = &PREFIX.WGT4;
  OUTPUT;
%END;

*****;
* 5 = Active duty;
*****;
MAJGRP = PUT(5,MAJGRP.F.);
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,MAJGRP.F.);
  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,MAJGRP.);
    SCORE = ADJ7;
    SEMEAN = SEMEAN7;
    N_OBS = &PREFIX.CNT7;
    N_WGT = &PREFIX.WGT7;
    OUTPUT;
%END;

*****;
* 8 = All Beneficiaries ;
*****;
MAJGRP = PUT(8,MAJGRP.);
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;

/*MJS 02/04/04*/
*****;
* COMPOSITE # 1.;
* GETTING NEEDED CARE VARIABLES.;
*****;
%PROCESS(QUESTION=RCOMPOS1,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R04011,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04013,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04028,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04030,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS1,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R04011,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04013,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04028,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04030,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
* COMPOSITE # 2.;
* GETTING CARE QUICKLY VARIABLES.;
*****;
%PROCESS(QUESTION=RCOMPOS2,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R04018,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04020,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04023,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04031,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS2,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R04018,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04020,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04023,TYPE=INDIVIDUAL,REGCAT=Catchment);

```

```

%PROCESS(QUESTION=C_R04031,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
* COMPOSITE # 3.;
* HOW WELL DOCTORS COMMUNICATE.;
*****;
%PROCESS(QUESTION=RCOMPOS3,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R04034,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04035,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04036,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04037,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS3,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R04034,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04035,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04036,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04037,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
* COMPOSITE # 4.;
* COURTEOUS AND HELPFUL OFFICE STAFF.;
*****;
%PROCESS(QUESTION=RCOMPOS4,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R04032,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04033,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS4,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R04032,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04033,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
* COMPOSITE # 5.;
* CUSTOMER SERVICE.;
*****;
%PROCESS(QUESTION=RCOMPOS5,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R04045,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04047,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04053,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS5,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R04045,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04047,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04053,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
* COMPOSITE # 6.;
* CLAIMS PROCESSING.;
*****;
%PROCESS(QUESTION=RCOMPOS6,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R04041,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R04042,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS6,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R04041,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R04042,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
* INDIVIDUAL # 1.;
* RATING OF ALL HEALTH CARE: 0 - 10.;
*****;
%PROCESS(QUESTION=R_R04038,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=C_R04038,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
* INDIVIDUAL # 2.;
* RATING OF HEALTH PLAN: 0 - 10.;
*****;
%PROCESS(QUESTION=R_R04054,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=C_R04054,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
* INDIVIDUAL # 3.;
* RATING OF PERSONAL DOCTOR: 0 - 10.;
*****;

```

```

%PROCESS(QUESTION=R_R04009,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=C_R04009,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
* INDIVIDUAL # 4.;
* SPECIALTY CARE: 0 - 10.;
*****;
%PROCESS(QUESTION=R_R04015,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=C_R04015,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****;
*****;
* STACK up all of the files into one final output dataset.;
*****;
*****;
DATA OUT.LOADCAHP;
  SET R_R04011 C_R04011
      R_R04013 C_R04013
      R_R04028 C_R04028
      R_R04030 C_R04030
      R_R04018 C_R04018
      R_R04020 C_R04020
      R_R04023 C_R04023
      R_R04031 C_R04031
      R_R04034 C_R04034
      R_R04035 C_R04035
      R_R04036 C_R04036
      R_R04037 C_R04037
      R_R04032 C_R04032
      R_R04033 C_R04033
      R_R04045 C_R04045
      R_R04047 C_R04047
      R_R04053 C_R04053
      R_R04041 C_R04041
      R_R04042 C_R04042
      R_R04038 C_R04038
      R_R04054 C_R04054
      R_R04009 C_R04009
      R_R04015 C_R04015
      RCOMPOS1 CCOMPOS1
      RCOMPOS2 CCOMPOS2
      RCOMPOS3 CCOMPOS3
      RCOMPOS4 CCOMPOS4
      RCOMPOS5 CCOMPOS5
      RCOMPOS6 CCOMPOS6
  ;
  IF SCORE = . THEN DELETE;
RUN;

TITLE1 "2002 DOD Health Survey Scores/Report Cards (8860-410)";
TITLE2 "Program Name: LOADCAHP.SAS By Keith Rathbun";
TITLE3 "Program Inputs: CAHPS Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: LOADCAHP.SD2 - Combined CAHPS Scores Database in WEB layout";

PROC FREQ;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
      REGION*REGCAT
      /MISSING LIST;
RUN;

```

H.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 (8860-410)
* 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.
*
*
* 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"
  ;
  VALUE REGIONF
    0 = "CONUS MHS  "
    1 = "North"
    2 = "South"
    3 = "West"
    4 = "Overseas"
  ;
  VALUE SERVREGF
    1 = "North Army"
    2 = "North Air Force"

```

```

3 = "North Navy"
4 = "North Other"
5 = "South Army"
6 = "South Air Force"
7 = "South Navy"
8 = "South Other"
9 = "West Army"
10 = "West Air Force"
11 = "West Navy"
12 = "West Other"
13 = "Overseas Army"
14 = "Overseas Air Force"
15 = "Overseas Navy"
16 = "Overseas Other"
17 = "CONUS ARMY"
18 = "CONUS AIR FORCE"
19 = "CONUS NAVY"
20 = "CONUS OTHER"

```

```
;
```

```
VALUE $BENTYPPF
```

```

"1998 " = "1998 "
"1999 " = "1999 "
"2000 " = "2000 "
"2001 " = "2001 "
"2002 " = "2002 "
"2003 " = "2003 "
"2004 " = "2004 "
"2000 Q1 " = "January, 2000 to December, 2000 "
"2000 Q2 " = "April, 2000 to March, 2001 "
"2000 Q3 " = "July, 2000 to June, 2001 "
"2000 Q4 " = "October, 2000 to September, 2001 "
"2002 Q1 " = "January, 2001 to December, 2001 "
"2002 Q2 " = "April, 2001 to March, 2002 "
"2002 Q3 " = "July, 2001 to June, 2002 "
"2002 Q4 " = "October, 2001 to September, 2002 "
"2003 Q1 " = "January, 2002 to December, 2002 "
"2003 Q2 " = "April, 2002 to March, 2003 "
"2003 Q3 " = "July, 2002 to June, 2003 "
"2003 Q4 " = "October, 2002 to September, 2003 "
"2004 Q1 " = "January, 2003 to December, 2003 "
"2004 Q2 " = "April, 2003 to March, 2004 "
"2004 Q3 " = "July, 2003 to June, 2004 "
"2004 Q4 " = "October, 2003 to September, 2004 "
"2005 Q1 " = "January, 2004 to December, 2004 "
"2005 Q2 " = "April, 2004 to March, 2005 "
"2005 Q3 " = "July, 2004 to June, 2005 "
"2005 Q4 " = "October, 2004 to September, 2005 "
/*****/
/* Admin. Year Defn. */
/* 2001 2002 2003 2004 */
/*****/
"R00007 ", "R02009 ", "R03009 ", "R04011" = "Problems Getting Personal Doctor/Nurse "
"R00014 ", "R02016 ", "R03013 ", "R04013" = "Problems Getting Referral to Specialist "
"R00028 ", "R02030 ", "R03027 ", "R04028" = "Problems Getting Necessary Care "
"R00029 ", "R02031 ", "R03028 ", "R04030" = "Delays in Care while Awaiting Approval "
"R00019 ", "R02021 ", "R03018 ", "R04018" = "Advice over Telephone"
"R00021 ", "R02023 ", "R03020 ", "R04023" = "Wait for Routine Visit "
"R00024 ", "R02026 ", "R03023 ", "R04020" = "Wait for Urgent Care "
"R00030 ", "R02032 ", "R03029 ", "R04031" = "Wait More than 15 Minutes Past Appointment "
/* "R00030 ", "R02032 ", "R03029 ", "R04031" = "Wait Less than 15 Minutes For Appointment "
**/
"R00033 ", "R02035 ", "R03032 ", "R04034" = "Listens Carefully "
"R00034 ", "R02036 ", "R03033 ", "R04035" = "Explains so You can Understand "
"R00035 ", "R02037 ", "R03034 ", "R04036" = "Shows Respect "
"R00036 ", "R02038 ", "R03035 ", "R04037" = "Spends Time with You "
"R00031 ", "R02033 ", "R03030 ", "R04032" = "Courteous and Respectful "
"R00032 ", "R02034 ", "R03031 ", "R04033" = "Helpful "
"R00048 ", "R02048 ", "R03044 ", "R04045" = "Problem Finding/Understanding Written Material"
"R00050 ", "R02050 ", "R03046 ", "R04047" = "Problem Getting Help from Customer Service "
"R00055 ", "R02055 ", "R03051 ", "R04053" = "Problem with Paperwork "
"R00044 ", "R02044 ", "R03040 ", "R04041" = "Claims Handled in a Reasonable Time "
"R00045 ", "R02045 ", "R03041 ", "R04042" = "Claims Handled Correctly "
"R00037 ", "R02039 ", "R03036 ", "R04038" = "Health Care "

```

```

"R00056 " , "R02056 " , "R03052 " , "R04054" = "Health Plan "
"R00009 " , "R02011 " , "R03011 " , "R04009" = "Primary Care Manager "
"R00016 " , "R02018 " , "R03015 " , "R04015" = "Specialty Care "
"PHYSIC " = "Physical "
"MENTAL " = "Mental "
;
VALUE $BENEF
"RCOMPOS1", "CCOMPOS1", "R00007", "R00014", "R00028", "R00029",
"R02009", "R02016", "R02030", "R02031",
"R03009", "R03013", "R03027", "R03028",
"R04011", "R04013", "R04028", "R04030"
= "Getting Needed Care "

"RCOMPOS2", "CCOMPOS2", "R00019", "R00021", "R00024", "R00030",
"R02021", "R02023", "R02026", "R02032",
"R03018", "R03020", "R03023", "R03029",
"R04018", "R04023", "R04020", "R04031"
= "Getting Care Quickly "

"RCOMPOS3", "CCOMPOS3", "R00033", "R00034", "R00035", "R00036",
"R02035", "R02036", "R02037", "R02038",
"R03032", "R03033", "R03034", "R03035",
"R04034", "R04035", "R04036", "R04037"
= "How Well Doctors Communicate "

"RCOMPOS4", "CCOMPOS4", "R00031", "R00032",
"R02033", "R02034",
"R03030", "R03031",
"R04032", "R04033"
= "Courteous and Helpful Office Staff "

"RCOMPOS5", "CCOMPOS5", "R00048", "R00050", "R00055",
"R02048", "R02050", "R02055",
"R03044", "R03046", "R03051",
"R04045", "R04047", "R04053"
= "Customer Service "

"RCOMPOS6", "CCOMPOS6", "R00044", "R00045",
"R02044", "R02045",
"R03040", "R03041",
"R04041", "R04042"
= "Claims Processing "
"RCOMPOS11", "COMPOS11", "MENTAL", "PHYS"
= "Health Status "
/*****/
/* Admin. Year Defn. */
/* 2001 2002 2003 2004 */
/*****/
"R00037", "R02039", "R03036", "R04038" = "Health Care "
"R00056", "R02056", "R03052", "R04054" = "Health Plan "
"R00009", "R02011", "R03011", "R04009" = "Primary Care Manager "
"R00016", "R02018", "R03015", "R04015" = "Specialty Care "
;
VALUE BEN
0 = 'Total' /*** 12-13 MAB ***/
1 = 'Getting Needed Care'
2 = 'Getting Care Quickly'
3 = 'Courteous and Helpful Office Staff'
4 = 'How Well Doctors Communicate'
5 = 'Customer Service'
6 = 'Claims Processing'
7 = 'Health Plan'
8 = 'Health Care'
9 = 'Primary Care Manager'
10 = 'Specialty Care'
11 = 'Preventive Care'
12 = 'Smoking Cessation';

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 = "Problems Getting Personal Doctor/Nurse"
2 = "Problems Getting Referral to Specialist"
3 = "Problems Getting Necessary Care"
4 = "Delays in Care while Awaiting Approval"
5 = "Composite";

VALUE GETCAREQ
1 = "Advice over Telephone"
2 = "Wait for Routine Visit"
3 = "Wait for Urgent Care"
4 = "Wait More than 15 Minutes Past Appointment"
5 = "Composite";

VALUE CRTSHELP
1 = "Courteous and Respectful"
2 = "Helpful"
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 = "Problem Finding/Understanding Written Material"
2 = "Problem Getting Help from Customer Service"
3 = "Problem with Paperwork"
4 = "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 = "Cholesterol Testing"
6 = "Composite";

VALUE SMOKEF
1 = "Non-Smoking Rate"
2 = "Counselled To Quit"
3 = "Composite";

RUN;

```

H.11.A - ..\Benchmark\BENCHA03.SAS - Calculate CAHPS Benchmark data for HCSDB - Annual.

```
*****
*
* PROGRAM:  BENCHA03.SAS
* TASK:    2004 DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE: Adjust 2004 Adult CAHPS Benchmarks
*
* WRITTEN: June 2000 BY ERIC SCHONE
*
* INPUTS:  1) BENCHA02.SD2 - 2003 Adult CAHPS Questions Renamed to be
*           consistent with the 2004 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, replace XREGION with XTNEXREG
*           14) Feb 2005 BY REGINA GRAMSS - Update to use for 2004 Annual Report
*
* 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
*****;
libname in V612 '..\..\Q4_2004\Programs\Benchmark\Data';
libname in2 V612 '..\ReportCards\CAHPS_Adult2004\Data';
libname out V612 'Data';
LIBNAME LIBRARY    "..\..\DATA\FMTLIB";

%let wgt=wrwt;

OPTIONS MLOGIC MPRINT NOCENTER 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;

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;

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));
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;
run;
%INCLUDE "..\..\..\Q4_2004\programs\REPORTCARDS\CAHPS_AdultQ42004\CONVERT.SAS";

%CONT1(DSN=SETUP, NUM=7, Y=R04011 R04013 R04028 R04030 /*MJS 03/23/04 Changed 2003 to 2004
variables names*/
R04045 R04047 R04053);
%CONT2(DSN=SETUP, NUM=4, Y=R04038 R04054 R04009 R04015);
%CONT3(DSN=SETUP, NUM=12, Y=R04018 R04023 R04020 R04031
R04034 R04035 R04036 R04037
R04032 R04033 R04041 R04042);
/* GETTING NEEDED CARE */
%adjust(r04011,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04013,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04028,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04030,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(1,r04011,r04013,r04028,r04030);

/* GETTING NEEDED CARE QUICKLY */
%adjust(r04018,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04023,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04020,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04031,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(2,r04018,r04023,r04020,r04031);

/* HOW WELL DOCTORS COMMUNICATE */
%adjust(r04034,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04035,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04036,age1824 age2534 age3544 age4554 age5564 age6574 r04075);

```

```

%adjust(r04037,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(3,r04034,r04035,r04036,r04037);

/* COURTEOUS AND HELPFUL OFFICE STAFF */
%adjust(r04032,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04033,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(4,r04032,r04033);

/* CUSTOMER SERVICE */
%adjust(r04045,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04047,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04053,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(5,r04045,r04047,r04053);

/* CLAIMS PROCESSING */
%adjust(r04041,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%adjust(r04042,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(6,r04041,r04042);

/* RATING ALL HEALTH CARE: 0 - 10 */
%adjust(r04038,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(7,r04038);

/* RATING OF HEALTH PLAN: 0 - 10 */
%adjust(r04054,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(8,r04054);

/* RATING OF PERSONAL DR: 0 - 10 */
%adjust(r04009,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(9,r04009);

/* SPECIALTY CARE */
%adjust(r04015,age1824 age2534 age3544 age4554 age5564 age6574 r04075);
%comp(10,r04015);

```

H.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 (6077-410)
* 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 and to use
*XTNEXREG vs XREGION.
*            13) 02/2004 by Regina Gramss - Updated for Annual 2004 run using
*XSERVREG for region.
*
* 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.SD2) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
*****
* Assign data libraries and options
*****;
LIBNAME IN V612 "DATA";
LIBNAME OUT V612 "DATA";
LIBNAME LIBRARY "..\..\DATA\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES 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 Group Number	Definitions
1. Prime enrollees	XINS_COV IN (1,2,6) AND H04007_R>=7
2. Enrollees w/mil PCM	XENR_PCM IN (1,2,6) AND H04007_R>=7
3. Enrollees w/civ PCM	XENR_PCM = 3 AND H04007_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 = "2004"; /*RSG 02/2005 UPDATED TO 2004*/

```

```

*****;
* Convert benchmark scores datasets into WEB layout.
*****;

```

```

DATA COMP&CNUM._&Gnum;
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,MAJGRP.);

```

```

*****;
* 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 = "Courteous and Helpful Office Staff";
ELSE IF &CNUM = 5 THEN BENEFIT = "Customer Service";
ELSE IF &CNUM = 6 THEN BENEFIT = "Claims Processing";
ELSE IF &CNUM = 7 THEN BENEFIT = "Health Care";
ELSE IF &CNUM = 8 THEN BENEFIT = "Health Plan";
ELSE IF &CNUM = 9 THEN BENEFIT = "Primary Care Manager";
ELSE IF &CNUM = 10 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;

```

```

*****;
* Assign composite score and SEMEAN
*****;

```

```

SCORE = TOTADJ;
SEMEAN = SDE;

*****
* Output composite score record for each REGION
*****;
OUTPUT;

*****
* Now, output the individual score records
*****;
IF &NVAR GT 1 THEN DO;
  ARRAY ITEMS &VARS;
  ARRAY SE      &SE;
  LENGTH NAME $8;
  DO I = 1 TO DIM(ITEMS); DROP I;
    CALL VNAME(ITEMS(I),NAME);
    NAME = SUBSTR(NAME,1,6);
    SCORE = ITEMS(I);
    SEMEAN = SE(I);
    BENTYPE = PUT(NAME,$BENTYPF.);
    TIMEPD = PUT(&YEAR,$BENTYPF.);    ***MJS 07/03/03 Added;
    OUTPUT;
  END;
END;

KEEP MAJGRP
REGION
REGCAT
BENTYPE
BENEFIT
TIMEPD /*MJS 07/03/03 Added*/
SEMEAN
SCORE
SIG
;
RUN;

%MEND;

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=8, NVAR=4, VARS=r04011_8 R04013_8 R04028_8 R04030_8, /*MJS 03/23/04 Changed
2003 to 2004 variables names*/
SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=8, NVAR=4, VARS=R04018_8 R04023_8 R04020_8 R04031_8,
SE=S_R04018 S_R04023 S_R04020 S_R04031);
*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=8, NVAR=4, VARS=R04034_8 R04035_8 R04036_8 R04037_8,
SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=8, NVAR=2, VARS=R04032_8 R04033_8, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=8, NVAR=3, VARS=R04045_8 R04047_8 R04053_8,
SE=S_R04045 S_R04047 S_R04053);

```

```

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=8, NVAR=2, VARS=R04041_8 R04042_8, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=8, NVAR=1, VARS=R04038_8, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=8, NVAR=1, VARS=R04054_8, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=8, NVAR=1, VARS=R04009_8, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=8, NVAR=1, VARS=R04015_8, SE=S_R04015);

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=3, NVAR=4, VARS=r04011_3 R04013_3 R04028_3 R04030_3,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=3, NVAR=4, VARS=R04018_3 R04023_3 R04020_3 R04031_3,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);

*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=3, NVAR=4, VARS=R04034_3 R04035_3 R04036_3 R04037_3,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=3, NVAR=2, VARS=R04032_3 R04033_3, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=3, NVAR=3, VARS=R04045_3 R04047_3 R04053_3,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=3, NVAR=2, VARS=R04041_3 R04042_3, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.

```

```

*****;
%PROCESS(CNUM=7, GNUM=3, NVAR=1, VARS=R04038_3, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=3, NVAR=1, VARS=R04054_3, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=3, NVAR=1, VARS=R04009_3, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=3, NVAR=1, VARS=R04015_3, SE=S_R04015);

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=4, NVAR=4, VARS=r04011_4 R04013_4 R04028_4 R04030_4,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=4, NVAR=4, VARS=R04018_4 R04023_4 R04020_4 R04031_4,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);

*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=4, NVAR=4, VARS=R04034_4 R04035_4 R04036_4 R04037_4,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=4, NVAR=2, VARS=R04032_4 R04033_4, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=4, NVAR=3, VARS=R04045_4 R04047_4 R04053_4,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=4, NVAR=2, VARS=R04041_4 R04042_4, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=4, NVAR=1, VARS=R04038_4, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=4, NVAR=1, VARS=R04054_4, SE=S_R04054);

*****
* INDIVIDUAL # 3.

```

```

* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=4, NVAR=1, VARS=R04009_4, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=4, NVAR=1, VARS=R04015_4, SE=S_R04015);

*****
*****;
*****;
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=5, NVAR=4, VARS=r04011_5 R04013_5 R04028_5 R04030_5,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=5, NVAR=4, VARS=R04018_5 R04023_5 R04020_5 R04031_5,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);

*****
*
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=5, NVAR=4, VARS=R04034_5 R04035_5 R04036_5 R04037_5,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=5, NVAR=2, VARS=R04032_5 R04033_5, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=5, NVAR=3, VARS=R04045_5 R04047_5 R04053_5,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=5, NVAR=2, VARS=R04041_5 R04042_5, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=5, NVAR=1, VARS=R04038_5, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=5, NVAR=1, VARS=R04054_5, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=5, NVAR=1, VARS=R04009_5, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;

```

```

%PROCESS(CNUM=10, GNUM=5, NVAR=1, VARS=R04015_5, SE=S_R04015);

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=6, NVAR=4, VARS=r04011_6 R04013_6 R04028_6 R04030_6,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=6, NVAR=4, VARS=R04018_6 R04023_6 R04020_6 R04031_6,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);
*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=6, NVAR=4, VARS=R04034_6 R04035_6 R04036_6 R04037_6,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=6, NVAR=2, VARS=R04032_6 R04033_6, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=6, NVAR=3, VARS=R04045_6 R04047_6 R04053_6,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=6, NVAR=2, VARS=R04041_6 R04042_6, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=6, NVAR=1, VARS=R04038_6, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=6, NVAR=1, VARS=R04054_6, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=6, NVAR=1, VARS=R04009_6, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=6, NVAR=1, VARS=R04015_6, SE=S_R04015);

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=7, NVAR=4, VARS=r04011_7 R04013_7 R04028_7 R04030_7,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.

```

```

* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=7, NVAR=4, VARS=R04018_7 R04023_7 R04020_7 R04031_7,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);
*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=7, NVAR=4, VARS=R04034_7 R04035_7 R04036_7 R04037_7,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=7, NVAR=2, VARS=R04032_7 R04033_7, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=7, NVAR=3, VARS=R04045_7 R04047_7 R04053_7,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=7, NVAR=2, VARS=R04041_7 R04042_7, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=7, NVAR=1, VARS=R04038_7, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=7, NVAR=1, VARS=R04054_7, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=7, NVAR=1, VARS=R04009_7, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=7, NVAR=1, VARS=R04015_7, SE=S_R04015);

*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=2, NVAR=4, VARS=r04011_2 R04013_2 R04028_2 R04030_2,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=2, NVAR=4, VARS=R04018_2 R04023_2 R04020_2 R04031_2,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);
*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=2, NVAR=4, VARS=R04034_2 R04035_2 R04036_2 R04037_2,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

```

```

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=2, NVAR=2, VARS=R04032_2 R04033_2, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;
%PROCESS(CNUM=5, GNUM=2, NVAR=3, VARS=R04045_2 R04047_2 R04053_2,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=2, NVAR=2, VARS=R04041_2 R04042_2, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=2, NVAR=1, VARS=R04038_2, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=2, NVAR=1, VARS=R04054_2, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=2, NVAR=1, VARS=R04009_2, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=2, NVAR=1, VARS=R04015_2, SE=S_R04015);

*****
*****
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*****;
%PROCESS(CNUM=1, GNUM=1, NVAR=4, VARS=r04011_1 R04013_1 R04028_1 R04030_1,
        SE=s_r04011 S_R04013 S_R04028 S_R04030);

*****
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*****;
%PROCESS(CNUM=2, GNUM=1, NVAR=4, VARS=R04018_1 R04023_1 R04020_1 R04031_1,
        SE=S_R04018 S_R04023 S_R04020 S_R04031);

*****
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*****;
%PROCESS(CNUM=3, GNUM=1, NVAR=4, VARS=R04034_1 R04035_1 R04036_1 R04037_1,
        SE=S_R04034 S_R04035 S_R04036 S_R04037);

*****
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****;
%PROCESS(CNUM=4, GNUM=1, NVAR=2, VARS=R04032_1 R04033_1, SE=S_R04032 S_R04033);

*****
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*****;

```

```

%PROCESS(CNUM=5, GNUM=1, NVAR=3, VARS=R04045_1 R04047_1 R04053_1,
        SE=S_R04045 S_R04047 S_R04053);

*****
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*****;
%PROCESS(CNUM=6, GNUM=1, NVAR=2, VARS=R04041_1 R04042_1, SE=S_R04041 S_R04042);

*****
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*****;
%PROCESS(CNUM=7, GNUM=1, NVAR=1, VARS=R04038_1, SE=S_R04038);

*****
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*****;
%PROCESS(CNUM=8, GNUM=1, NVAR=1, VARS=R04054_1, SE=S_R04054);

*****
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*****;
%PROCESS(CNUM=9, GNUM=1, NVAR=1, VARS=R04009_1, SE=S_R04009);

*****
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*****;
%PROCESS(CNUM=10, GNUM=1, NVAR=1, VARS=R04015_1, SE=S_R04015);

*****
* 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
      COMP10_1 COMP10_2 COMP10_3 COMP10_4 COMP10_5 COMP10_6 COMP10_7 COMP10_8
  ;
  IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6077-410)"; /*MJS 03/23/04 Updated
project number*/
TITLE2 "Program Name: BENCHA04.SAS By Keith Rathbun";
TITLE3 "Program Inputs: Benchmark Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: BENCHA04.SD2 - Combined Benchmark Scores Database in WEB layout";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES TIMEPD BENEFIT BENTYPE MAJGRP REGION REGCAT /*MJS 07/18/03 Added TIMEPD*/
      REGION*REGCAT
      /MISSING LIST;
RUN;

```

H.12.A - ..\ReportCards\MPR_Adult2004\PRVCOMP.SAS - Calculate Preventive Care Composite Scores - Annual.

```

*****
* Project: DoD Reporting and Analysis 8860-400
* Program: PRVCOMP.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)
* 01/29/03 By Chris Rankin: Added &YR to output variable names
* for the Trend program
* 02/04/04 By Eric Schone: Updated for 2003 Annual Report. Changed
* HP_FLU to HP_CHOL. Added NORMDATA data step and IN2000 libname.
* 02/05/04 By Chris Rankin: CACSMPL taken from Group8 dataset
* 02/2005 By Regina Gramss: Updated for 2004 Annual Report. Changed
* codes to use XSERVREG region/service affiliation fields.
* Purpose: Calculate MPR Preventive Care Composites
* Input: \\DOD\2002\DATA\AFINAL\HCS02A_1.SD2
* Output: RFINAL.SD2
* CFINAL.SD2
* MFINAL.SD2
* SFINAL.SD2
* DFINAL.SD2
* Include
* Files: LOADCAHPQ.INC
* Note: Next program is Loadmprq.sas
*****;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 MLOGIC MPRINT
NOFMTERR COMPRESS=YES;

LIBNAME IN V612 "..\..\..\DATA";
LIBNAME IN2000 V612 "..\..\..\2000\DATA"; /*ES 02/04/04*/
LIBNAME CACLIB V612 "..\CAHPS_Adult2004\Data"; /*CDR 02/05/04 */
LIBNAME OUT V612 ".";
LIBNAME LIBRARY V612 "..\..\..\DATA\FMTLIB";

*LIBNAME IN V612 "F:\2004\DATA";
*LIBNAME IN2000 V612 "F:\2000\DATA"; /*ES 02/04/04*/
*LIBNAME CACLIB V612 "F:\2004\PROGRAMS\REPORTCARDS\CAHPS_Adult2004\Data"; /*CDR 02/05/04 */
*LIBNAME OUT V612 "F:\2004\Programs\ReportCards\MPR_Adult2004";
*LIBNAME LIBRARY V612 "F:\2004\DATA\FMTLIB";

%LET WGT=CWRWT;
%LET DEBUG=Y; /* Set to Y for Debug print of datasets */
%LET INDATA=HCS04a_1; /*ES 02/04/04*/
%LET YRDATA=HCS04; /*ES 02/04/04*/
%LET YR = 04;

/***** The following parameters are used in the Variance *****/
/***** calcuation macro for region and catchment area *****/

%LET GRPNUM=8; /* number of groups */
%LET COMPNUM=8; /* number of variables */
%LET REGNUM=16; /* number of regions */
%LET CATCHNUM=9999; /* number of catchment areas */

%LET CMPNUM1=5; /* number of variables in first composite */ /*ES 02/04/04*/
%LET CMPNUM2=3; /* number of variables in second composite */ /*ES 02/04/04*/

%LET COMPCNT=2; /* number of composites */

**** set up benchmarks for prentive services ;
**** note -- these are the hp 2000 goals ;

%LET GOALVAR1= .90; /* HP Goal for Prenatal Care */
%LET GOALVAR2= .70; /* HP Goal for Mammography */

```

```

%LET GOALVAR3= .90;      /** HP Goal for Papsmeas          **/
%LET GOALVAR4= .95;      /** HP Goal for Blood Pressure Check **/
%LET GOALVAR5= .90;      /** HP Goal for Cholesterol Screening **/
%LET GOALVAR6= .90;      /** access goal                  **/
%LET GOALVAR7= .90;      /** access goal                  **/
%LET GOALVAR8= .98;      /** access goal                  **/

%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";
**%INCLUDE "F:\2004\PROGRAMS\LOADWEB\LOADCAHQ.INC";
/*%INCLUDE "..\..\LOADWEB\CATREP.INC"; RSG 02/2005 - NO LONGER USED, USE CACR IN LIBRARY*/

*****;
* Beneficiary group note
*   Eight groups           Definitions
* _____;
* 1. Prime enrollees      XINS_COV IN (1,2,6) AND H03007>=2
* 2. Enrollees w/mil PCM  XENR_PCM IN (1,2,6) AND H03007>=2
* 3. Enrollees w/civ PCM  XENR_PCM IN (3,7)   AND H03007>=2
* 4. Nonenrollees        XINS_COV IN (3,4,5)
* 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);
  BY MPRID;
RUN;

PROC SORT DATA=IN.&INDATA(KEEP=MPRID XINS_COV HP_CHOL  HP_BP  HP_MAMOG
  HP_PAP HP_PRNTL /*ES 02/04/04*/
  XREGION XTNEXREG XENR_PCM XBNFGRP ENBGSMPL &WGT /*RSG 02/2005 ADDED XTNEXREG, UPDATED VAR
  NAMES*/
  ADJ_CELL H04023 H04020 H04031 H04007 SERVAF)
  OUT= &YRDATA; BY MPRID;
RUN;

/**** note -- output all data to a single dataset for macro */
/**** call*/
/**** MACROS are no longer called for catchment areas */

DATA NORMDATA(KEEP=XREGION cwrWT /*ES 02/04/04*/
  PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
  DENV1-DENV&COMPNUM /*IN_GROUP8*/ XTNEXREG XSERVREG XSERVAFF); /*RSG 02/2005 added
new region fields*/
  /* RSG 02/2005 - TOOK OUT VAR IN_GROUP8*/

  set IN2000.hcs00a_1(KEEP=MPRID XINS_COV HP_CHOL HP_BP
  HP_MAMOG HP_PAP HP_PRNTL /*ES 02/04/04*/
  XREGION XENR_PCM XBNFGRP ENBGSMPL cwrWT
  ADJ_CELL H00021 H00024 H00030 SERVAF); /*CDR 02/05/2004 */ /*RSG 02/2005 added SERVAF*/
/* IF IN_1;
  IF IN_2=1 THEN IN_GROUP8=1;
  ELSE IN_GROUP8=0;
*/
/*IF IN_1 & NOT IN_2 THEN PUT
  "NORM DATA: NO CATCHMENT AREA FOR MPRID=" MPRID;*/

*****
* 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 SERVAF = 'A' THEN XSERVAFF = 1;      *Army;
  ELSE IF SERVAF = 'F' THEN XSERVAFF = 2; *Air Force;

```

```

ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
ELSE XSERVAFF = 4;*Other/unknown;

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

IF XTNEXREG = . THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;

PRVVAR1=HP_PRNTL;           /** prenatal care   **/
PRVVAR2=HP_MAMOG;          /** mammography   **/
PRVVAR3=HP_PAP;           /** papsmear     **/
PRVVAR4=HP_BP;            /** blood pressure **/
PRVVAR5=HP_CHOL;          /** cholesterol   **/ /*ES 02/04/04*/
PRVVAR6=H00021;           /** access var 1   **/ /*ES 02/04/04*/
PRVVAR7=H00024;           /** access var 2   **/ /*ES 02/04/04*/
PRVVAR8=H00030;           /** access var 3   **/ /*ES 02/04/04*/

/**** 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*/

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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 5;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
  ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 9;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
  ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 13;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
  ELSE XSERVREG = 16;
END;
run;
/*

```

```

PROC FREQ DATA=NORMDATA;
  TABLES IN_GROUP8/MISSING LIST;
  TITLE "OVERLAP BETWEEN &INDATA AND GROUP8 DATA";
RUN;
*/
%LET YEAR = 2004;

LIBNAME INQ1 V612 "..\..\..\..\Q1_&YEAR.T\DATA\AFINAL";
LIBNAME INQ2 V612 "..\..\..\..\Q2_&YEAR.T\DATA\AFINAL";
LIBNAME INQ3 V612 "..\..\..\..\Q3_&YEAR.T\DATA\AFINAL";
LIBNAME INQ4 V612 "..\..\..\..\Q4_&YEAR.T\DATA\AFINAL";

/*RSG 02/2005 Use new XCATCH to use as CACSMPL*/
*LIBNAME INQ1 V612 "F:\Q1_&YEAR.T\DATA\AFINAL";
*LIBNAME INQ2 V612 "F:\Q2_&YEAR.T\DATA\AFINAL";
*LIBNAME INQ3 V612 "F:\Q3_&YEAR.T\DATA\AFINAL";
*LIBNAME INQ4 V612 "F:\Q4_&YEAR.T\DATA\AFINAL";

%INCLUDE "..\..\WEIGHTING\XCATCH.INC"; *Create TEMP dataset containing the detailed CACSMPL;
*%INCLUDE "F:\2004\PROGRAMS\WEIGHTING\XCATCH.INC"; *Create TEMP dataset containing the detailed
CACSMPL;

DATA &YRDATA.;
  MERGE TEMP &YRDATA.;
  BY MPRID;
  RENAME XCATCH=CACSMPL;
RUN;

DATA &YRDATA(KEEP=BGROUP MHS CONUS XREGION CACSMPL &WGT TMP_CELL
  PRVVAR1-PRVVAR&COMPNUM. NUM&YR.V1-NUM&YR.V&COMPNUM.
  DEN&YR.V1-DEN&YR.V&COMPNUM IN_GROUP8
  XSERVAFF XTNEXREG XSERVREG); /*RSG 02/2005 Add fields used for Region breakdown*/

  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;

  /*IF IN_1 & NOT IN_2 THEN PUT
  "&YRDATA: No Catchment Area for MPRID=" MPRID; */

*****
* 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
*****;

  CELLP=1;
  LENGTH TMP_CELL 8;
  TMP_CELL=ADJ_CELL; /* make ADJ_CELL a numeric variable */

/* RSG 02/2005 Add codes to define XSERVAFF, XSERVREG*/

  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 XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;

  PRVVAR1=HP_PRNTL; /** prenatal care **/
  PRVVAR2=HP_MAMOG; /** mammography **/
  PRVVAR3=HP_PAP; /** papsmear **/
  PRVVAR4=HP_BP; /** blood pressure **/
  PRVVAR5=HP_CHOL; /** cholesterol **/ /*ES 02/04/04*/
  PRVVAR6=H04020; /** access var 1 **/ /*RSG 02/2005*/
  PRVVAR7=H04023; /** access var 2 **/ /*RSG 02/2005*/
  PRVVAR8=H04031; /** access var 3 **/ /*RSG 02/2005*/

**** 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 &COMPNUM1 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 &COMPNUM1 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 */

/*RSG 02/2005 Add codes to define XSERVREG*/

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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 5;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
  ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 9;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
  ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 13;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
  ELSE XSERVREG = 16;
END;

*****
* Assign indicator of CONUS based on XREGION. CONUS stands for
* Contential United States it but includes both Alaska and Hawaii.
*****;
/* RSG 02/2005 Define Conus by XTNEXREG*/

IF XTNEXREG IN (1,2,3) THEN CONUS=1;
ELSE IF XTNEXREG = 4 THEN CONUS=2;

* Prime enrollees *;

IF (XINS_COV IN (1,2,6) AND H04007>=2) THEN DO; /*ES 02/04/04*/
  BGROUP=1;
  OUTPUT;
END;

* Enrollees with military PCMs *;

IF (XENR_PCM IN (1,2,6) AND H04007>=2) THEN DO; /*ES 02/04/04*/
  BGROUP=2;
  OUTPUT;
END;

```

```

* Enrollees with civilian PCMs *;

IF (XENR_PCM IN (3,7) AND H04007>=2) THEN DO; /*ES 02/04/04*/
  BGROUP=3;
  OUTPUT;
END;

* Nonenrollees *;

IF XINS_COV IN (3,4,5) THEN DO;
  BGROUP=4;
  OUTPUT;
END;

* Active duty *;

IF XBNFGRP = 1 THEN DO;
  BGROUP=5;
  OUTPUT;
END;

* Active duty dependents *;

IF XBNFGRP = 2 THEN DO;
  BGROUP=6;
  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*CONUS*XSERVREG*CACSMPL/MISSING LIST
  OUT=OBSCNT(DROP=PERCENT);
RUN;
proc sort data=obsCnt; by bgroup mhs conus cacsmpl count;
data obsCnt(rename=(tcount=count));/* es 3-16-05, to keep only one servreg cacsmpl combination*/
set obsCnt;
by bgroup mhs conus cacsmpl ;
if first.bgroup|first.mhs|first.conus|first.cacsmpl then tcount=0;
tcount+count;
if last.bgroup|last.mhs|last.conus|last.cacsmpl;
drop count;
run;
proc sort; by bgroup mhs conus xservreg cacsmpl;

PROC SORT DATA=&YRDATA; BY BGROUP MHS CONUS XSERVREG CACSMPL;
RUN;

DATA HCSDB /*FAILED*/;

```

```

MERGE &YRDATA(IN=IN_ALL) OBSCNT(IN=IN_OBS);
BY BGROUP MHS CONUS XSERVREG 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        ****
**** (REGION, CACSMPL, MHS)                        ****
**** Note: 7/10/2000 use CONUS for MHS              ****
**** Note: there are 8 variables and 8 groups       ****
*****;

%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)=CONUS %THEN %LET PREF=C;          /** dataset prefix for catchment
area data **/

%ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
    %LET ENDNUM=4;          /** RSG 01/2005 Change level of conus to 4 **/
    %LET PREF=M;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=CACSMPL %THEN %DO;
    %LET ENDNUM=&CATCHNUM;
    %LET PREF=D;          /** dataset prefix for catchment area data **/
%END;

%DO I=1 %TO &GRPNUM;          /** 8 groups **/

    %DO J=1 %TO &COMPNUM;          /** 8 variables **/

        DATA INDATA&I.&J(KEEP=&WGT MHS CONUS 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 > 4 OR XSERVAFF = . THEN DELETE;          /**RSG 01/2005 Delete Conus greater
than 4 which are not conus */
            %END;
            %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
                IF CONUS NE 1 THEN DELETE;
            %END;
            %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;

```

```

        IF XTNEXPREG NOTIN (1,2,3,4) THEN DELETE;
    %END;
RUN;

*** Calculate values for regions, catchment areas ****;

    %IF %UPCASE(&TABLEVAR) NE CONUS %THEN %DO;

        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;

    %END;
    %ELSE %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;

**** No tables, levels, or subgroups needed ****;

        PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
            WEIGHT &WGT;
            SETENV DECWIDTH=4;
            NEST TMP_CELL / MISSUNIT;
            VAR NUM&YR.V&J;
            OUTPUT SEMEAN/ TABLECELL=DEFAULT REPLACE
            FILENAME=&PREF.GRP&I.V&J;
        RUN;

    %END;

***** 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;
        %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
            CONUS=1;
        %END;
    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 (CONUS);
%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)=CONUS %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 <= 4;          /** RSG 0/2005 Change xservreg values to keep
to be between 1-4 **/
            %END;
            %IF %UPCASE(&BYVAR)=CONUS %THEN %DO; /* RSG 02/2005 CONUS value must be 1*/
                WHERE BGROUP=&I AND CONUS = 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;

*** 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(CONUS);
%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)=CONUS %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 cwrwt;
    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 <= 4; /** RSG 01/2005 Change conus values to keep to be between
1-4 **/
    %END;
    %ELSE %IF &PREF=C %THEN %DO;
      WHERE CONUS = 1;
    %END;

    /*** set up group variable **/

    RENAME BGROUP=GROUP;;

    /*** set up proportions, and composites **/

    ARRAY PROPRT 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(PROPRT);
      PROPRT(J) = NUMER(J)/DENOM(J);
    END;
    DROP J;

    /*** composites **/
  /*
  %DO Q=1 %TO &COMPNT;
    %IF &Q=1 %THEN %DO;
      CP&YR.NUM&Q.=SUM(OF NUM&YR.V1-NUM&YR.V&CMPNUM1);

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        CP&YR.DEN&Q.=SUM(OF DEN&YR.V1-DEN&YR.V&COMPNUM1);
        CP&YR.OBS&Q.=SUM(OF NOBS&YR.V1-NOBS&YR.V&COMPNUM1);
    %END;
    %ELSE %DO;
        CP&YR.NUM&Q.=SUM(OF NUM&YR.V&START-NUM&YR.V&COMPNUM);
        CP&YR.DEN&Q.=SUM(OF DEN&YR.V&START-DEN&YR.V&COMPNUM);
        CP&YR.OBS&Q.=SUM(OF NOBS&YR.V&START-NOBS&YR.V&COMPNUM);
    %END;
    COMP&YR.&Q.=CP&YR.NUM&Q./CP&YR.DEN&Q.;
%END;
*/
** 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;
GOALVAR7=&GOALVAR7;
GOALVAR8=&GOALVAR8;

** 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&compnum1);
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&COMPNUM1);
CP&YR.BMK2=SUM(OF WTD&YR.V&START-WTD&YR.V&COMPNUM);
comp&yr.1=sum(of cmp&yr.v1-cmp&yr.v&compnum1);
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(CONUS);
%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);

```

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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                    *****;
*** Region, Catchment, MHS                      *****;
*****;
PROC FORMAT; /*RSG 02/2005 - hardcoded in prog to have caps vs format in loadcahq.inc*/
  VALUE REGIONF
    0 = "CONUS 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)=CONUS %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&COMPNT CP&YR.1SE CP&YR.2SE
  CP&YR.BMK1-CP&YR.BMK&COMPNT
  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&COMPNT
  DEN&YR.V1-DEN&YR.V&COMPNUM CP&YR.DEN1-CP&YR.DEN&COMPNT);

/** 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 $25. REGCAT $42.;

%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";

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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(XSERVREG, SERVREGF.);
%END;
%IF &PREF=S %THEN %DO;
    REGCAT=PUT(XTNEXREG,REGIONF.);
    REGION=PUT(XTNEXREG,REGIONF.);
%END;
%else %IF &PREF=C %THEN %DO;
    REGION="CONUS MHS";
    REGCAT="CONUS MHS";
%END;
%ELSE %IF &PREF=R %THEN %DO;
    REGION=PUT(XSERVREG, SERVREGF.);
    REGCAT=PUT(XSERVREG, SERVREGF.);
%END;
%ELSE %IF &PREF=M %THEN %DO;
    REGION=PUT(XSERVAFF,XSERVAFF.);
    REGCAT=PUT(XSERVAFF,XSERVAFF.);
%END;
**/

/**** setup t statistics, degrees 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 SERRSQ{&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;
    SERRSQ{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 &COMPNUM;
%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 nob&yr.v1-nob&yr.v&cmpnum1);
cp&yr.den&p=sum(of den&yr.v1-den&yr.v&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 significant **/

/**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; */

RUN;

%MEND GETSIG;

/** RSG 02/2005 - Any errors relating to uninitialized 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(CONUS);
%GETSIG(XTNEXREG);
%GETSIG(XSERVREG);
%GETSIG(XSERVAFF);
%GETSIG(CACSMPL);

ENDSAS;
```

H.12.B - ..\ReportCards\MPR_Adult2004\LOADMPR.SAS - Convert the MPR Scores Database into the WEB layout - Annual.

```
*****;
* Project: DoD Reporting and Analysis 8687-100
* 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.
*
* Purpose: Calculate MPR Preventive Care Composites
*
* Input: RFINAL.SD2
*        CFINAL.SD2
*        MFINAL.SD2
*        DFINAL.SD2
*        SFINAL.SD2
*        SMOKE.SD2
* Output: loadmpr.sd2
*****;
```

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2;

```
LIBNAME INLIB V612 ".";
LIBNAME OUT V612 ".";
LIBNAME LIBRARY V612 "..\..\data\fmtlib"; /*MJS 02/05/04*/
```

```
*LIBNAME INLIB V612 "F:\2004\Programs\ReportCards\MPR_Adult2004";
*LIBNAME OUT V612 "F:\2004\Programs\ReportCards\MPR_Adult2004";
*LIBNAME LIBRARY V612 "F:\2004\data\fmtlib"; /*MJS 02/05/04*/
```

```
%LET COMPNUM=8; /** number of questions in both composites **/
%LET CMPNUM1=5; /** number of questions in first composite **/ /*MJS 02/05/04*/
```

```
%LET YR=04; /*MJS 02/05/04*/
%LET YEAR=2004;
%LET EYR=02; /*RSG 02/2005*/
```

```
%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC"; /*MJS 02/05/04*/
*%INCLUDE "F:\2004\PROGRAMS\LOADWEB\LOADCAHQ.INC"; /*MJS 02/05/04*/
```

```
*****;
*** Note -- take out access to care questions and composite ***;
*****;
```

```
DATA BENCHMKS(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SIG);
  FORMAT MAJGRP $30. REGION $25. REGCAT $42.
  BENEFIT $34. BENTYPE $50. TIMEPD $5.;
```

SET inlib.CFINAL;

/***** Benchmarks *****/

```
ARRAY BENCHMK{*} GOALVAR1-GOALVAR&CMPNUM1 CP&yr.BMK1;
DO I = 1 TO 6; /*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"; /*MJS 02/05/04*/
ELSE IF I = 6 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 = 0 TO 16; DROP REG;
MAJGRP = "Benchmark";
REGION = PUT(REG,SERVREGF.);
REGCAT = PUT(REG,SERVREGF.);
OUTPUT;

END;
DO SERV = 1 TO 4; DROP SERV;
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 $25. REGCAT $42.
BENEFIT $34. BENTYPE $50. TIMEPD $5.;
SET INLIB.MFINAL
INLIB.RFINAL
DFINAL
INLIB.SFINAL
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 6; /*MJS 02/05/04*/
  SCORE = SCORES{I};
  SEMEAN = SEMEANS{I};
  SIG = SIGNIF{I};
  N_OBS = NOBS{I};
  N_WGT = NWGT{I};
  if i<6 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"; /*MJS 02/05/04*/
  ELSE IF I = 6 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;
end;
*/

DATA TREND1 (KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE semean TIMEPD SCORE SIG N_OBS N_WGT);
  FORMAT MAJGRP $30. REGION $25. REGCAT $42.
    BENEFIT $34. BENTYPE $50. TIMEPD $5.;

  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=NWGT1;
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. NWGT1;
DO I = 1 TO 6; /*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"; /*MJS 02/05/04*/
ELSE IF I = 6 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 $25. REGCAT $42.
BENEFIT $34. BENTYPE $50. TIMEPD $5.;

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 6; /*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"; /*MJS 02/05/04*/
ELSE IF I = 6 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;
```

H.13 - ..\ReportCards\MPR_Adult2004\TRENDMPR.SAS - Calculate Trend and Perform Significance tests on MPR Scores - Annual.

```

* Project: DoD Reporting and Analysis 8687-100
* 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.
*
* Purpose: Calculate trends from 2001 to 2003
* Output:  RTREND.SD2
*          MTREND.SD2
*          CTREND.SD2
*          STREND.SD2
*          DTREND.SD2
*
* Input:   RFINAL.SD2
*          CFINAL.SD2
*          MFINAL.SD2
*          SFINAL.SD2
*          DFINAL.SD2
* Note:    Next program is loadmpr.sas
*****;

```

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 MLOGIC MPRINT;

%LET YR = 04;
%LET EYR = 02;

```

LIBNAME IN&YR. V612 ". "; /*MJS 02/05/04*/
LIBNAME IN&EYR. V612 "..\..\2002\ReportCards\MPR_Adult20&EYR."; /*MJS 02/10/04*/
LIBNAME OUT V612 ". ";
LIBNAME LIBRARY "..\..\data\fmtlib";

*LIBNAME IN&YR. V612 "F:\2004\Programs\ReportCards\MPR_Adult2004"; /*MJS
02/05/04*/
*LIBNAME IN&EYR. V612 "F:\2004\Programs\2002\ReportCards\MPR_Adult2002"; /*MJS 02/10/04*/
*LIBNAME OUT V612 "F:\2004\Programs\ReportCards\MPR_Adult2004";
*LIBNAME LIBRARY "F:\2004\data\fmtlib";

```

%LET COMPNUM=8; /* number of variables */

**** 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 H99004=4
* 2. Enrollees w/mil PCM  XENR_PCM IN (2,6) AND H99004=4
* 3. Enrollees w/civ PCM  XENR_PCM=3 AND H99004=4
* 4. Nonenrollees        XINSCOV IN (3,4,5)
* 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; /*MJS 02/05/04*/
BY MAJGRP REGION REGCAT;
RUN;

```

```

PROC SORT DATA=IN&YR..&INDATA; /*MJS 02/05/04*/
  BY MAJGRP REGION REGCAT;
RUN;

DATA OUT.&OUTDATA;
  MERGE IN&YR..&INDATA(IN=IN_&YR.) IN&YR..&INDATA(IN=IN_&EYR.); /*MJS 02/05/04*/
  BY MAJGRP REGION REGCAT;
  IF IN_&YR. & IN_&EYR.;
  /** calculate trends in the composite benchmarks ***/

  ARRAY BMK&YR.* CP&YR.BMK1 CP&YR.BMK2; /*MJS 02/10/04*/
  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}); /*MJS 02/10/04*/
    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; /*MJS 02/10/04*/
  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; /*MJS 02/10/04*/
  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; /*MJS 02/10/04*/
  ARRAY DEN&YR.* DEN&YR.V1-DEN&YR.V&COMPNUM CP&YR.DEN1 CP&YR.DEN2;
  ARRAY NWGT* NWGT1-NWGT&COMPNUM NWGTTC1 NWGTTC2;

  /** setup t statistics, degrees of freedom ***/

  DO I=1 TO 10;
    IF SCORE&YR.{I} GE 0 AND SCORE&YR.{I} GE 0 THEN DO; /*MJS 02/10/04*/
      IF SCORE&YR.{I} > 0 THEN TREND{I}=100*(SCORE&YR.{I}-SCORE&EYR.{I}); /*changed
2/21/20&EYR.*/
      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}); /*MJS 02/10/04*/
        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}; /*MJS 02/10/04*/
          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;
    END;
  END;
  DROP I;

RUN;

%MEND TRENDS;

```

```
%TRENDS(MFINAL, MTREND);  
%TRENDS(RFINAL, RTREND);  
%TRENDS(CFINAL, CTREND);  
%TRENDS(SFINAL, STREND);  
%TRENDS(DFINAL, DTREND);
```

H.14 - ..\ReportCards\MPR_Adult2004\SMOKING.SAS - Calculate Smoking Rate and Smoking Cessation - Annual.

```

*****
*
* Project:    DoD Reporting and Analysis 6077-410
* Program:    SMOKING.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:
*
* Input:      2004 Survey data:
*             2004\Data\HCS04A_1.SD2
*             2000\DATA\HCS00A_1.SD2
*
* Output:     SMOKE.SD2
*
*****;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR
        MPRINT MLOGIC;

LIBNAME  INDAT v612 "..\..\Data";
LIBNAME  INNORM v612 "..\..\Data\2000";
LIBNAME  OUT   v612 ".";
LIBNAME  LIBRARY '..\..\Data\fmtlib';

*LIBNAME  INDAT v612 "F:\2004\Data";
*LIBNAME  INNORM v612 "F:\2000\Data";
*LIBNAME  OUT   v612 "F:\2004\Programs\ReportCards\MPR_Adult2004";
*LIBNAME  LIBRARY 'F:\2004\Data\fmtlib';

%LET DSN=HCS04a_1;           /*RSG 02/2005 Annual data used for smoking information*/
%LET DSN_NORM=HCS00A_1;     /*RSG 01/2005 2000 data to use to calculate weights*/
%LET REGNUM = 16;          /*RSG 01/2005 Number of Regions (with serv affiliation)*/
%LET CONNUM = 4;          /*RSG 01/2005 Number of serv affiliation levels*/
%LET CATCHNUM=9999;       /*RSG 02/2005 number of catchment areas **/
%LET CURRENT = 2004;

%INCLUDE "..\..\LoadWeb\LOADCAHQ.INC";
*%INCLUDE "F:\2004\PROGRAMS\LoadWeb\LOADCAHQ.INC";

PROC FORMAT;
VALUE AGEF
LOW - 17 = 1
 18 - 24 = 2
 25 - 34 = 3
 35 - 44 = 4
 45 - 54 = 5
 55 - 64 = 6
 65 - 74 = 7
 75 - HIGH = 8;

DATA NORMDATA (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF
                TOTCON GROUP XSEXa WRWT);
SET INNORM.&DSN_NORM.;
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

TMP_CELL=ADJ_CELL;
AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);

IF SERVAFF = 'A' THEN XSERVAFF = 1;      *Army;
ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2; *Air Force;

```

```

ELSE IF SERVAF = 'N' THEN XSERVAFF = 3;   *Navy;
ELSE XSERVAFF = 4;*Other/unknown;

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

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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 5;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
  ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 9;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
  ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 13;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
  ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
  ELSE XSERVREG = 16;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG = 4 THEN TOTCON=2;

IF XTNEXREG = . THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;

* prime enrollees;
IF XINS_COV IN (1,2,6) AND H00002>=2 THEN DO;
  GROUP=1;
  OUTPUT;
END;

* enrollees with military pcms;
IF XENR_PCM IN (1,2,6) AND H00002>=2 THEN DO;
  GROUP=2;
  OUTPUT;
END;

* enrollees with civilian pcms;
IF XENR_PCM = 3 AND H00002>=2 THEN DO;
  GROUP=3;
  OUTPUT;
END;

* nonenrollees;
IF XINS_COV IN (3,4,5) THEN DO;
  GROUP=4;
  OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 THEN DO;
  GROUP=5;
  OUTPUT;
END;

```

```

* active duty dependents;
IF XBNFGRP = 2 THEN DO;
  GROUP=6;
  OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
  GROUP=7;
  OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;

/**RSG 02/2005 - Bring in new CACSMPL**/
%LET YEAR = 2004;
%LET YR=04;

LIBNAME INQ1 V612 "..\..\..\..\Q1_&YEAR.T\DATA\AFINAL";
LIBNAME INQ2 V612 "..\..\..\..\Q2_&YEAR.T\DATA\AFINAL";
LIBNAME INQ3 V612 "..\..\..\..\Q3_&YEAR.T\DATA\AFINAL";
LIBNAME INQ4 V612 "..\..\..\..\Q4_&YEAR.\DATA\AFINAL";

/*
LIBNAME INQ1 V612 "F:\Q1_&YEAR.T\DATA\AFINAL";
LIBNAME INQ2 V612 "F:\Q2_&YEAR.T\DATA\AFINAL";
LIBNAME INQ3 V612 "F:\Q3_&YEAR.T\DATA\AFINAL";
LIBNAME INQ4 V612 "F:\Q4_&YEAR.\DATA\AFINAL";
*/

%INCLUDE "..\..\WEIGHTING\XCATCH.INC"; *Create TEMP dataset containing the detailed CACSMPL;
*%INCLUDE "F:\2004\PROGRAMS\WEIGHTING\XCATCH.INC"; *Create TEMP dataset containing the detailed
CACSMPL;

PROC SORT DATA=INDAT.&DSN. (DROP=CACSMPL) OUT=&DSN.;
BY MPRID;
RUN;

DATA &DSN.;
MERGE TEMP &DSN.;
BY MPRID;
RENAME XCATCH=CACSMPL;
RUN;

DATA SMOKE (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF TOTCON GROUP
SM_RATE SM_CESS SM_RTDN SM_CSDN XSEXA WRWT CACSMPL);
SET &DSN.;

LENGTH AGE_N AGE_GRP TMP_CELL 8.;

TMP_CELL=ADJ_CELL;
AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);

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 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 XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
  IF XSERVAFF = 1 THEN XSERVREG = 5;
  ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;

```

```

ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
IF XSERVAFF = 1 THEN XSERVREG = 9;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO;
IF XSERVAFF = 1 THEN XSERVREG = 13;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
ELSE XSERVREG = 16;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG=4 THEN TOTCON=2;

IF XTNEXREG = . THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;

IF HP_SMOKH IN (1,2) THEN DO;
SM_RATE = 0;
IF HP_SMOKH = 2 THEN SM_RATE=1;
SM_RTDN=1;
END;

IF HP_cess >0 THEN DO;
SM_CESS = 0;
IF HP_CESS = 1 THEN SM_CESS=1;
SM_CSDN=1;
END;

* prime enrollees;
IF XINS_COV IN (1,2,6) AND H04007>=2 THEN DO;
GROUP=1;
OUTPUT;
END;

* enrollees with military pcms;
IF XENR_PCM IN (1,2,6) AND H04007>=2 THEN DO;
GROUP=2;
OUTPUT;
END;

* enrollees with civilian pcms;
IF XENR_PCM = 3 AND H04007>=2 THEN DO;
GROUP=3;
OUTPUT;
END;

* nonenrollees;
IF XINS_COV IN (3,4,5) THEN DO;
GROUP=4;
OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 THEN DO;
GROUP=5;
OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 THEN DO;
GROUP=6;
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=&CONNUM;
  %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=WRWT XSERVAFF XSERVREG AGE_GRP XSEXA
    &SMOKEVAR. &DEN. TMP_CELL XTNEXREG CACSMPL);  /**RSG 02/2005 add CACSMPL**/
  SET SMOKE;
  WHERE XSERVREG > 0 AND GROUP=&I. AND &DEN. >= 0;
  %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
    IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
  %END;
  %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;

  %IF %UPCASE(&SMOKE) NE CS %THEN %DO;

    DATA NORMDAT&I.(KEEP=WRWT XSERVAFF XSERVREG AGE_GRP XSEXA
      TMP_CELL XTNEXREG);
    SET NORMDATA;
    WHERE XSERVREG > 0 AND GROUP=&I.;
    %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
      IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
    %END;
    %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;

    %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;

```

```

PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
WEIGHT WRWT;
SETENV DECWIDTH=4;
NEST TMP_CELL / missunit;
VAR SM_RATE;
TABLES AGE_GRP*XSEXA*&TABLEVAR.;
SUBGROUP AGE_GRP XSEXA &TABLEVAR.;
LEVELS 8 2 &ENDNUM.;
OUTPUT SEMEAN MEAN wsum nsum
/ TABLECELL=DEFAULT
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 WRWT;
SETENV DECWIDTH=4;
NEST TMP_CELL / missunit;
VAR SM_RATE;
TABLES AGE_GRP*XSEXA;
SUBGROUP AGE_GRP XSEXA;
LEVELS 8 2;
OUTPUT SEMEAN MEAN wsum nsum
/ TABLECELL=DEFAULT
FILENAME=&PREF.GRP&I.&SMOKE.;
RUN;

%END;

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 2000 DATA*/
proc summary data=normdat&i. nway;
var wrwt;
class age_grp xsex;
output out=norm_&i. sum=normwt;

proc sort data=&pref.ser_&i.&smoke.;
by age_grp xsex;

data &pref.ser_&i.&smoke.;
merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
by age_grp xsex;
if gin;
wsum=wsum/normwt;
nsum=nsum/normwt;
sesq=normwt*semean**2;
run;

proc summary data=&pref.ser_&i.&smoke. nway;
var mean sesq semean 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._RATE;
    SET &PREF.SERT&I.&SMOKE.;
    RUN;
%END;
%ELSE %DO;

    DATA &PREF._RATE;
        SET &PREF._RATE &PREF.SERT&I.&SMOKE.;
    RUN;

    PROC SORT DATA=&PREF._RATE;
    BY GROUP;
    RUN;

%END;

%END;

%ELSE %IF %UPCASE(&SMOKE) = CS %THEN %DO;

    %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
    PROC DESCRIPT DATA=INDAT&I DESIGN=STRWR NOPRINT;
        WEIGHT WRWT;
        SETENV DECWIDTH=4;
        NEST TMP_CELL / MISSUNIT;
        VAR &SMOKEVAR;
        TABLES &TABLEVAR;
        SUBGROUP &TABLEVAR;
        LEVELS &ENDNUM;
        OUTPUT SEMEAN MEAN wsum nsum
            / TABLECELL=DEFAULT
            FILENAME=&PREF.GRP&I.&SMOKE.;
    RUN;

%END;

    %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;

    PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
        WEIGHT WRWT;
        SETENV DECWIDTH=4;
        NEST TMP_CELL / missunit;
        VAR &SMOKEVAR.;
        OUTPUT SEMEAN MEAN wsum nsum
            / TABLECELL=DEFAULT
            FILENAME=&PREF.GRP&I.&SMOKE.;
    RUN;

%END;

    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 SEMEAN MEAN wsum nsum;
    %END;
    %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
        TOTCON=1;
        KEEP TOTCON GROUP SEMEAN MEAN wsum nsum;
    %END;
    RUN;

%IF &I. = 1 %THEN %DO;

    DATA &PREF._CESS;
    SET &PREF.SER_&I.&SMOKE.;
    RUN;
%END;
%ELSE %DO;

```

```

DATA &PREF._CESS;
  SET &PREF._CESS &PREF.SER_&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(XSERVREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XTNEXREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XTNEXREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(TOTCON,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(TOTCON,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(CACSMPL,RT,SM_RATE,SM_RTDN); /*RSG 02/2005 Add CACSMPL macro call**/
%A_SUDAAN(CACSMPL,CS,SM_CESS,SM_CSDN);

%MACRO ADDIT(PREF, TYPE);

DATA &PREF._&TYPE;
SET &PREF._&TYPE;
LENGTH BENEFIT $34. BENTYPE $50.;

BENEFIT="Smoking Cessation";
%IF &TYPE=RATE %THEN %DO;
  BENTYPE="Non-Smoking Rate";
%END;
%IF &TYPE=CESS %THEN %DO;
  BENTYPE="Counselled To Quit";
%END;

RUN;

%MEND;

%ADDIT(C,RATE);
%ADDIT(C,CESS);
%ADDIT(M,RATE);
%ADDIT(M,CESS);
%ADDIT(R,RATE);
%ADDIT(R,CESS);
%ADDIT(S,RATE);
%ADDIT(S,CESS);
%ADDIT(D,RATE); /*RSG 02/2005 Add CACSMPL macro call**/
%ADDIT(D,CESS);

/*RSG 02/2005 Create Region for CACSMPL data*/

*libname in v612 'F:\2004\Programs\CAHPS_Adult2004\Data';
libname ingp v612 '..\CAHPS_Adult2004\Data';

proc freq data=ingp.group8 noprint;
tables cacsmpl*xservreg / list out=cacfmt;
run;

proc sort data=cacfmt;
by cacsmpl descending count;
data cacformat;
set cacfmt;
by cacsmpl;
if first.cacsmpl;
drop count percent;
run;

```

```

%MACRO MAKEDATA(PREF, TABLEVAR);

DATA &PREF._SMOKE;
SET &PREF._RATE
    &PREF._CESS
;

LENGTH MAJGRP $30. REGION REGCAT $42.;

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';
%END;

%IF &TABLEVAR = XSERVREG %THEN %DO;
    REGION = PUT(XSERVREG,SERVREGF.);
%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 = "CONUS 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 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(XSERVREG,SERVREGF.);
    DROP GROUP &TABLEVAR XSERVREG;
    RUN;
%END;

%MEND MAKEDATA;

%MAKEDATA(M,XSERVAFF);
%MAKEDATA(C,TOTCON);

```

```

%MAKEDATA(R,XSERVREG);
%MAKEDATA(S,XTNEXREG);
%MAKEDATA(D,CACSMPL);          /*RSG 02/2005 Add CACSMPL macro call**/

DATA SMOKE;
SET M_SMOKE R_SMOKE S_SMOKE C_SMOKE D_SMOKE; /*RSG 02/2005 Add CACSMPL DATA**/
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;

DATA COMP (DROP=L_MEAN L_SE RENAME=(S_MEAN=SCORE S_SE=SEMEAN l_sum=n_wgt l_obs=n_obs));
SET SMOKE;
BY MAJGRP REGION REGCAT;

L_MEAN=LAG(SCORE);
L_SE =LAG(SEMEAN);
l_sum=lag(n_wgt);
l_obs=lag(n_obs);
IF LAST.REGCAT THEN DO;
  S_MEAN=SUM(L_MEAN,SCORE)/2;
  S_SE=SUM(L_SE,SEMEAN)/2;
  BENTYPE="Composite";
  DROP SCORE SEMEAN n_wgt n_obs;
  OUTPUT;
END;
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=0.75;
  SEMEAN=. ;
  REGION="Benchmark";
  REGCAT="Benchmark";
  DROP N_WGT N_OBS;
  OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
  SCORE=0.88;
  SEMEAN=. ;
  REGION="Benchmark";
  REGCAT="Benchmark";
  DROP N_WGT N_OBS;
  OUTPUT;
  SCORE=(0.75 + 0.88)/2;
  SEMEAN=. ;
  REGION="Benchmark";
  REGCAT="Benchmark";
  BENTYPE="Composite";
  DROP N_WGT;
  OUTPUT;
END;
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=0.75;
  SEMEAN=. ;
  MAJGRP="Benchmark";
  DROP N_WGT N_OBS;
  OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
  SCORE=0.88;
  SEMEAN=. ;
  MAJGRP="Benchmark";
  DROP N_WGT;
  OUTPUT;
  SCORE=(0.75+0.88)/2;
  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-0.88)/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 > 0.88 THEN SIG = 1;
    ELSE IF SCORE < 0.88 THEN SIG = -1;
  END;
END;
IF BENTYPE='Counselled To Quit' THEN DO;
  IF SEMEAN > 0 THEN TSTAT=(SCORE-0.75)/SEMEAN;
  ELSE TSTAT=. ;
  IF N_OBS > 0 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 > 0.75 THEN SIG = 1;
    ELSE IF SCORE < 0.75 THEN SIG = -1;
  END;
END;
IF BENTYPE='Composite' THEN DO;
  IF SEMEAN > 0 THEN TSTAT=(SCORE-0.815)/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 > 0.815 THEN SIG = 1;
    ELSE IF SCORE < 0.815 THEN SIG = -1;
  END;
END;
DROP TSTAT PVAL;
RUN;

DATA SMOKE_ALL;
SET SIG1 BENCH BENCH2;
LENGTH TIMEPD $5.;
TIMEPD="&CURRENT.";
RUN;

PROC SORT DATA=SMOKE_ALL OUT=OUT.SMOKE;
BY MAJGRP REGION REGCAT BENTYPE;
RUN;

```


H.15.A - ..\LOADWEB\FAKE.SAS - Generate the WEB layout/template file - Annual.

```

/*****/
/* PROJECT: 8860 - 2002 Annual Survey */
/* 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. */
/* */
/* */
/*****/

LIBNAME OUT V612 '.';
LIBNAME IN V612 '..\ReportCards\CAHPS_Adult2004\Data'; /** Changed to group8 location for
revised cacsmpl KRR 02-05-2004 ***/
LIBNAME LIBRARY V612 '..\..\DATA\FMTLIB';

*LIBNAME OUT V612 'F:\2004\Programs\Loadweb';
*LIBNAME IN V612 'F:\2004\Programs\ReportCards\CAHPS_Adult2004\Data'; /** Changed to group8
location for revised cacsmpl KRR 02-05-2004 ***/
*LIBNAME LIBRARY V612 'F:\2004\DATA\FMTLIB';

OPTIONS COMPRESS=YES NOFMterr;

%include "loadcahq.inc";
*%include "F:\2004\Programs\Loadweb\loadcahq.inc";

/*RSG 02/2005 added to make fake.sd2 with macros*/
%LET NUMQTR = 5; /*RSG 02/2005 - Numbering based off quarterly program*/
%LET PERIOD2 = 2002;
%LET PERIOD3 = 2003;
%LET PERIOD4 = 2004;
%LET PERIOD5 = Trend;

DATA TEMP;
SET IN.GROUP8(KEEP=XSERVREG XSERVAFF XTNEXREG CONUS 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 xservreg*cacsmpl/ noprint out=temp2;
run;
proc sort; by cacsmpl descending count;
data temp2;
set temp2; by cacsmpl;
if first.cacsmpl;
proc sort; by xservreg cacsmpl;
data temp3;
length cafmt $42;
set temp2 end=last; by xservreg;
caf=0;
where cacsmpl ne 9999;
if first.xservreg then do;
cafmt=put(xservreg,servregf.);
output;
end;

```

```

cafmt=put(cacsmpl,cacr.);
caf=1;
if count>1 & cafmt ne 'INV' then output;
if last then do;
  xservreg=0;
  caf=0;
  cafmt='Benchmark';
  output;
/* RSG 02/2005 Added in codes for service affiliation, xtsexreg and conus categories*/
  xservreg=17;
  caf=1;
  cafmt = 'ARMY';
  output;
  xservreg=18;
  cafmt = 'AIR FORCE';
  output;
  xservreg=19;
  cafmt = 'NAVY';
  output;
  xservreg=20;
  cafmt = 'OTHER';
  output;
  xservreg=21;
  cafmt = 'NORTH';
  output;
  xservreg=22;
  cafmt = 'SOUTH';
  output;
  xservreg=23;
  cafmt = 'WEST';
  output;
  xservreg=24;
  cafmt = 'OVERSEAS';
  output;
  xservreg=25;
  cafmt = 'CONUS MHS';
  output;
end;
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;

PROC FORMAT;
VALUE BEN
0 = 'Total' /** Added 01-09-2002 by KRR ***/
1 = 'Getting Needed Care'
2 = 'Getting Care Quickly'
3 = 'Courteous and Helpful Office Staff'
4 = 'How Well Doctors Communicate'
5 = 'Customer Service'
6 = 'Claims Processing'
7 = 'Health Plan'
8 = 'Health Care'
9 = 'Primary Care Manager'
10 = 'Specialty Care'
11 = 'Preventive Care'
12 = 'Smoking Cessation';

VALUE MAJOR
1 = "Prime Enrollees"
2 = "Enrollees with Military PCM"
3 = "Enrollees with Civilian PCM"
/**4 = "Non-enrolled Beneficiaries" CHANGED MAB 1-25-2002**/
4 = "Standard/Extra Users"
5 = "Active Duty"

```

```

6 = "Active Duty Dependents      "
7 = "Retirees and Dependents    "
/**8 = "All Beneficiaries        "   CHANGED MAB 1-25-2002**/
8 = "All Users                   "   ;

RUN;

%MACRO FAKE;
DATA FAKE;

KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD I K;   ***MJS 06/18/03 Added TIMEPD;

LENGTH MAJGRP $ 30
REGION $ 25      /*RSG 01/2005 lengthen format to fit service affiliation*/
REGCAT $ 42
BENTYPE $ 50
TIMEPD $ 5;     ***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 REGCAT IN ('ARMY','NAVY','AIR FORCE','OTHER','NORTH','SOUTH',
              'WEST','OVERSEAS','CONUS MHS','North Army','North Navy',
              'North Air Force','North Other','South Army','South Navy',
              'South Air Force','South Other','West Army','West Navy',
              'West Air Force','West Other','Overseas Army','Overseas Navy',
              'Overseas Air Force','Overseas Other') THEN REGION=REGCAT;

DO K=1 TO 12;       ** 12 Benefits **;  /*** 12-13 MAB ****/

BENEFIT=PUT(K,BEN.);

IF K=1 THEN DO;
DO L=1 TO 5;          ***MJS 06/18/03 Added L loop and BENTYPE PUT;
BENTYPE=PUT(L,GETNCARE.);  ***that replaced BENTYPE hard assignment;
%DO Q = 2 %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 5;          ***MJS 06/18/03 Added L loop and BENTYPE PUT;
BENTYPE=PUT(L,GETCAREQ.);  ***that replaced BENTYPE hard assignment;
%DO Q = 2 %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 3;          ***MJS 06/18/03 Added L loop and BENTYPE PUT;
BENTYPE=PUT(L,CRTSHELP.);  ***that replaced BENTYPE hard assignment;
%DO Q = 2 %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 5;          ***MJS 06/18/03 Added L loop and BENTYPE PUT;
BENTYPE=PUT(L,HOWWELL.);  ***that replaced BENTYPE hard assignment;
%DO Q = 2 %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;
ELSE IF K=5 THEN DO;
    DO L=1 TO 4;                ***MJS 06/18/03 Added L loop and BENTYPE PUT;
        BENTYPE=PUT(L,CUSTSERV.);    ***that replaced BENTYPE hard assignment;
        %DO Q = 2 %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;
ELSE IF K=6 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 = 2 %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;
ELSE IF K=7 THEN DO;
    %DO Q = 2 %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 = 2 %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 = 2 %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 Q = 2 %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=11 THEN DO;
    DO L=1 TO 6;                ***MJS 06/18/03 Added L loop and BENTYPE PUT;
        BENTYPE=PUT(L,PREVCARE.);    ***that replaced BENTYPE hard assignment;
        %DO Q = 2 %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=12 THEN DO;                ***RSG 02/2005 Added for smoking scores.;
    DO M=1 TO 3;
        BENTYPE=PUT(M,SMOKEF.);
        %DO Q = 2 %TO &NUMQTR;    ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
        TIMEPD = "&&PERIOD&Q"; OUTPUT;
    %END;

```



```
ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP1=22;
ELSE IF UPCASE(REGION) = 'OVERSEAS ARMY' THEN LINEUP1=23;
ELSE IF UPCASE(REGION) = 'OVERSEAS NAVY' THEN LINEUP1=24;
ELSE IF UPCASE(REGION) = 'OVERSEAS AIR FORCE' THEN LINEUP1=25;
ELSE IF UPCASE(REGION) = 'OVERSEAS OTHER' THEN LINEUP1=26;
ELSE LINEUP1=27;

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;
```

H.15.B - ..\LOADWEB\MERGFINL.SAS - Merge the final CAHPS and MPR Scores Databases into the WEB layout - Annual.

```

*****
*
* PROGRAM:   MERGFINL.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* 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.
*
* INPUTS:   1) MPR and CAHPS Individual and Composite data sets with adjusted
*           scores, and benchmark data for 1999-2002 DoD HCS.
*           - LOADMPR.SD2 - 1999-2003 MPR Scores Databases
*           - LOADCAHP.SD2 - 1999-2003 CAHPS Scores Databases
*           - BENCHA04.SD2 - 1999-2003 CAHPS Benchmark Databases
*           - FAKE.SD2 - WEB Layout in Column order
*
* OUTPUT:   1) MERGFINL.SD2 - Combined Scores Database in WEB layout
*
* NOTES:
*
* 1) The following steps need to be run prior to this
*    program (2001,2002,2003):
*    - 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
*    - 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 V612 ".";
LIBNAME IN02 V612 ".";
LIBNAME IN03 V612 "..\2003\LOADWEB";
LIBNAME IN04 V612 "..\2002\LOADWEB";
LIBNAME IN05 V612 "..\REPORTCARDS\MPR_ADULT2004";
LIBNAME IN06 V612 "..\2003\REPORTCARDS\MPR_ADULT2003";
LIBNAME IN07 V612 "..\2002\REPORTCARDS\MPR_ADULT2002";
LIBNAME IN08 V612 "..\BENCHMARK\DATA";
LIBNAME IN09 V612 "..\2003\BENCHMARK\DATA";
LIBNAME IN10 V612 "..\2002\BENCHMARK\DATA";
LIBNAME OUT V612 ".";

/*
LIBNAME IN01 V612 "F:\2004\Programs\Loadweb";
LIBNAME IN02 V612 "F:\2004\Programs\Loadweb";
LIBNAME IN03 V612 "F:\2004\Programs\2003\LOADWEB";
LIBNAME IN04 V612 "F:\2004\Programs\2002\LOADWEB";
LIBNAME IN05 V612 "F:\2004\Programs\REPORTCARDS\MPR_ADULT2004";
LIBNAME IN06 V612 "F:\2004\Programs\2003\REPORTCARDS\MPR_ADULT2003";
LIBNAME IN07 V612 "F:\2004\Programs\2002\REPORTCARDS\MPR_ADULT2002";
LIBNAME IN08 V612 "F:\2004\Programs\BENCHMARK\DATA";
LIBNAME IN09 V612 "F:\2004\Programs\2003\BENCHMARK\DATA";
LIBNAME IN10 V612 "F:\2004\Programs\2002\BENCHMARK\DATA";
LIBNAME OUT V612 "F:\2004\Programs\Loadweb";
*/

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

```

```
%LET PERIOD2 = 2002;
%LET PERIOD3 = 2003;
%LET PERIOD4 = 2004;
```

```
*****
* Construct ORDERing variable from WEB layout
*****;
```

```
DATA ORDER1;
```

```
SET IN01.FAKE;
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 LINEUP2=1;
ELSE IF UPCASE(REGION) = 'CONUS MHS' THEN LINEUP2=2;
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) = 'NORTH' THEN LINEUP2=7;
ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP2=8;
ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP2=9;
ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP2=10;
ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP2=11;
ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP2=12;
ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP2=13;
ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP2=14;
ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP2=15;
ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP2=16;
ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP2=17;
ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP2=18;
ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP2=19;
ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP2=20;
ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP2=21;
ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP2=22;
ELSE IF UPCASE(REGION) = 'OVERSEAS ARMY' THEN LINEUP2=23;
ELSE IF UPCASE(REGION) = 'OVERSEAS NAVY' THEN LINEUP2=24;
ELSE IF UPCASE(REGION) = 'OVERSEAS AIR FORCE' THEN LINEUP2=25;
ELSE IF UPCASE(REGION) = 'OVERSEAS OTHER' THEN LINEUP2=26;
ELSE LINEUP2=27;
IF REGION=REGCAT THEN LINEUP3=1;
ELSE LINEUP3=2;
```

```
RUN; ***MJS 07/03/03 Changed BENTYPE to TIMEPD;
```

```
PROC SORT DATA=ORDER1 OUT=ORDER2 (DROP=LINEUP LINEUP2 LINEUP3);
BY LINEUP LINEUP2 LINEUP3 REGCAT;
RUN;
```

```
DATA ORDER;
```

```
SET order2;
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 MERGFIL;
```

```

SET IN02.LOADCAHP (IN=INCAHP04)
    IN03.LOADCAHP (IN=INCAHP03)
    IN04.LOADCAHP (IN=INCAHP02)
    IN05.LOADMPR (IN=INMPR04)
    IN06.LOADMPR (IN=INMPR03)
    IN07.LOADMPR (IN=INMPR02)
    IN08.BENCHA04 (IN=INBEN04)
    IN09.BENCHA04 (IN=INBEN03)
    IN10.BENCHA04 (IN=INBEN02);
SVCAHP04 = INCAHP04;
SVCAHP03 = INCAHP03;
SVCAHP02 = INCAHP02;
SVMPR04 = INMPR04 ;
SVMPR03 = INMPR03 ;
SVMPR02 = INMPR02 ;
SVBEN04 = INBEN04 ;
SVBEN03 = INBEN03 ;
SVBEN02 = INBEN02 ;

LENGTH KEY $200;
IF MAJGRP = "All Beneficiaries" THEN MAJGRP = "All Users";
IF MAJGRP = "Non-enrolled Beneficiaries" THEN MAJGRP = "Standard/Extra Users";
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;
*****
* Keep only the composites from 2002 and 2003.
*****;
/* IF ( INBEN03 OR INBEN02 OR
    INCAHP03 OR INCAHP02 OR
    INMPR03 OR INMPR02) THEN DO;
    IF TIMEPD IN ("&PERIOD2.", "&PERIOD3.") THEN OUTPUT;
END;
ELSE OUTPUT;*/

RUN;

PROC SORT DATA=MERGFIL1; BY KEY; RUN;

*****
* Append ORDERING variable to the merged Scores database file
*****;
DATA MERGFIL2 out.MISSING;
MERGE MERGFIL1(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 SVCAHP04 = 1 THEN SOURCE = "CAHPS &PERIOD4.";
IF SVCAHP03 = 1 THEN SOURCE = "CAHPS &PERIOD3.";
IF SVCAHP02 = 1 THEN SOURCE = "CAHPS &PERIOD2.";
IF SVMPR04 = 1 THEN SOURCE = "MPR &PERIOD4. .";
IF SVMPR03 = 1 THEN SOURCE = "MPR &PERIOD3. ";
IF SVMPR02 = 1 THEN SOURCE = "MPR &PERIOD2. ";
IF SVBEN04 = 1 THEN SOURCE = "BENCHMARK &PERIOD4.";
IF SVBEN03 = 1 THEN SOURCE = "BENCHMARK &PERIOD3.";
IF SVBEN02 = 1 THEN SOURCE = "BENCHMARK &PERIOD2.";

IF IN1 AND NOT IN2 THEN OUTPUT out.MISSING; *Missing from layout;
IF IN1 AND ORDER NE . THEN OUTPUT MERGFIL2;
RUN;

*****
* Reorder file according to WEB layout
*****;
PROC SORT DATA=MERGFIL2 OUT=OUT.MERGFIL1; BY ORDER; RUN;

DATA FAKE;

```

```

    SET order2;
    ORDER = _N_;
RUN;

DATA LAYONLY;
    MERGE FAKE(IN=IN1) OUT.MERGFINL(IN=IN2 KEEP=ORDER);
    BY ORDER;
    IF IN1 AND NOT IN2;
RUN;

TITLE1 "2003 DOD Health Survey Scores/Report Cards (8860-410)";
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.SD2 - Merged Final Scores Database for input to MAKEHTML.SAS";

/*
TITLE5 "MERGFINL.SD2 Data source counts";
PROC FREQ DATA=OUT.MERGFINL;
TABLES SOURCE FLAG

    SVCAHP03 SVCAHP02 SVCAHP01
    SVMPR03  SVMPR02  SVMPR01
    SVBEN03  SVBEN02  SVBEN01

    SVCAHP03 * SVCAHP02 * SVCAHP01 *
    SVMPR03  * SVMPR02  * SVMPR01  *
    SVBEN03  * SVBEN02  * SVBEN01

/MISSING LIST;
RUN;*/

TITLE5 "MERGFINL.SD2 Data attribute counts";
PROC FREQ DATA=OUT.MERGFINL;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
    REGION*REGCAT
/MISSING LIST;
RUN;

TITLE5 "LAYONLY.SD2 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.SD2)";
PROC PRINT DATA=out.MISSING;
VAR MAJGRP REGION REGCAT BENTYPE BENEFIT;
RUN;

```

H.16 - ..\LOADWEB\CONUS_Q.SAS - Generate CAHPS CONUS scores and perform significance tests - Annual.

```
*****
*
* PROGRAM: CONUS_Q.SAS
* TASK: ANNUAL DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* 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 functionality.
*
* MODIFIED: 1) 01/07/2002 BY KEITH RATHBUN, Updated for 2000 annual consumer
* reports.
* 2) 01/27/2003 BY KEITH RATHBUN, Updated for 2002 annual consumer
* reports.
* 3) 02/08/2004 BY CHRIS RANKIN, Updated for 2003 annual consumer
* reports.
*
* INPUTS: 1) MERGFINL.SD2 - Scores Database in WEB Layout
* 2) FAKE.SD2 - Scores Database WEB Layout
* 3) CONUS_A.SD2 - Previous years Combined CAHPS/MPR Scores Database in WEB layout
*
* OUTPUT: 1) CONUS_Q.SD2 - Combined CAHPS/MPR Scores Database in WEB layout
* 2) LT30Q.SD2 - Records with <= 30 observations
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
* - STEP1Q.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
* - MERGFINL.SAS - Merge the final CAHPS and MPR Scores Databases
*
*****
* Assign data libraries and options
*****;
LIBNAME IN1 V612 ".";
LIBNAME OUT V612 ".";

*LIBNAME IN1 V612 "f:\2004\programs\loadweb";
*LIBNAME OUT V612 "f:\2004\programs\loadweb";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*****
*****
* Process Macro Input Parameters:
*
* 1) BENTYPE = Benefit Type
* 2) MAJGRP = Major Group
* 3) TYPE = INDIVIDUAL or COMPOSITE
* 4) BENEFIT = COMPOSITE Benefit Type
*
*****
*****;
* Set up empty template file for data merge purposes and set first time flag
*****;
%LET DSN = MERGFINL;

DATA INIT;
  SET IN1.&DSN;
  DELETE;
RUN;
%LET FLAG = 0;

%MACRO PROCESS(BENTYPE=,MAJGRP=,TYPE=,BENEFIT=);
DATA TEMP;
  SET PRETEMP END=FINISHED;
  %IF "&TYPE" = "INDIVIDUAL" %THEN %DO;
    WHERE BENTYPE = "&BENTYPE" AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
    REGION NOT IN("Benchmark","CONUS MHS") AND
```

```

        REGCAT NOT IN("Benchmark","CONUS MHS") AND
        REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
%END;
%ELSE %IF "&TYPE" = "COMPOSITE" %THEN %DO;
    WHERE BENTYPE = &BENTYPE AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
    BENEFIT = "&BENEFIT" AND
    REGION NOT IN("Benchmark","CONUS MHS") AND
    REGCAT NOT IN("Benchmark","CONUS MHS") AND
    REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
%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,7,9)='Army' THEN SERVICE=1;
    ELSE IF SUBSTR(REGION,7,9)='Air Force' THEN SERVICE=2;
    ELSE IF SUBSTR(REGION,7,9)='Navy' THEN SERVICE=3;
    ELSE SERVICE=4;
END;
ELSE IF SUBSTR(REGION,1,4)='West' THEN DO;
    REGCON=3;
    TOTCON=1;
    IF SUBSTR(REGION,6,9)='Army' THEN SERVICE=1;
    ELSE IF SUBSTR(REGION,6,9)='Air Force' THEN SERVICE=2;
    ELSE IF SUBSTR(REGION,6,9)='Navy' THEN SERVICE=3;
    ELSE SERVICE=4;
END;
ELSE IF SUBSTR(REGION,1,8)='Overseas' THEN DO;
    IF SUBSTR(REGION,10,5)='Army' THEN SERVICE=1;
    ELSE IF SUBSTR(REGION,10,9)='Air Force' THEN SERVICE=2;
    ELSE IF SUBSTR(REGION,10,4)='Navy' THEN SERVICE=3;
    ELSE SERVICE=4;
    REGCON=4;
    TOTCON=2;
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 = "CONUS";
FLAG = "CONUS";
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";
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_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";
  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 *;

```

```

*****;
PROC SORT DATA=TEMP;
BY TOTCON;
DATA TEMP4;
  SET TEMP END=FINISHED;
  length key $200;
  IF _N_ = 1 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;
  *****
  * Skip over the Non-CONUS
  *****;
  IF TOTCON NE 2 THEN DO;
    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;
  END;
  IF FINISHED THEN GOTO FINISHED;
  RETURN;

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;

FINISHED:
  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 = "CONUS";
  FLAG = "CONUS";
  REGION = "CONUS MHS";
  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;
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;

%MACRO CALLIT(TIMEPD=);

DATA PRETEMP;
SET IN1.&DSN.;
IF TIMEPD="&TIMEPD";
RUN;

*****
* Create CONUS for Active Duty - Individual
*****;
%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Active Duty, TYPE=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 and Respectful ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);

*****
* Create CONUS for Active Duty Dependents - Individual
*****;
%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Active Duty Dependents, TYPE=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 and Respectful ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);

*****
* Create CONUS for Enrollees with Civilian PCM - Individual
*****;
%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Enrollees with Civilian PCM, TYPE=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 and Respectful                ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval  ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand          ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful                                ,MAJGRP=Enrollees with Civilian PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                       ,MAJGRP=Enrollees with Civilian PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork                  ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care         ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care                   ,MAJGRP=Enrollees with Civilian PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit                 ,MAJGRP=Enrollees with Civilian PCM,
TYPE=INDIVIDUAL);

```

* Create CONUS for Enrollees with Military PCM - Individual

*****;

```

%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Enrollees with Military PCM, TYPE=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 and Respectful              ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand        ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful                                ,MAJGRP=Enrollees with Military PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                       ,MAJGRP=Enrollees with Military PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork                  ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care         ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care                   ,MAJGRP=Enrollees with Military PCM, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit                 ,MAJGRP=Enrollees with Military PCM,
TYPE=INDIVIDUAL);

```

* Create CONUS for Standard/Extra Users - Individual

*****;

```

%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Standard/Extra Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled Correctly                ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time    ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);

```

```

%PROCESS(BENTYPE=Courteous and Respectful ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=Standard/Extra Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=Standard/Extra Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect ,MAJGRP=Standard/Extra Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You ,MAJGRP=Standard/Extra Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care ,MAJGRP=Standard/Extra Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,MAJGRP=Standard/Extra Users,
TYPE=INDIVIDUAL);

```

* Create CONUS for Prime Enrollees - Individual

*****;

```

%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Prime Enrollees, TYPE=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 and Respectful ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,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 Urgent Care ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);

```

* Create CONUS for Retirees and Dependents - Individual

*****;

```

%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=Retirees and Dependents, TYPE=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 and Respectful ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);

```

```

%PROCESS(BENTYPE=Delays in Care while Awaiting Approval      ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand              ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful                                     ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                          ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service  ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork                     ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care            ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse    ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist    ,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 Urgent Care ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit                    ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);

*****
* Create CONUS for All Users - Individual
*****;
%PROCESS(BENTYPE=Advice over Telephone,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled Correctly                  ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time      ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous and Respectful                 ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval  ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand          ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful                                  ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully                       ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork                  ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care         ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect                           ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You                   ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment ,MAJGRP=All Users, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit                  ,MAJGRP=All Users, 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 Users            , TYPE=COMPOSITE,BENEFIT=Claims
Processing);

*****
* Create CONUS for Courteous and Helpful Office Staff - Quarterly

```

```

*****;
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff); ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
%PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents , TYPE=COMPOSITE,BENEFIT=Courteous
and Helpful Office Staff);
%PROCESS(BENTYPE="Composite", MAJGRP=All Users , TYPE=COMPOSITE,BENEFIT=Courteous and
Helpful Office Staff);

*****
* 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 Users , 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 Users , 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 Users          , 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 Users          , 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 Users          , 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 Users          , 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);

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%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 Users                , 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 Users                , TYPE=COMPOSITE,BENEFIT=Specialty Care);

%MEND;
%CALLIT(TIMEPD=2004);
%CALLIT(TIMEPD=2003);
%CALLIT(TIMEPD=2002);

*****
* Extract ORDER and KEY from the WEB Layout file.  TEMPQ will be used
* as place holders for missing records.  FAKE will be used for adding
* new records.
*****
DATA ORDER1;
  SET IN1.FAKE;
  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 LINEUP2=1;
  ELSE IF UPCASE(REGION) = 'CONUS MHS' THEN LINEUP2=2;
  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) = 'NORTH' THEN LINEUP2=7;
  ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP2=8;
  ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP2=9;
  ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP2=10;
  ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP2=11;
  ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP2=12;
  ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP2=13;
  ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP2=14;
  ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP2=15;
  ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP2=16;
  ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP2=17;
  ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP2=18;
  ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP2=19;
  ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP2=20;
  ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP2=21;
  ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP2=22;
  ELSE IF UPCASE(REGION) = 'OVERSEAS ARMY' THEN LINEUP2=23;
  ELSE IF UPCASE(REGION) = 'OVERSEAS NAVY' THEN LINEUP2=24;
  ELSE IF UPCASE(REGION) = 'OVERSEAS AIR FORCE' THEN LINEUP2=25;

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```

ELSE IF UPCASE(REGION) = 'OVERSEAS OTHER' THEN LINEUP2=26;
ELSE LINEUP2=27;
IF REGION=REGCAT THEN LINEUP3=1;
ELSE LINEUP3=2;

RUN;    ***MJS 07/03/03 Changed BENTYPE to TIMEPD;

PROC SORT DATA=ORDER1 OUT=ORDER (DROP=LINEUP LINEUP2 LINEUP3);
BY LINEUP LINEUP2 LINEUP3 REGCAT;
RUN;

DATA FAKE;
SET ORDER;
SIG = .;
SCORE = .;
ORDER = _N_;
LENGTH KEY $200.;
KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
      UPCASE(TRIM(MAJGRP)) || UPCASE(TRIM(REGCAT)) ||
      UPCASE(TRIM(REGION)) || UPCASE(TRIM(TIMEPD));
IF BENEFIT='Total' THEN DELETE;

RUN;
PROC SORT DATA=FAKE OUT=TEMPQ;          BY KEY; RUN;
PROC SORT DATA=FAKE(KEEP=ORDER KEY); BY KEY; RUN;

*****
* Append BENCHMARK records to CAHPS records and perform significance tests
*****;
DATA BENCHMRK(KEEP=MAJGRP BENEFIT BENTYPE SEMEAN SCORE timepd);
SET IN1.&DSN;
WHERE REGION = "Benchmark" AND SVMPR02=0 AND SVMPR03=0 AND SVMPR04=0; /*CDR 2/08/2004*/
RUN;
Data abnchmrk(keep=benefit bentype timepd ascore);
set benchmrk;
where upcase(majgrp)='ALL USERS';
rename score=ascore;
proc sort; by benefit bentype timepd;
proc sort data=benchmrk; by benefit bentype timepd;
data benchmrk;
merge benchmrk abnchmrk; by benefit bentype timepd;

PROC SORT DATA=BENCHMRK; BY MAJGRP BENEFIT BENTYPE timepd; RUN;

PROC SORT DATA=FINAL; BY KEY; RUN;

DATA CONUS_Q;
MERGE FINAL(IN=IN1) FAKE(IN=IN2);
BY KEY;
IF IN1;
RUN;
PROC SORT DATA=CONUS_Q; BY MAJGRP BENEFIT BENTYPE timepd; RUN;

*****
* Perform significance tests for CONUS scores
*****;
DATA SIGTEST1;
MERGE CONUS_Q(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
BY MAJGRP BENEFIT BENTYPE timepd;
LENGTH KEY $200.;
%include "offset.inc";
TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1)); /*RSG 02/2005 ADD CONDITION TO PREVENT
ERRS FOR PROBT FUNCTION*/
ELSE TEST = .;
SIG = 0;
IF TEST < 0.05 THEN SIG = 1;
IF SCORE < BSCORE THEN SIG = -SIG;
* REGION = "CONUS MHS";
* REGCAT = "CONUS MHS";

KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
      UPCASE(TRIM(MAJGRP)) || UPCASE(TRIM(REGCAT)) ||
      UPCASE(TRIM(REGION)) || UPCASE(TRIM(TIMEPD));

```

```

SOURCE = "CONUS_Q";
FLAG   = "CONUS_Q";
score=score+ascore-bscore;
IF SIN;
RUN;
PROC SORT DATA=SIGTEST1; BY KEY; RUN;

*****
* Extract CAHPS scores to perform significance tests
*****;
DATA CAHPS MPR;
SET IN1.&DSN;
*****
* Significance tests have already been performed for MPR scores,
* so remove from file.
*****;
/* CDR 2/08/2004 */

IF SVMPR02 = 1|svmpr03=1|svmpr04=1 THEN OUTPUT MPR;
IF SVMPR02 = 0 & svmpr03 = 0 & svmpr04 = 0 THEN OUTPUT CAHPS;
RUN;

PROC SORT DATA=CAHPS;
BY MAJGRP BENEFIT BENTYPE timepd;
RUN;

*****
* Perform significance tests for CAHPS scores
*****;
DATA SIGTEST2;
MERGE CAHPS(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
BY MAJGRP BENEFIT BENTYPE timepd;
%include "offset.inc";
TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1)); /*RSG 02/2005 ADD CONDITION TO PREVENT
ERRS FOR PROBT FUNCTION*/
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=SIGTEST2; BY KEY; RUN;

PROC SORT DATA=MPR; BY KEY; RUN;

*****
* Combine previously created records with the new file
*****;
DATA COMBINE OUT.LT30Q;
SET SIGTEST1 SIGTEST2 MPR;
BY KEY;
*****
* 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;

*****
* Create place holders for missing records
*****;
DATA FAKEONLY;
MERGE COMBINE(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 COMBINE;
  BY KEY;

  *****
  * Convert CAHPS Composites and Individual to 1-100 scale. Note that
  * preventive care, and scores from previous quarters have already been
  * converted to 1-100 scale. The below if condition will need to have the
  * following condition added for Q4:
  * AND BENTYPE NE "July, 2000 to June, 2001".
  *****;
  IF BENEFIT NE "Preventive Care" /*AND
    BENTYPE NOT IN ("1998","1999","2000")*/
  THEN SCORE = SCORE*100;
RUN;

PROC SORT DATA=CONUS_Q OUT=OUT.CONUS_Q; BY ORDER; RUN;

TITLE1 "Annual 2003 DOD Health Survey Scores/Report Cards (8860-410)";
TITLE2 "Program Name: CONUS_Q.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MERGFINL.SD2 - Scores Database in WEB Layout";
TITLE4 "Program Outputs: CONUS_Q.SD2 - CONUS Scores Database in WEB layout";

PROC FREQ;
TABLES SIG FLAG SOURCE BENEFIT BENTYPE MAJGRP REGION REGCAT
      REGION*REGCAT
      /MISSING LIST;
RUN;

```

H.17 - ..\LOADWEB\TREND_A.SAS - Calculate Trends for CAHPS scores - Annual.

```
*****
*
* PROGRAM:  TREND_A.SAS
* TASK:    2003 DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* PURPOSE: Add TREND records to Scores database.
*
* WRITTEN: 06/28/2000 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 calculate trends.
*            3) 01/27/2003 BY KEITH RATHBUN -- updated for 2002 survey.
*            Use 2000/2002 pairs to calculate trends.
*            4) 02/08/2004 BY CHRIS RANKIN -- updated for 2003 survey.
*            Use 2001/2003 pairs to calculate trends.
*            5) 02/2005 BY REGINA GRAMSS -- updated for 2004 survey,
*            include smoking cessation trend calculation,
*            put patch in for to order properly.
*
* INPUTS:  1) CONUS_Q.SD2 - MPR and CAHPS Scores Database in WEB layout
*            2) FAKE.SD2 - Scores Database WEB Layout
*
* OUTPUT:  1) TREND_A.SD2 - 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.SD2) will be run through the
*    MAKEHTML.SAS program to generate the HTML consumer reports.
*
*****
* Assign data libraries and options
*****;

LIBNAME IN   ".";
LIBNAME OUT  ".";

*LIBNAME IN   "F:\2004\Programs\Loadweb";
*LIBNAME OUT  "F:\2004\Programs\Loadweb";

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*/

data fakecut(keep=region regcat);
set in.conus_q;
where majgrp='Prime Enrollees' & region ne regcat
  & benefit='Health Plan' & timepd='2004';
if semean>.05|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;
  WHERE TIMEPD IN ('2002','2004'); /*CDR 2/08/2004 */
  *****
  * Trends already calculated for MPR scores, so remove from file
  * (RSG 02/2005) EXCEPT Smoking scores whose trend need to be calculated
  *****;
  IF (SVMPR02 = 1 or SVMPR03 = 1 or SVMPR04 = 1)
    AND BENEFIT NE 'Smoking Cessation' THEN DELETE;

RUN;

/* CDR 2/08/2004 Changed from 2000,2002 to 2001,2003*/

DATA TEMP02;
  SET TRENDS;
  KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE ;
  IF TIMEPD = "2002";
RUN;
PROC SORT DATA=TEMP02; BY MAJGRP REGION REGCAT BENEFIT BENTYPE; RUN;

DATA TEMP04;
  SET TRENDS;
  KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE;
  IF TIMEPD = "2004";
RUN;
PROC SORT DATA=TEMP04; BY MAJGRP REGION REGCAT BENEFIT BENTYPE; RUN;

DATA PAIR0204(keep=majgrp region regcat benefit bentype);
  MERGE TEMP02(IN=IN02) TEMP04(IN=IN04);
  BY MAJGRP REGION REGCAT BENEFIT BENTYPE;
  IF IN02 AND IN04;
RUN;

PROC SORT DATA=TRENDS;
  BY MAJGRP REGION REGCAT BENEFIT BENTYPE;
RUN;

DATA TRENDS;
  MERGE TRENDS(IN=INTREND) PAIR0204(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
  *****;

/* CDR 2/08/2004 - Changed from 2000,2002 to 2001,2003 */

DATA TRENDS bench;
  SET TRENDS(drop=bscore bsemean);
  BY MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD;
  IF TIMEPD = '2002' THEN DO;
    SCORE02 = SCORE/100;
    SE02    = SEMEAN;
    N02     = N_OBS;
    W02     = N_WGT;
  END;
  RETAIN SCORE02 SE02 N02 W02;
  IF TIMEPD = '2004' THEN DO;
    SCORE04 = SCORE/100;
    SE04    = SEMEAN;
    N04     = N_OBS;
    W04     = N_WGT;
  END;
  RETAIN SCORE04 SE04 N04 W04;
  LENGTH KEY $200.;
  IF TIMEPD = '2004' 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(SE02**2+SE04**2);
N_OBS = MIN(N02,N04);
N_WGT = MIN(W02,W04);
SCORE = SCORE04-SCORE02;
DSCORE = 100*(SCORE04-SCORE02);
if region='Benchmark' then OUTPUT bench;
else output trends;
END;
DROP ORDER SCORE02 SCORE04 SE02 SE04 N02 N04;
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 benefit='Getting Care Quickly' then do;
score=.A; dscore=.A; sig=.A; end; */ /* CDR 2/09/2004 */
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 ORDER1;
SET IN.newFAKE;
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 LINEUP2=1;
ELSE IF UPCASE(REGION) = 'CONUS MHS' THEN LINEUP2=2;
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) = 'NORTH' THEN LINEUP2=7;
ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP2=8;
ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP2=9;
ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP2=10;
ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP2=11;
ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP2=12;

```

```

ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP2=13;
ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP2=14;
ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP2=15;
ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP2=16;
ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP2=17;
ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP2=18;
ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP2=19;
ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP2=20;
ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP2=21;
ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP2=22;
ELSE IF UPCASE(REGION) = 'OVERSEAS ARMY' THEN LINEUP2=23;
ELSE IF UPCASE(REGION) = 'OVERSEAS NAVY' THEN LINEUP2=24;
ELSE IF UPCASE(REGION) = 'OVERSEAS AIR FORCE' THEN LINEUP2=25;
ELSE IF UPCASE(REGION) = 'OVERSEAS OTHER' THEN LINEUP2=26;
ELSE LINEUP2=27;
IF REGION=REGCAT THEN LINEUP3=1;
ELSE LINEUP3=2;

RUN;    ***MJS 07/03/03 Changed BENTYPE to TIMEPD;

PROC SORT DATA=ORDER1 OUT=ORDER2 (DROP=LINEUP LINEUP2 LINEUP3);
BY LINEUP LINEUP2 LINEUP3 REGCAT;
RUN;

DATA ORDER;
SET ORDER2;
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 REGION REGCAT; RUN;
DATA CONUS_Q;
MERGE CONUS_Q fakecut(keep=region regcat in=nin); by region regcat;
if ^(nin);
*   if timepd ne 'Trend'|benefit='Preventive Care';
proc sort;*/ 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*/
RUN;

TITLE1 "2003 DOD Health Survey Scores/Report Cards (8860-410)";
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.SD2 - Merged Final Scores Database with TRENDS for input to
SIGNIF_A.SAS";

TITLE5 "FREQs of TREND_A.SD2";
PROC FREQ;
TABLES SOURCE FLAG MAJGRP REGION BENEFIT BENTYPE
/MISSING LIST;
RUN;

TITLE5 "FREQs of FAKE.SD2";

```

```
PROC FREQ DATA=IN.newFAKE;  
  TABLES MAJGRP REGION BENEFIT BENTYPE  
  /MISSING LIST;  
RUN;
```

H.18 - ..\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 ;
* ;
* ;
* ;
* ÔÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ! ;
* ;
* IF YOU MODIFY THIS PROGRAM THEN PLEASE INITIAL AND DOCUMENT ;
* YOUR CHANGES. THOSE FAILING TO DO THIS WILL BE SEVERELY ;
* BEATEN. ;
* ;
* ÔÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ!ÔÛÛ! ;
* ;
* ;
* ;
* 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 ;

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* 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 ;
* ;
* NOTE: Update only SRCYR1, SRCYR2, PERIOD1/2/3, and CURRENTPERIOD. ;
*=====;

```

```

OPTIONS COMPRESS=YES;

```

```

%LET SRCYR1 = 2003; *** Previous year;
%LET SRCYR2 = 2004; *** Current year;

```

```

%LET PERIOD1=2002;
%LET PERIOD2=2003;
%LET CURRENTPERIOD = 2004;
%LET QTRS=3;          /** Qtr of these reports    **/

OPTIONS NOXWAIT MPRINT;

%LET HTMLSP=%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 hcolor=%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-benefit heading **/
  /** 1=headings, 0=no headings          **/

/*****
/***** Macro for putting notes at bottom of table  *****/
/*****
%MACRO BOTTOM_NOTES();
%if &seppage. ne 2 %then %do;
  %if &var3. =7 %then %do;    ***MJS 4/23/03 Changed 8 to 7;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";    ***MJS
03/24/04 C
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";

    PUT "</td></tr>";
  %end;

  %else %if &var3. =8 %then %do;    ***MJS 4/23/03 Changed 9 to 8;
    PUT "<tr>";
    PUT "    <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";    ***MJS
03/24/04 C
    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>";
    PUT "    <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";

    PUT "</td></tr>";
  %end;

```

```

%else %if &var3. =9 %then %do;   ***MJS 4/23/03 Changed 10 to 9;
  PUT "<tr>";
  PUT "   <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";   ***MJS
03/24/04 C
  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>";
  PUT "   <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";

  PUT "</td></tr>";
%end;

%else %if &var3. =10 %then %do;   ***MJS 4/23/03 Changed 11 to 10;
  PUT "<tr>";
  PUT "   <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";   ***MJS
03/24/04 C
  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>";
  PUT "   <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";

  PUT "</td></tr>";
%end;

%else %do;
  PUT "<tr>";
  PUT "   <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
&SRCYR2 Health Care Survey of DOD Beneficiaries</font>";   ***MJS 03/24/04 Changed hard-coded year
to m
  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>";
  PUT "   <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";
%end;
%end;
%else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
(&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
(&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do; /* 08/04/04 - RSG -
CREATE FOOTNOTE FOR TREND PAGES THAT WAS MODIFIED*/
  PUT "<tr>";
  PUT "   <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";   ***MJS
03/24/04 C
  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>";
  PUT "   <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";
  PUT "</td></tr>";

```

```

%end;

%else %do;
  PUT "<tr>";
  PUT "      <td colspan='&columns.'><font face='Arial,Helvetica,Swiss,Geneva' size='2'>Source:
Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2.</font>";   ***MJS
03/24/04 C
  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>";
  PUT "      <center><a href='&hrefxls.'><img src='&imgdir.\excel.gif' border=0>Download
Page</a></center>";
  PUT "</td></tr>";
%end;

```

%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 V612 '.' 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 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;
SET SRC1.TREND_A(DROP=FLAG SOURCE KEY); /**** MAB testing 3/16/2005 ****/

IF BENEFIT="Total" THEN DELETE; /**** MAB testing 2/11/2005 ****/

IF SCORE>100 then SCORE=100;
IF (TIMEPD="Trend" and -.5<SCORE<0) THEN SCORE=ABS(SCORE);
IF TIMEPD="Trend" THEN TIMEPD="TREND";

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";

/**RSG 01/2005 CREATE SERVICE FIELD TO ORDER REGION BY SERVICE AFFILIATION, ALSO
CHANGE CONUS SERVICE AFFILIATION TO LOWER CASE*/

```

IF MAJGRP = "Benchmark" THEN DELETE;

ELSE IF MAJGRP = "Prime Enrollees" THEN LINEUP=1;
ELSE IF MAJGRP = "Enrollees with Military PCM" THEN LINEUP=2;
ELSE IF MAJGRP = "Enrollees with Civilian PCM" THEN LINEUP=3;
ELSE IF MAJGRP = "Standard/Extra Users" THEN LINEUP=4;
ELSE IF MAJGRP = "Active Duty" THEN LINEUP=5;
ELSE IF MAJGRP = "Active Duty Dependents" THEN LINEUP=6;
ELSE IF MAJGRP = "Retirees and Dependents" THEN LINEUP=7;
ELSE IF MAJGRP = "All Beneficiaries" THEN LINEUP=8;

IF REGION = "Benchmark" THEN LINEUP2=1;
ELSE IF UPCASE(REGION) = 'CONUS MHS' THEN LINEUP2=2;
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) = 'NORTH' THEN LINEUP2=7;
ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP2=8;
ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP2=9;
ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP2=10;
ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP2=11;
ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP2=12;
ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP2=13;
ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP2=14;
ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP2=15;
ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP2=16;
ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP2=17;
ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP2=18;
ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP2=19;
ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP2=20;
ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP2=21;
ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP2=22;
ELSE IF UPCASE(REGION) = 'OVERSEAS ARMY' THEN LINEUP2=23;
ELSE IF UPCASE(REGION) = 'OVERSEAS NAVY' THEN LINEUP2=24;
ELSE IF UPCASE(REGION) = 'OVERSEAS AIR FORCE' THEN LINEUP2=25;
ELSE IF UPCASE(REGION) = 'OVERSEAS OTHER' THEN LINEUP2=26;
ELSE LINEUP2=27;

IF REGION=REGCAT THEN LINEUP3=1;
ELSE LINEUP3=2;

RUN;

PROC SORT;
  BY LINEUP LINEUP2 LINEUP3;
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 (DROP=LINEUP LINEUP2 LINEUP3);
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(Active Duty);
%if &var1.=6 %then %let major=%STR(Active Duty Dependents);
%if &var1.=7 %then %let major=%STR(Retirees and Dependents);
%if &var1.=8 %then %let major=%STR(All Users);

%if &var1.=0 %then %do;

    %let comma=%STR();
    %let grpmsg=%STR();
%end;
%else %do;
    IF MAJGRP = "&major."; /*** MAB MODIFIED 3/16/2005 ***/
    %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;
TEMPLATE=COMPRESS("Templates\Template&var3..xls");
%end;
%else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
      (&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
      (&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
      TEMPLATE=COMPRESS("Templates\Template_trend2.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=7 or &var3=8 or &var3=9 or &var3=10 %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)="CONUS MHS" ;
    %let sub_regs=%STR(CONUS 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)="NORTH";
    %let sub_regs=%STR(NORTH);
%end;
%else %if &var2.=7 %then %do;

```

```

        IF UPCASE(REGION)="NORTH ARMY" or REGION="Benchmark" or REGION = "CONUS MHS"
            OR REGION="NORTH" OR REGION="ARMY";
        %let sub_regs=%STR(North Army);
    %end;
%else %if &var2.=8 %then %do;
    IF UPCASE(REGION)="NORTH NAVY" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="NORTH" OR REGION="NAVY";
        %let sub_regs=%STR(North Navy);
    %end;

%else %if &var2.=9 %then %do;
    IF UPCASE(REGION)="NORTH AIR FORCE" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="NORTH" OR REGION="AIR FORCE";
        %let sub_regs=%STR(North Air Force);
    %end;
%else %if &var2.=10 %then %do;
    IF UPCASE(REGION)="NORTH OTHER" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="NORTH" OR REGION="OTHER";
        %let sub_regs=%STR(North Other);
    %end;
%else %if &var2.=11 %then %do;
    IF UPCASE(REGION)="SOUTH";
        %let sub_regs=%STR(SOUTH);
    %end;
%else %if &var2.=12 %then %do;
    IF UPCASE(REGION)="SOUTH ARMY" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="SOUTH" OR REGION="ARMY";
        %let sub_regs=%STR(South Army);
    %end;

%else %if &var2.=13 %then %do;
    IF UPCASE(REGION)="SOUTH NAVY" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="SOUTH" OR REGION="NAVY";
        %let sub_regs=%STR(South Navy);
    %end;
%else %if &var2.=14 %then %do;
    IF UPCASE(REGION)="SOUTH AIR FORCE" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="SOUTH" OR REGION="AIR FORCE";
        %let sub_regs=%STR(South Air Force);
    %end;
%else %if &var2.=15 %then %do;
    IF UPCASE(REGION)="SOUTH OTHER" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="SOUTH" OR REGION="OTHER";
        %let sub_regs=%STR(South Other);
    %end;
%else %if &var2.=16 %then %do;
    IF UPCASE(REGION)="WEST";
        %let sub_regs=%STR(OVERSEAS);
    %end;

%else %if &var2.=17 %then %do;
    IF UPCASE(REGION) = "WEST ARMY" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="WEST" OR REGION="ARMY";
        %let sub_regs=%STR(West Army);
    %end;
%else %if &var2.=18 %then %do;
    IF UPCASE(REGION) = "WEST NAVY" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="WEST" OR REGION="NAVY";
        %let sub_regs=%STR(West Navy);
    %end;
%else %if &var2.=19 %then %do;
    IF UPCASE(REGION) = "WEST AIR FORCE" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="WEST" OR REGION="AIR FORCE";
        %let sub_regs=%STR(West Air Force);
    %end;
%else %if &var2.=20 %then %do;
    IF UPCASE(REGION) = "WEST OTHER" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="WEST" OR REGION="OTHER";
        %let sub_regs=%STR(West Other);
    %end;
%else %if &var2.=21 %then %do;
    IF UPCASE(REGION) = "OVERSEAS" ;
        %let sub_regs=%STR(OVERSEAS);
    %end;

```

```

%else %if &var2.=22 %then %do;
  IF UPCASE(REGION) = "OVERSEAS ARMY" or REGION="Benchmark" or REGION = "CONUS MHS"
    OR REGION="OVERSEAS" OR REGION="ARMY";
  %let sub_regs=%STR(Overseas Army);
%end;
%else %if &var2.=23 %then %do;
  IF UPCASE(REGION) = "OVERSEAS NAVY" or REGION="Benchmark" or REGION = "CONUS MHS"
    OR REGION="OVERSEAS" OR REGION="NAVY";
  %let sub_regs=%STR(Overseas Navy);
%end;
%else %if &var2.=24 %then %do;
  IF UPCASE(REGION) = "OVERSEAS AIR FORCE" or REGION="Benchmark" or REGION = "CONUS MHS"
    OR REGION="OVERSEAS" OR REGION="AIR FORCE";
  %let sub_regs=%STR(Overseas Air Force);
%end;
%else %if &var2.=25 %then %do;
  IF UPCASE(REGION) = "OVERSEAS OTHER" or REGION="Benchmark" or REGION = "CONUS MHS"
    OR REGION="OVERSEAS" OR REGION="OTHER";
  %let sub_regs=%STR(Overseas Other);
%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(5+&qtrs.);
  %end;
  %else %if &var3.=2 %then %do;  ***MJS 4/23/03 Changed 3 to 2;
    IF BENEFIT="Getting Care Quickly";
    %let columns=%EVAL(5+&qtrs.);
  %end;
  %else %if &var3.=3 %then %do;  ***MJS 4/23/03 Changed 4 to 3;
    IF BENEFIT="Courteous and Helpful Office Staff";
    %let columns=%EVAL(3+&qtrs.);
  %end;
  %else %if &var3.=4 %then %do;  ***MJS 4/23/03 Changed 5 to 4;
    IF BENEFIT="How Well Doctors Communicate";
    %let columns=%EVAL(5+&qtrs.);
  %end;
  %else %if &var3.=5 %then %do;  ***MJS 4/23/03 Changed 6 to 5;
    IF BENEFIT="Customer Service";
    %let columns=%EVAL(4+&qtrs.);
  %end;
  %else %if &var3.=6 %then %do;  ***MJS 4/23/03 Changed 7 to 6;
    IF BENEFIT="Claims Processing";
    %let columns=%EVAL(3+&qtrs.);
  %end;
  %else %if &var3.=7 %then %do;  ***MJS 4/23/03 Changed 8 to 7;
    IF BENEFIT="Health Plan";
    %let columns=%EVAL(2+&qtrs.);  ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
  %end;
  %else %if &var3.=8 %then %do;  ***MJS 4/23/03 Changed 9 to 8;
    IF BENEFIT="Health Care";
    %let columns=%EVAL(2+&qtrs.);  ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
  %end;
  %else %if &var3.=9 %then %do;  ***MJS 4/23/03 Changed 10 to 9;
    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.=10 %then %do;  ***MJS 4/23/03 Changed 11 to 10;
    IF BENEFIT="Specialty Care";
    %let columns=%EVAL(2+&qtrs.);  ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
  %end;
  %else %if &var3.=11 %then %do;  ***MJS 4/23/03 Changed 12 to 11;

```

```

    IF BENEFIT="Preventive Care";    ***MJS 04/30/03 Changed from 5+ to 6+ because Cholesterol
Testing was added;
    %let columns=%EVAL(6+&qtrs.);    ***DKB CHANGED FROM 6+ to 5+ because removed flu shot 5/7/02;
    %end;
    %else %if &var3.=12 %then %do;    /*** MAB Added 2/11/2005 ***/
    IF BENEFIT="Smoking Cessation";
    %let columns=%EVAL(3+&qtrs.);
    %end;

    /*** Set macro variable ***/
    %if &var3.=0 %then %do;
        %let sub_ben=%STR(&currentperiod. Composite Scores);
        %let columns=13;
    %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;

    /*** 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 BENEFIT="Courteous and Helpful Office Staff" AND
        BENTYPE="Composite" THEN WIDTH3=70;    ***DKB ADDED TREND 4/30/2002***;
        ***MJS 07/03/03 Changed from BENTYPE IN any period and Est. Quarterly Rate
of Change;

    %if &var3.=0 %then %do;
        WIDTH_COL1=.;
        WIDTH3=40;
    %end;

    /*** Added 5-7-2001 mab ***/
    %if &prefix.=p %then %do;
        WIDTH3=.;
    %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.7-0-0-0.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;

/**** ÔÔ FRAMES SECTION ÔÔ ****/
%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.=3 OR &var3.=6 OR &var3.=12 %then %do;   ***MJS 4/23/03 Changed 4&7 to 3&6;
  ***RSG 02/2005 Added var3=12;
    %let splitpixel=181;
  %end;
  %else %if &var3.=4 %then %do;
    %let splitpixel=196;
  %end;
  %else %if &var3.=5 %then %do;
    %let splitpixel=221;
  %end;
  %else %if &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
    %let splitpixel=158;
  %end;
  %else %if &var3.=11 %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'>";
  %end;

```



```

PUT "      <td colspan='7' 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='13' 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 **/
/** ÔÔ FRAMES SECTION ÔÔ **/

/**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='Total Score'
BORDER=0></td>";
PUT "<td width=80 colspan=2><IMG SRC='&imgdir.\ea.gif'ALT='Ease of Access'
BORDER=0></td>";
PUT "<td width=185 colspan=4><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=2><IMG SRC='&imgdir.\smoking.gif' ALT='Smoking Cessation'
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=4><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>Smoking</b></font></td>";
PUT "</tr>";
PUT "<tr bgcolor= &hdcolr.>";
%end;

/** Print out 1st column of 4th row **/
/** ÔÔ FRAMES SECTION ÔÔ **/

```



```

DATA _NULL_;
SET HTML END=EOF;
*LENGTH HREF $ 250; /*MJS 01/29/04 Commented out statement*/

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\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.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %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 **/
/** ŪŪ FRAMES SECTION ŪŪ **/
%if &prefix=f %then %do;
PUT "<tr bgcolor= &hdcblr.><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) **/
    /** ÔÔ FRAMES SECTION ÔÔ **/
    %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 "%mpres('&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 ****/
    /** ÔÔ FRAMES SECTION ÔÔ **/
    /**RSG HERE**/
    %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 "TREND" THEN PUT "<td align='center' valign='bottom'><a href="" HREF +(-1) ""
&target.><IMG SRC='' IMAGE '' alt='' TIMEPD '' BORDER=0></a></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.'>;
            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.'>;

```



```

        records appropriate for bentype;
    IF BENTYPE="Composite";
%end;
%else %if &var4. ne 0 and BENTYPE ne "Composite" %then %do;

        /***** MAB 3-16-2005 REMOVED
        %if &var4. = 1 %then %do;
            IF 1 <= _N_ <= 5;
        %end;
        %else %if &var4. = 2 %then %do;
            IF 6 <= _N_ <= 10;
        %end;
        %else %if &var4. = 3 %then %do;
            IF 11 <= _N_ <= 15;
        %end;
        %else %if &var4. = 4 %then %do;
            IF 16 <= _N_ <= 20;
        %end;
        %else %if &var4. = 5 %then %do;
            IF 21 <= _N_ <= 25;
        %end;*****/

        /***** MAB 3-16-2005 ADDED *****/
%if &var3. = 1 %then %do;
    %if &var4. = 1 %then %do;
        IF BENTYPE = "Problems Getting Personal Doctor/Nurse";
    %end;
    %else %if &var4. = 2 %then %do;
        IF BENTYPE = "Problems Getting to See Specialist";
    %end;
    %else %if &var4. = 3 %then %do;
        IF BENTYPE = "Problems Getting Necessary Care";
    %end;
    %else %if &var4. = 4 %then %do;
        IF BENTYPE = "Delays in Care while Awaiting Approval";
    %end;
%end;
%else %if &var3. = 2 %then %do;
    %if &var4. = 1 %then %do;
        IF BENTYPE = "Advice over Telephone";
    %end;
    %else %if &var4. = 2 %then %do;
        IF BENTYPE = "Wait for Routine Visit";
    %end;
    %else %if &var4. = 3 %then %do;
        IF BENTYPE = "Wait for Urgent Care";
    %end;
    %else %if &var4. = 4 %then %do;
        IF BENTYPE = "Wait in Doctor's Office";
    %end;
%end;
%else %if &var3. = 3 %then %do;
    %if &var4. = 1 %then %do;
        IF BENTYPE = "Courteous and Respectful";
    %end;
    %else %if &var4. = 2 %then %do;
        IF BENTYPE = "Helpful";
    %end;
%end;
%else %if &var3. = 4 %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;

```

```

%end;
%else %if &var3. = 5 %then %do;
    %if &var4. = 1 %then %do;
        IF BENTYPE = "Problem Finding/Understanding Written Material";
    %end;
    %else %if &var4. = 2 %then %do;
        IF BENTYPE = "Problem Getting Help from Customer Service";
    %end;
    %else %if &var4. = 3 %then %do;
        IF BENTYPE = "Problem with Paperwork";
    %end;
%end;
%else %if &var3. = 6 %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. = 11 %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;
    %else %if &var4. = 5 %then %do;
        IF BENTYPE = "Cholesterol Testing";
    %end;
%end;
%else %if &var3. = 12 %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;
%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 **/
        /** ÔÛ FRAMES SECTION ÔÛ **/
        /**PUT "<td></td>"**/

        /** 4th Row start (column 1) **/
        /** ÔÛ FRAMES SECTION ÔÛ **/
        %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 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");*//*RSG 02/2005 - annual only
goes back 2 years*/
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");*//*RSG 02/2005 - annual only
goes back 2 years*/
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*/

*****;

/** 4th Row (columns 2+) */
/** If quarter column then HREF link is different */
/** ÔÔ FRAMES SECTION ÔÔ */

*LENGTH HREF $250;

%if &prefix=f %then %do;
IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");          *DKB CHANGED IMAGE NAME FROM QTR TO COL;

/*HERE!!*/
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;*//*RSG 02/2005 Annual only goes back 2 years*/
/*ELSE IF _N_=5 THEN HREF=HREFf5;*/
ELSE IF _N_=3 THEN HREF=HREFf4;
ELSE IF _N_=4 THEN HREF=HREFf5;
if 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 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=HREFf5;*//*RSG 02/2005 Annual only goes back 2 years*/
ELSE IF _N_=3 THEN HREF=HREFp4;

```

```

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>";
/*** 2-2 MAB removed scale row ***/
END;

RUN;

%end;

/*** U U FRAMES SECTION U U ***/
%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.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
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 &VAR3. NE 0 %THEN %DO;
IF BENTYPE="Composite" THEN DELETE; /***DKB ADDED TREND 5/2/2002***/
%END;
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 = "Problems Getting Personal Doctor/Nurse";
      %end;
      %else %if &var4. = 2 %then %do;
        IF BENTYPE = "Problems Getting to See Specialist";
      %end;
      %else %if &var4. = 3 %then %do;
        IF BENTYPE = "Problems Getting Necessary Care";
      %end;
      %else %if &var4. = 4 %then %do;
        IF BENTYPE = "Delays in Care while Awaiting Approval";
      %end;
    %end;
  %else %if &var3. = 2 %then %do;
    %if &var4. = 1 %then %do;
      IF BENTYPE = "Advice over Telephone";
    %end;
    %else %if &var4. = 2 %then %do;
      IF BENTYPE = "Wait for Routine Visit";
    %end;
    %else %if &var4. = 3 %then %do;
      IF BENTYPE = "Wait for Urgent Care";
    %end;
    %else %if &var4. = 4 %then %do;
      IF BENTYPE = "Wait in Doctor's Office";
    %end;
  %end;
  %end;
  %else %if &var3. = 3 %then %do;
    %if &var4. = 1 %then %do;
      IF BENTYPE = "Courteous and Respectful";
    %end;
    %else %if &var4. = 2 %then %do;
      IF BENTYPE = "Helpful";
    %end;
  %end;
  %end;
  %else %if &var3. = 4 %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;
  %end;
  %else %if &var3. = 5 %then %do;
    %if &var4. = 1 %then %do;
      IF BENTYPE = "Problem Finding/Understanding Written Material";
    %end;
    %else %if &var4. = 2 %then %do;
      IF BENTYPE = "Problem Getting Help from Customer Service";
    %end;
    %else %if &var4. = 3 %then %do;
      IF BENTYPE = "Problem with Paperwork";
    %end;
  %end;

```

```

        %end;
    %end;
%else %if &var3. = 6 %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. = 11 %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;
    %else %if &var4. = 5 %then %do;
        IF BENTYPE = "Cholesterol Testing";
    %end;
%end;
%else %if &var3. = 12 %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;
%end;
%end;
%end;

RUN;
%end;

/*ÛÛÛ ALL MAJGRPS ÛÛÛ*/
%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;
IF MAJGRP="Active Duty" THEN MAJNUM=5;
IF MAJGRP="Active Duty Dependents" THEN MAJNUM=6;
IF MAJGRP="Retirees and Dependents" THEN MAJNUM=7;
IF MAJGRP="All Users" THEN MAJNUM=8;

    /** HREF link to another page **/
    HREF=COMPRESS("../html\&prefix."||MAJNUM||"-0-&var3.-&var4.&q.htm");    /** Link is diff for CONUS
MHS region **/
    /** 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,1,5)="CONUS" 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 12; **RSG 02/2005 Changed 11 to 12 for 12 Benefits;
        %if &i.^=7 AND &i.^=8 AND &i.^=9 AND &i.^=10 %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"); /** href to 2nd html
file ***/
        %end;
    %else %do;
        HREFQ=COMPRESS("../html\&prefix.&var1.-&var2.-&i.-0.htm"); /** href to 2nd html
file ***/
    %end;
    /*RSG 02/2005 take out width - to center correctly*/
    %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 ; /* 2000/11: moved inside if stmt */
    ROW+1;
    IF LMAJGRP^=" " THEN PUT "</tr>"; /** terminate previous row ***/

    /** Column 1 / Row 1 ***/
    /** ÔÛ FRAMES SECTION ÔÛ ***/
    %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 */

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```

cells      ELSE IF MOD(ROW,2)=0 THEN      PUT MAJGRP '09'x @@; /* rather than spanning across
          */
          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=-1 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 '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 @@;
  END;
END;

```

```

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;
%if &var3.=0 %then %do;
FILE XLSDATA;
PUT; PUT;
PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries"; ***MJS 03/24/04 Changed
hard-coded year to macro variable;
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";
%end;
%else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
(&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
(&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
FILE XLSDATA;
PUT; PUT;
PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
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";
%end;
%else %if &var3.ne 0 %then %do;
FILE XLSDATA;
PUT; PUT;
PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
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";
%end;
%end;

/*-----*/
/* 2000/11: end xls code */
/*-----*/

END;
RUN;
%end;

/*ÛÛÛ All Regions ÛÛÛ*/
%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;

  %let columns_less1=%EVAL(&columns.-1);
  %if &seepage.=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 12; /**RSG 02/2005 changed 11 to 12 since we now have 12 benefits;
    %if &i.^=7 AND &i.^=8 AND &i.^=9 AND &i.^=10 %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 ; /* 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 */
  /** ÔÔ FRAMES SECTION ÔÔ */
  %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 **/
```

```
    /** 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 &var1.=3 or &var1.=4 or &var1.=6 or &var1.=7 %then %do;  
            /*RSG 02/2005 - THESE SHOULD NOT HAVE LINKED REGIONS*/  
            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="CONUS MHS" then do;  
                    /**HERE**/  
                    /*RSG 02/2005 - WANT THESE BOLDED WITHOUT LINKS */  
                    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" then do; /*RSG 02/2005 THESE SHOULD NOT BE BOLDED WITHOUT  
LINKS*/  
                    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; /*RSG 02/2005 LINKED AND NOT BOLDED*/  
                    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; /*RSG 02/2005 THESE ARE PRINT FRIENDLY PAGES*/  
                %if &var1.=3 or &var1.=4 or &var1.=6 or &var1.=7 %then %do;  
                    /*RSG 02/2005 these should not have linked regions*/  
                    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="CONUS MHS" then do;  
                                /*RSG 02/2005 - bold and not linked regions*/  
                                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" then do;
```

```

/*RSG 02/2005 - unbold, not linked regions*/
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;
/*RSG 02/2005 unbolded, linked regions*/
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;

/**RSG 02/2005 Conus treated as Region, comment out code**/
/**IF SUBSTR(REGION,1,5) = "CONUS" 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 &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;
/*RSG 02/2005 to center print pages correctly*/
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;
        %if &var3.=0 %then %do;
            FILE XLSDATA;
            PUT; PUT;
            PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries"; ***MJS 03/24/04 Changed
hard-coded year to macro variable;
            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";
        %end;
        %else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
(&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or

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```

                (&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
        FILE XLSADATA;
        PUT; PUT;
        PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
        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";
        %end;
        %else %if &var3.ne 0 %then %do;
        FILE XLSADATA;
        PUT; PUT;
        PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
        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";
        %end;
    %end;
/*-----*/
/* 2000/11: end xls code */
/*-----*/

END;

RUN;

%end;

```

```

/* Single Regions */
/* 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 width=' " WIDTH_COL1 "'><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";
        ELSE IF SUBSTR(REGCAT,1,5) = "CONUS" 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
            UPCASE(SUBSTR(REGCAT,1,5)) NE "NORTH" AND UPCASE(SUBSTR(REGCAT,1,5)) NE "SOUTH" AND
            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;          /*** no significance ***/
/*RSG 02/2005 add in width*/
  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;
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;
  %if &var3.=0 %then %do;
    FILE XLSDATA;
    PUT; PUT;
    PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries";    ***MJS 03/24/04 Changed
hard-coded year to macro variable;
    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";
  %end;
  %else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
    (&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
    (&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
    FILE XLSDATA;
    PUT; PUT;
    PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
    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";
  %end;
  %else %if &var3.ne 0 %then %do;
    FILE XLSDATA;
    PUT; PUT;
    PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and &SRCYR2";
***MJS 03/24/04 Changed hard-coded year to macro variable;
    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";
  %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.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");   ***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");
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**/

/** 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;   /*RSG 02/2005 - var1 was renumbered because of 8 majgrps**/
  %if &var1.^=3 and &var1.^=4 and &var1.^=6 and &var1.^=7 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="" MAJGRP5 +(-1) "" &target.><font face='&fontface.' size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
    PUT "<a href="" MAJGRP8 +(-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.";

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        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 "<br>";
        PUT "<a href="" MAJGRP5 +(-1) "" &target.><font face='&fontface.' size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
        PUT "<a href="" MAJGRP6 +(-1) "" &target.><font face='&fontface.' size='2'>Active Duty
Dependents</font></a>&htmlsp.&htmlsp.";
        PUT "<a href="" MAJGRP7 +(-1) "" &target.><font face='&fontface.' size='2'>Retirees and
Dependents</font></a>&htmlsp.&htmlsp.";
        PUT "<a href="" MAJGRP8 +(-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;
    FILENAME CMDS DDE 'excel|system';

    /* Align 2 titles */
    DATA _NULL_;
        FILE CMDS;
        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 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;

        /** Increment Row and Column pointers ***/

```



```

*****;
**** 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(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);
%MEND DOALL1;

/**** Create 368 HTML pages (8 Majgrps / All Regions / 12 Benefits)****/
%MACRO DOALL2();
    %DO J=1 %TO 8;
        %DO K=1 %TO 12;          * 12 Sub-benefits ;          /**** MAB Changed to 12
2/11/2005 ****/
            %MKHTML(&J.,0,&K.,1,0);  ***RSG 08/07/03 Add var4 part of new page numbers;
            %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;
            %MKHTML(&J.,0,&K.,2,&L.);
            %END;
            %ELSE %IF &K. = 3 OR &K. = 6 OR &K. = 12 %THEN %DO L = 0 %TO 2;
***RSG 02/2005 - ADDED 12TH BENEFIT;
                %MKHTML(&J.,0,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;
                    %MKHTML(&J.,0,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
                    %MKHTML(&J.,0,&K.,2,&L.);
                %END;
            %END;
        %END;
    %END;
%MEND DOALL2;

/**** Create 25 HTML pages (All Majgrps / 25 Regions / All Benefits) ****/
/* RSG 02/2005 NOT NEEDED IN ANNUAL
%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 736 HTML pages (All Majgrps / 16 Regions / 12 Benefits) ****/
%MACRO DOALL4(i=);
    %DO K = 1 %TO 12;
        /**** Call macro for 2nd page (except for ratings benefits) ****/
        %DO J = 7 %TO 10;
            %MKHTML(&I.,&J.,&K.,1,0);
            %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;
            %MKHTML(&I.,&J.,&K.,2,&L.);
            %END;

```

```

                %ELSE %IF &K. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2; /*** MAB Added
2/11/2005 ***/
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %end;
%END;
%DO J = 12 %TO 15;
                %MKHTML(&I.,&J.,&K.,1,0);
                %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;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2; /*** MAB Added
2/11/2005 ***/
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %end;
%END;
%DO J = 17 %TO 20;
                %MKHTML(&I.,&J.,&K.,1,0);
                %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;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2; /*** MAB Added
2/11/2005 ***/
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %end;
%END;
%DO J = 22 %TO 25;
                %MKHTML(&I.,&J.,&K.,1,0);
                %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;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2; /*** MAB Added
2/11/2005 ***/
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;
%MKHTML(&I.,&J.,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
%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=7 %TO 10; /*RSG 02/2005*/

```

```

        %MKHTML(&i.,&j.,0,0,0);
    %END;
    %DO J=12 %TO 15; /*RSG 02/2005*/
        %MKHTML(&i.,&j.,0,0,0);
    %END;
    %DO J=17 %TO 20; /*RSG 02/2005*/
        %MKHTML(&i.,&j.,0,0,0);
    %END;
    %DO J=22 %TO 25; /*RSG 02/2005*/
        %MKHTML(&i.,&j.,0,0,0);
    %END;
%MEND DOALL5;

```

```

/*****
/**** Create macros to call MKHTML macro ****
/**** Need special macros for Excel files ****
/****

```

```

/**** Create 7 HTML pages (7 Majgrps / All Regions / All Benefits)****
/*****

```

```

%MACRO EXCEL1();
    %MKHTML(1,0,0,0,0);
    %MKHTML(2,0,0,0,0);
    %MKHTML(4,0,0,0,0);
    %MKHTML(7,0,0,0,0);
    %MKHTML(3,0,0,0,0);    ***MJS 05/04/03 Removed Civilian PCM (Majgrp 3), and changed 4-8
to 3-7;
    %MKHTML(5,0,0,0,0);    ***RSG 08/07/03 Added fourth dimension page number (var4);
    %MKHTML(6,0,0,0,0);
%MEND EXCEL1;
*****/

```

```

/**** Create 322 HTML pages (7 Majgrps / All Regions / 12 Benefits)****
/*****

```

```

%MACRO EXCEL2();
    %DO J = 1 %TO 7;
        %DO K=1 %TO 12;          * 11 Sub-benefits ;    ***MJS 4/23/03 Changed 2 to 1 and 12 to 11;
            %MKHTML(&J.,0,&K.,1,0);
            ***MJS 05/04/03 Removed Civilian PCM (Majgrp
3), and changed 4-8 to 3-7;
            ***RSG 08/07/03 Added fourth dimension page
number (var4);
            %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 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. = 3 OR &K. = 6 OR &K. = 12 %THEN %DO L = 0 %TO 2;
***RSG 02/2005 - ADDED 12TH BENEFIT;
                %MKHTML(&J.,0,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;
                %MKHTML(&J.,0,&K.,2,&L.);
                %END;
                %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
                %MKHTML(&J.,0,&K.,2,&L.);
                %END;
            %END;
        %END;
    %END;

```

```

    %END;
%MEND EXCEL2;
*****/

```

```

/**** Create 25 HTML pages (All Majgrps / 25 Regions / All Benefits) ****
/*****

```

```

%MACRO EXCEL3();
  %DO J=1 %TO 25;          * 25 Regions ;
    %MKHTML(0,&J.,0,0,0);
  %END;
%MEND EXCEL3;
*****/

/**** Create ??? HTML pages (All Majgrps / 25 Regions / 12 Benefits) ****/
/*****
%MACRO EXCEL4();
  ***RSG 8/7/03 Made changes to add 5th parameter to macro;
  %DO J=1 %TO 25;
    %DO K=1 %TO 12;      ***RSG 02/2005 CHANGED TO 25 REGIONS/12 BENEFIT (FROM 4, 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 "L" for different number;
          %MKHTML(0,&J.,&K.,2,&L.);
        *number of sub-benefit trend pages for each benefit;
          %END;
        %ELSE %IF &K. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2; ***RSG 02/2005
ADDED 12TH BENEFIT;
          %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 EXCEL4;
*****/

/**** Run macro to create Frame HTML files ****/
/*
%LET PREFIX=f;
%LET OUTXLS=0;
%DOALL1;
%DOALL2;
%DOALL4(I=1);
%DOALL4(I=2);
%DOALL4(I=5);
%DOALL4(I=8);
%DOALL5(I=1);
%DOALL5(I=2);
%DOALL5(I=5);
%DOALL5(I=8);
*/
/**** 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=5);
%DOALL4(I=8);
%DOALL5(I=1);
%DOALL5(I=2);
%DOALL5(I=5);
%DOALL5(I=8);
*/

```

```
/** Run macro to create Excel files ONLY **/  
%LET PREFIX=p;  
%LET OUTXLS=1;  
%DOALL1;  
%DOALL2;  
  
%DOALL4(I=1);  
%DOALL4(I=2);  
%DOALL4(I=5);  
%DOALL4(I=8);  
  
%DOALL5(I=1);  
%DOALL5(I=2);  
%DOALL5(I=5);  
%DOALL5(I=8);  
  
%PUT "&number_html_files. HTML files created.";
```

H.19 Q4_2004\PROGRAMS\ReportCards\CAHPS_AdultQ42004\CONVERT.SAS - Converts response 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;
```

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APPENDIX I

SAS CODE FOR TRICARE CONSUMER WATCH

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I.1 ConsumerWatch\CONSUMERWATCH-CMACRO.INC - Produce numbers for annual Consumer Watch reports.

```

*****
*
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-C.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 03/15/05 LUCY LU
*          --REMOVE LIBNAME FORM THE PROGRAM
*          --SUBSTITUTE ACTUAL YEAR VALUES BY MACRO YEAR VARIABLES
*          --ADD SMOKING CESSATION RATE ON PREVENTIVE CARE TABLE
*
* INPUT   : ..\..\..\&YEAR.\PROGRAMS\LOADWEB\TREND_A.SD2
* OUTPUT  : INTO EXCEL SPREADSHEET
*****
* ;

OPTIONS NOXWAIT NOFMterr SOURCE2;

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 */
%LET VAL = &AREA.;

x "COPY &FOLDER.\TEMPLATE.XLS &FOLDER.\&NAME.";
X "START &FOLDER.\&NAME.";

DATA _NULL_;
  X=SLEEP(3);
RUN;

*****
*
* FIGURE 1: Health Care Rating
*****
* ;
TITLE2 'Figure 1: Health Care Rating';
PROC FREQ DATA=TREND_A;
  WHERE MAJGRP = 'Prime Enrollees'
        AND REGCAT in ("&VAL","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;
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 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 ("&VAL","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;
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 ("&VAL","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;
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: Intent to Disenroll
*****
*

TITLE2 'Figure 4: Intent to Disenroll';
PROC FREQ NOPRINT DATA=DISENRLC;
  WHERE BENTYPE = "&YEAR."
  AND FIGURE='INTENT TO DISENROLL'
  AND PUT(CACSMPL,CATREP.) = "&VAL";
  TABLES BENTYPE*CACSMPL*FIGURE*COL3*COL4*ROW/ OUT=FIG403A(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=DISENRLC;
  WHERE BENTYPE = "&YEAR."
  AND FIGURE='INTENT TO DISENROLL'
  AND COL2 NE .;
  TABLES BENTYPE*FIGURE*COL2*ROW/ OUT=FIG403C(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=DISENRLC;
  WHERE BENTYPE = "&YEARP1."
  AND FIGURE='INTENT TO DISENROLL'
  AND PUT(CACSMPL,CATREP.) = "&VAL";
  TABLES BENTYPE*CACSMPL*FIGURE*COL3*COL4*ROW/ OUT=FIG402A(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=DISENRLC;
  WHERE BENTYPE = "&YEARP1."
  AND FIGURE='INTENT TO DISENROLL'
  AND COL2 NE .;
  TABLES BENTYPE*FIGURE*COL2*ROW/ OUT=FIG402C(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=DISENRLC;
  WHERE BENTYPE = "&YEARP2."
  AND FIGURE='INTENT TO DISENROLL'
  AND PUT(CACSMPL,CATREP.) = "&VAL";
  TABLES BENTYPE*CACSMPL*FIGURE*COL3*COL4*ROW/ OUT=FIG401A(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=DISENRLC;
  WHERE BENTYPE = "&YEARP2."
  AND FIGURE='INTENT TO DISENROLL'
  AND COL2 NE .;
  TABLES BENTYPE*FIGURE*COL2*ROW/ OUT=FIG401C(DROP=COUNT PERCENT);
RUN;

DATA COL2(DROP=COL3 COL4 CACSMPL)
  COL3(DROP=COL2 COL4 CACSMPL)
  COL4(DROP=COL2 COL3 CACSMPL);
  SET FIG403A FIG403C FIG402A FIG402C FIG401A FIG401C;

  IF COL2>=0 THEN OUTPUT COL2;
  IF COL3>=0 THEN OUTPUT COL3;
  IF ABS(COL4)>=0 THEN OUTPUT COL4;
RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;

```

```

DATA ALLROWS;
  LENGTH ROW 8.;
  DO ROW = 1 TO 3;
    OUTPUT;
  END;
RUN;

PROC SORT DATA=ALLROWS; BY ROW; RUN;

DATA FIG4;
  MERGE COL2 COL3 COL4 ALLROWS;
  BY ROW;
  CACSMPL="&VAL";
RUN;

TITLE2 'INTENT TO DISENROLL';
PROC PRINT;
RUN;

*****
* DDE LINK (EXCEL file has to be open )
*****;

FILENAME TBL DDE "EXCEL|DISENROLL!R19C2:R21C4";

DATA _NULL_;
  SET FIG4;
  FILE TBL NOTAB LRECL=200;
  PUT COL2 '09'X COL3 '09'X COL4;
RUN;

FILENAME TBL DDE "EXCEL|DISENROLL!R18C3:R18C3";

DATA _NULL_;
  SET FIG4;
  FILE TBL NOTAB LRECL=200;
  PUT CACSMPL;
RUN;

*****
*
* FIGURE 5: Access Composites
*****;

TITLE2 'Figure 5: Access Composites';
PROC FREQ NOPRINT DATA=TREND_A;
  WHERE MAJGRP = 'Prime Enrollees'
    AND REGCAT in ("&VAL","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;
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(KEEP=ROW SCORE1 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;
```

```
DATA FIG5;
MERGE COL2 COL3 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 ("&VAL","Benchmark")
    AND BENEFIT IN ('Courteous and Helpful Office Staff','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 ('Courteous and Helpful Office Staff','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;
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 COL2(DROP=SCORE RENAME=(SCORE1=COL2))
  COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
  COL4(KEEP=ROW SCORE1 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 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 = 'Courteous and Helpful Office Staff' AND REGCAT NE 'Benchmark')
THEN OUTPUT COL2 COL6;
    IF (BENEFIT = 'Courteous and Helpful Office Staff' AND REGCAT = 'Benchmark')
THEN OUTPUT COL3;
    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=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;

DATA FIG6;
    MERGE COL2 COL3 COL4 COL5 COL6 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 COL2;
RUN;

```

```

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C9:R18C9";

```

```

DATA _NULL_;
SET FIG6;
FILE TBL NOTAB LRECL=200;
PUT COL3;
RUN;

```

```

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C10:R21C10";

```

```

DATA _NULL_;
SET FIG6;
FILE TBL NOTAB LRECL=200;
PUT COL4;
RUN;

```

```

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C11:R18C11";

```

```

DATA _NULL_;
SET FIG6;
FILE TBL NOTAB LRECL=200;
PUT COL5;
RUN;

```

```

FILENAME TBL DDE "EXCEL|COMPOSITES!R23C8:R26C10";

```

```

DATA _NULL_;
SET FIG6;
FILE TBL NOTAB LRECL=200;
PUT COL6 '09'X '09'X 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 ("&VAL","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;
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;
RUN;
PROC SORT DATA=FIG7_BE;
BY BENEFIT;
RUN;

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
      COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
      COL4(KEEP=ROW SCORE1 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;

DATA FIG7;
  MERGE COL2 COL3 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 = "&VAL"
    AND TIMEPD = "&YEAR"
    AND (BENEFIT = 'Preventive Care'|BENEFIT='Smoking Cessation')
    AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal
Care',
  'Cholesterol Testing', '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 = 'Preventive Care'|BENEFIT='Smoking Cessation')
    AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal
Care',
  'Cholesterol Testing', '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 = "&VAL"
    AND TIMEPD = "&YEARP1"
    AND (BENEFIT = 'Preventive Care'|BENEFIT='Smoking Cessation')
    AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal
Care',
  'Cholesterol Testing', '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 = "&VAL"
    AND TIMEPD = "&YEARP2"
    AND (BENEFIT= 'Preventive Care'|BENEFIT='Smoking Cessation')
    AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal
Care',
  'Cholesterol Testing', '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='Cholesterol Testing' 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='Cholesterol Testing' 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='Cholesterol Testing' THEN DO;
        COL6=SCORE;
        COL12=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='Cholesterol Testing' 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 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;
  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='Cholesterol Testing' 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 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;
TITLE2 'TABLE 1';
PROC PRINT;
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;
  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;
RUN;
```

```
FILENAME CMDS DDE "EXCEL|SYSTEM";
DATA _NULL_;
  FILE CMDS;
  PUT '[SAVE]';
  PUT '[CLOSE]';
RUN;
```

```
%MEND RUNCW;
```

I.2 ConsumerWatch\CONSUMERWATCH-C.SAS - Run annual MTF TRICARE Consumer Watch reports.

```

OPTIONS PS=63 LS=200 COMPRESS=NO ERRORS=2 NOCENTER SOURCE2 NOFMterr SPOOL;
*****
*
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-CMACRO.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.
*
*****
*;
options mprint;

/*****/
/* TIME PERIOD MACROS */
/*****/

%LET YEAR = 2004;
%LET YEARP1 = 2003;
%LET YEARP2 = 2002;

%INCLUDE 'CATREP.INC';

LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT V612 '..\LOADWEB';
LIBNAME IN '.';

/*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;

DATA DISENRLC;
  SET IN.DISENRLC(RENAME=(REGCAT=XREGCAT));

*WHERE BENTYPE NE "" ;

REGCAT=COMPRESS(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='CONUS 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;
  *IF REGCAT IN ('AIR FORCE', 'ARMY', 'NAVY', 'NORTH', 'OTHER',
'OVERSEAS', 'SOUTH', 'WEST', 'BENCHMARK')

  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 Air Force",FOLDER=North);
*%RUNBYREG(REG="North Army",FOLDER=North);
%RUNBYREG(REG="North Navy",FOLDER=North);
%RUNBYREG(REG="North Other",FOLDER=North);

%RUNBYREG(REG="Overseas Air Force",FOLDER=Overseas);
%RUNBYREG(REG="Overseas Army",FOLDER=Overseas);

```

```
%RUNBYREG(REG="Overseas Navy",FOLDER=Overseas);
%RUNBYREG(REG="Overseas Other",FOLDER=Overseas);
/*
%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="CONUS MHS",FOLDER=CONUSMHS);
*/
```

I.3 ConsumerWatch\DIENRL-C.SAS - Calculate disenrollment scores for annual TRICARE Consumer Watch.

```
*****
**
* PROJECT: 6077-300
* PROGRAM: DIENRL-C.SAS
* PURPOSE: To produce numbers that go into 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: 03/08/05 BY LUCY LU.
*          --CHANGE REGION VARIABLE TO XTENXREG
*          --ADD INCLUDE FILE TO CREATE YEAR MACRO VARIABLES
*          --CHANGE VARIABLE NAME XCATCH TO CACSMPL TO BE CONSISTENT
*
* NOTE:    THIS PROGRAM IS MODIFIED IN MARCH 2005. TO RUN DIFFERENT YEAR YOU
NEED
*          CHANGE %LET YEAR TO CURRENT YEAR AND QUARTERLY DIRECTORIES
*
* OUTPUT  : DIENRLC.SD2
*****
*;
```

```
OPTIONS PS=63 LS=200 ERRORS=2 NOCENTER SOURCE2 NOFMterr MPRINT;
```

```
LIBNAME OUT V612  '.';
LIBNAME LIBRARY '..\..\DATA\FMTLIB';
LIBNAME IN V612  '..\LOADWEB';
```

```
%LET YEAR=2004;
%LET YEARP1=2003;
%LET YEARP2=2002;
%LET YR=04;
%LET YRP1=03;
%LET YRP2=02;
```

```
%INCLUDE 'CATREP.INC';
```

```
TITLE "Consumer Watch &YEAR. - Catchment";
TITLE2 'Plans to Disenroll';
```

```
%MACRO DIENRL(YR=, YEAR=, ROW=);
```

```
LIBNAME IN&YR V612 "..\..\..\&YEAR.\DATA";
```

```
****THE DIRECTORIES OF QUARTERLY FILES TO RUN XCATCH.INC****;
```

```
LIBNAME INQ1    V612 "..\..\..\Q1_&YEAR.t\data\afinal";
LIBNAME INQ2    V612 "..\..\..\Q2_&YEAR.t\data\afinal";
LIBNAME INQ3    V612 "..\..\..\Q3_&YEAR.t\data\afinal";
```

```

LIBNAME INQ4      V612 "..\..\..\Q4_&YEAR\data\afinal.";

%MACRO PROCESS;
*****
* Extract necessary CACSMPL-related information from the frame files.
*****;
%DO QTR = 1 %TO 4; * Do for each quarter;

    %IF &YEAR = 2004 %THEN %DO;

        PROC SORT DATA=INQ&QTR..HCS&YR.&QTR._1(KEEP=MPRID PCM ENRID DCATCH D_PAR
D_FAC D_HEALTH
CACSMPL XREGION)
        OUT=HCSDB&QTR;
        BY MPRID; RUN;
    %END;

        ****THIS CODE IS FOR ADDING VARIABLE ENRID FOR YEAR 2002 AND 2003***;

    %IF &YEAR = 2002 %THEN %DO;

        LIBNAME IN1T V612 "..\..\..\Q&QTR._&YEAR\data\afinal"; * Location of
frame file;
        LIBNAME IN2T V612 "..\..\..\Q&QTR._&YEAR.t\data\afinal"; * Location HCSDB
file;

        PROC SORT DATA=IN1T.FRAMEA(KEEP=MPRID D_PAR D_FAC D_HEALTH CACSMPL)
OUT=FRAME&QTR; BY MPRID; RUN;
        PROC SORT DATA=IN1T.EXTRACT(KEEP=MPRID PCM ENRID DCATCH) OUT=EXTRACT&QTR;
BY MPRID; RUN;

    %IF &QTR = 4 %THEN %DO;

        PROC SORT DATA=IN1T.HCS&YR.&QTR._1(KEEP=MPRID XREGION) OUT=HCSDB&QTR; BY
MPRID; RUN;

        DATA HCSDB&QTR;
        MERGE FRAME&QTR(IN=IN1)  EXTRACT&QTR(IN=IN2) HCSDB&QTR(IN=IN3);
        BY MPRID;
        IF IN3; *Keep only respondents;
        RUN;
    %END;

%ELSE %DO;

        PROC SORT DATA=IN2T.HCS&YR.&QTR._1(KEEP=MPRID XREGION) OUT=HCSDB&QTR; BY
MPRID; RUN;

        DATA HCSDB&QTR;
        MERGE FRAME&QTR(IN=IN1)  EXTRACT&QTR(IN=IN2) HCSDB&QTR(IN=IN3);
        BY MPRID;

```

```

        IF IN3; *Keep only respondents;
    RUN;
    %END;
%END;

    %IF &YEAR = 2003 %THEN %DO;

    %IF &QTR = 4 %THEN %DO;
        LIBNAME IN1T V612 "..\..\..\Q&QTR._&YEAR\data\afinal"; * Location of
frame file;

        PROC SORT DATA=IN1T.NEWFRAME(KEEP=MPRID D_PAR D_FAC D_HEALTH CACSMPL)
            OUT=FRAME; BY MPRID; RUN;
        PROC SORT DATA=IN1T.HCS&YR.&QTR._2(KEEP=MPRID PCM ENRID DCATCH XREGION)
            OUT=HCSDB; BY MPRID; RUN;

    DATA HCSDB&QTR;
        MERGE FRAME(IN=IN1) HCSDB(IN=IN3);
        BY MPRID;
        IF IN3; *Keep only respondents;
    RUN;
    %END;

    %ELSE %DO;
        LIBNAME IN1T V612 "..\..\..\Q&QTR._&YEAR\data\afinal"; * Location of
frame file;
        LIBNAME IN2T V612 "..\..\..\Q&QTR._&YEAR.t\data\afinal"; * Location HCSDB
file;

        PROC SORT DATA=IN1T.FRAMEA(KEEP=MPRID D_PAR D_FAC D_HEALTH CACSMPL)
            OUT=FRAME&QTR; BY MPRID; RUN;
        PROC SORT DATA=IN1T.EXTRACT(KEEP=MPRID PCM ENRID DCATCH) OUT=EXTRACT&QTR;
BY MPRID; RUN;
        PROC SORT DATA=IN2T.HCS&YR.&QTR._1(KEEP=MPRID XREGION) OUT=HCSDB&QTR; BY
MPRID; RUN;

    DATA HCSDB&QTR;
        MERGE FRAME&QTR(IN=IN1) EXTRACT&QTR(IN=IN2) HCSDB&QTR(IN=IN3);
        BY MPRID;
        IF IN3; *Keep only respondents;
    RUN;
%END;

    %END;

%END;
%MEND;

%PROCESS;

DATA TEMP(KEEP=MPRID XCATCH enrid);
    SET HCSDB1 HCSDB2 HCSDB3 HCSDB4;
    BY MPRID;
    LENGTH XCATCH 8;
    if pcm = 'MTF' then do;

```

```

    if ('1976' <= enrid <= '1980') or ('6301' <= enrid <= '6323') or
      ('6991' <= enrid <= '6994') or ('6501' <= enrid <= '6512') or
      ('7166' <= enrid <= '7195') or ('6700' <= enrid <= '6881')
      then XCATCH=INPUT(dcatch,8.); *Administrative assignment--1976-1980
added q4 2002*;
    else if enrid = '6919' then XCATCH=dcatch; *managed care contractor;
    else if ('3031' <= enrid <= '3057')
      then XCATCH =INPUT(dcatch,8.); ***On the Ship***;
    else if enrid in ('0002', '5208', '0250', '0449', '0626','0012')
      then XCATCH = INPUT(dcatch,8.); ***Inactive***;
      *****;
    else if ('0190' <= enrid <='0199') then XCATCH = dcatch; **uniformed
Service Family Health Plan;
      *****;
    else XCATCH = INPUT(enrid,8.);
end;
else XCATCH=INPUT(dcatch,8.);
if pcm = 'MTF' then do;
  if NOT (('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='6919' or ('3031' <= enrid <= '3057') or
    enrid in ('0002', '5208', '0250', '0449', '0626','0012')) then
      XCATCH = INPUT(d_par,8.);
end;

if d_fac = 'NONCAT' or d_fac = 'TGRO' or d_fac = 'TPR' then do;
  if d_health in ('01','02','05','17') then XCATCH = 9901;
  else if d_health in ('03','04','06','18') then XCATCH = 9902;
  else if d_health in ('07','08','09','10','11','12','19') then XCATCH =
9903;
  else if d_health in ('00','13','14','15') then XCATCH = 9904;
end;
*** If the facility is unknown then set com_geo indicates unknown facility
***;
*** '0999' added 03/15 to account for id 6992;
if CACSMPL in (9900, 999, 998, .) then XCATCH = 9999;
if xcatch in (321,100,35) then xcatch=6223;
RUN;

```

```

PROC SORT DATA=TEMP(KEEP=MPRID XCATCH); BY MPRID; RUN;
PROC SORT DATA=IN&YR..HCS&YR.A_1(KEEP=CONUS KDISENRL XBNFGRP XENRLMT XREGION
CWRWT MPRID ADJ_CELL)
  OUT=HCS&YR.A_1; BY MPRID; RUN;

```

```

DATA MERGE&YR;
  MERGE HCS&YR.A_1(IN=IN1)
    TEMP(RENAME=(XCATCH=CACSMPL));
BY MPRID;

IF IN1;

TOTAL=1;

IF XREGION IN (1,2,5,17) THEN XTNEXREG=1;

```

/*LLU, 1/27/05*/

```

IF XREGION IN (3,4,6,18) THEN XTNEXREG=2;
IF XREGION IN (7,8,9,10,11,12,16,19) THEN XTNEXREG=3;
IF XREGION IN (13,14,15) THEN XTNEXREG=4;

FORMAT CACSMPL CACR.;
IF (KDISENRL=1 AND XBNFGRP IN (2,3,4) AND XENRLMT = 2) THEN DEPVAR = 1;
ELSE DEPVAR = 0;
IF (XBNFGRP IN (2,3,4) AND XENRLMT = 2) THEN DENOM = 1;
ELSE DENOM = 0;
* STRATUMN = STRATUM + 0;
RUN;

/*****/
/* RUN SIGNIFICANCE TESTS */
/*****/

***CALCULATE VALUES FOR EACH COLUMN FOR ENTIRE POPULATION***;
PROC SORT DATA=MERGE&YR;
BY ADJ_CELL;
RUN;

PROC DESCRIPT DATA=MERGE&YR DESIGN=STRWR NOPRINT;
WEIGHT CWRWT;***** FINAL SURVEY WEIGHT *****;
NEST ADJ_CELL / MISSUNIT;
VAR DEPVAR;***** VARIABLES TO BE ESTIMATED **;
SUBPOPN (DENOM=1);
TABLES CACSMPL;
SUBGROUP CACSMPL;
LEVELS 9999;
setenv/decwidth=6;
OUTPUT / TABLECELL=DEFAULT FILENAME=Z&YR;
RUN;

***CALCULATE VALUES FOR EACH COLUMN FOR ENTIRE POPULATION***;

PROC DESCRIPT DATA=MERGE&YR DESIGN=STRWR NOPRINT;
WEIGHT CWRWT;***** FINAL SURVEY WEIGHT *****;
NEST ADJ_CELL / MISSUNIT;
VAR DEPVAR;***** VARIABLES TO BE ESTIMATED**;
SUBPOPN (DENOM=1 AND CONUS=1);
setenv/decwidth=6;
OUTPUT / TABLECELL=DEFAULT FILENAME=C&YR;
RUN;

/****PULL VARIABLE XTNEXREG FOR NEXT STEP 3/23/05 LLU****/

PROC SORT DATA=Z&YR; BY CACSMPL; RUN;

PROC SORT DATA=MERGE&YR(KEEP=CACSMPL XTNEXREG) OUT=TEMP&YR NODUPKEY; BY CACSMPL;
RUN;

/*
TITLE "CROSS TAB FROM FILE MERGE&YR.";

PROC FREQ DATA=MERGE&YR;

```

```

TABLES CACSMPL*XTNEXREG/LIST OUT=TEMP&YR(KEEP=CACSMPL XTNEXREG);
*BY CACSMPL;
RUN;*/

```

```

DATA Z&YR;
  MERGE Z&YR(IN=Z) TEMP&YR(IN=M);
BY CACSMPL;
IF Z;
RUN;

```

```

PROC SORT DATA=Z&YR; BY TABLENO; RUN;

```

```

DATA N&YR (KEEP=COL4 CACSMPL ROW);
  MERGE C&YR(RENAME=(MEAN=DOM_MEAN SEMEAN=DOM_SE NSUM=DOM_N))
    Z&YR ;
  BY TABLENO;
  RETAIN NCOL 0;
  ARRAY COLUMNS COL1-COL9999;
  IF CACSMPL > 0;
  NCOL+1;
  /* CONUS MTF5 */
  IF XTNEXREG IN (1,2,3) THEN
    VARDIF = ((1 - 2*NSUM/DOM_N)*DOM_SE**2 + SEMEAN**2);
  /* OCONUS MTF5 */
  IF XTNEXREG=4 THEN
    VARDIF = DOM_SE**2 + SEMEAN**2;
    SEDIF = SQRT(VARDIF);
    N=MIN(NSUM,DOM_N);

  ***SIGNIFICANCE TEST***;
  TESTVAL = 2*(1-PROBT(ABS(MEAN - DOM_MEAN) / SEDIF,N));
  PUT VARDIF= SEDIF= TESTVAL=;
  IF TESTVAL<.05 & MEAN>DOM_MEAN THEN COLUMNS(NCOL) = 1;
  ELSE IF TESTVAL <.05 & MEAN<DOM_MEAN THEN COLUMNS(NCOL) = -1;
  ELSE COLUMNS(NCOL) = 0;
  DO I=1 TO 9999;
    IF COLUMNS(I) NE . THEN COL4=COLUMNS(I);
  END;
  ROW=&ROW;
RUN;

```

```

PROC PRINT DATA=N&YR(OBS=100);
TITLE '100 RECORDS FROM N&YR. AFTER CALCULATING VERDIF'; RUN;

```

```

/*****/
/*MHS*/
/*****/
PROC FREQ DATA=MERGE&YR NOPRINT;
  WHERE (CONUS=1 AND KDIENRL=1 AND XBNFGRP IN (2,3,4) AND XENRLLMT=2);
  TABLES TOTAL / OUT=MHSNUM&YEAR(RENAME=(COUNT=MHSNUM));
  WEIGHT CWRWT;
RUN;
PROC FREQ DATA=MERGE&YR NOPRINT;
  WHERE (CONUS=1 AND XBNFGRP IN (2,3,4) AND XENRLLMT=2);
  TABLES TOTAL / OUT=MHSDEN&YEAR(RENAME=(COUNT=MHSDEN));
  WEIGHT CWRWT;

```

```

RUN;

/*****/
/*UNWEIGHTED*/
/*****/
PROC FREQ DATA=MERGE&YR NOPRINT;
  WHERE (CONUS=1 AND XBNFGRP IN (2,3,4) AND XENRLLMT=2);
  TABLES TOTAL / OUT=MHSDEU&YEAR(RENAME=(COUNT=MHSDENU));
RUN;

/*****/
/*MTF */
/*****/
PROC SORT DATA=MERGE&YR; BY CACSMPL;RUN;

PROC FREQ DATA=MERGE&YR NOPRINT;
  WHERE (KDISENRL=1 AND XBNFGRP IN (2,3,4) AND XENRLLMT=2);
  TABLES TOTAL / OUT=CACN&YEAR(RENAME=(COUNT=CACNUM));
  WEIGHT CWRWT;
  BY CACSMPL;
RUN;
PROC FREQ DATA=MERGE&YR NOPRINT;
  WHERE (XBNFGRP IN (2,3,4) AND XENRLLMT=2);
  TABLES TOTAL / OUT=CACD&YEAR(RENAME=(COUNT=CACDEN));
  WEIGHT CWRWT;
  BY CACSMPL;
RUN;

/*****/
/*UNWEIGHTED*/
/*****/
PROC FREQ DATA=MERGE&YR NOPRINT;
  WHERE (XBNFGRP IN (2,3,4) AND XENRLLMT=2);
  TABLES TOTAL / OUT=CACDU&YEAR(RENAME=(COUNT=CACDENU));
  BY CACSMPL;
RUN;

DATA MHS&YEAR;
  MERGE MHSNUM&YEAR MHSDEN&YEAR MHSDEU&YEAR;
  BY TOTAL;
  LENGTH BENTYPE $35;
  BENTYPE = "&YEAR.";
  ROW=&ROW;
  IF (MHSDEN<200 OR MHSDENU<30) THEN COL2=.;
  ELSE COL2 = (MHSNUM / MHSDEN)*100;
RUN;
DATA CAC&YEAR;
  MERGE CACN&YEAR CACD&YEAR CACDU&YEAR N&YR;
  BY CACSMPL;
  LENGTH BENTYPE $35;
  BENTYPE = "&YEAR.";
  ROW=&ROW;
  IF (CACDEN<200 OR CACDENU<30) THEN COL3=.;
  ELSE COL3 = (CACNUM / CACDEN)*100;
RUN;
DATA DIS&YEAR(DROP=TOTAL PERCENT MHSNUM MHSDEN MHSDENU CACNUM CACDEN CACDENU);
  SET MHS&YEAR CAC&YEAR;

```

```
LENGTH FIGURE $19;
FIGURE = 'INTENT TO DISENROLL';
RUN;
```

```
%MEND DISENRL;
```

```
%DISENRL (YR=&YR, YEAR=&YEAR, ROW=3);
%DISENRL (YR=&YRP1, YEAR=&YEARP1, ROW=2);
%DISENRL (YR=&YRP2, YEAR=&YEARP2, ROW=1);
```

```
*****
*****
*****
* Combine all temporary datasets into one dataset for inclusion in consumer
watch
Create variavle REGCAT for consumerwatch-c program, LLU 3/24/05
*****
*****
*****;
```

```
DATA DISENRLC;
SET DIS&YEAR DIS&YEARP1 DIS&YEARP2;
```

```
REGCAT=PUT(CACSMPL,CATREP.);
RUN;
```

```
/**PULL FORMATTED REGCAT FROM TREND_A TO MATCH THE RECORDS IN DISENRL FILE.
TAKE THE ONES THAT IN TREND_A FILE ONLY. LLU 3/23/05 ***/
```

```
PROC FREQ DATA=IN.TREND_A;
TALBES REGCAT/OUT=REG;
RUN;
```

```
PROC SORT DATA=REG(KEEP=REGCAT); BY REGCAT; RUN;
PROC SORT DATA=DISENRLC; BY REGCAT; RUN;
```

```
DATA DISENRLC ;
MERGE REG(IN=REG) DISENRLC(IN=DIS);
BY REGCAT;
IF REG|COL2 NE .;
RUN;
```

```
PROC PRINT DATA=DISENRLC(OBS=100);
PROC SORT DATA=DISENRLC OUT=OUT.DISENRLC; BY ROW;
PROC CONTENTS DATA=OUT.DISENRLC;
RUN;
```

I.4 ..\..\Q4_2004\PROGRAMS\ConsumerWatch\CONSUMERWATCH-CONUS.SAS - Run CONUS TRICARE Consumer Watch reports.

```
*****
*
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-CONUS.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*          TO PRODUCE EXCEL TABLE FOR CONUS DATA.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004.
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\LOADWEB\CONUS_Q.SD2
*          INTENT TO DISENROLL: DISENRL.SD2
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO.INC
*****
* ;

/*****/
/* UPDATE REGIONAL LIBNAMES */
/*****/

/* LIBNAMES for Regional Consumer Watch */
LIBNAME CURNTR '..\LOADWEB';

LIBNAME IN    '.';

/*****/
/* TIME PERIOD MACROS: UPDATE EACH QUARTER */
/*****/

%LET CURRNT   = 'October, 2003 to September, 2004';
%LET CURRNTQ  = Q4;

%LET PREV1    = 'July, 2003 to June, 2004';
%LET PREV1Q   = Q3;

%LET PREV2    = 'April, 2003 to March, 2004';
%LET PREV2Q   = Q2;

%LET PREV3    = 'January, 2003 to December, 2003';
%LET PREV3Q   = Q1;

TITLE "6077-420 DOD CONSUMER WATCH &CURRNTQ CY 2004";

%INCLUDE "CONSUMERWATCH-MACRO.INC";

%RUNCW(AREA=CONUS MHS,
       FOLDER=CONUSMHS,
       CURRENT=CURNTR.CONUS_Q);
```


I.5 ..\..\Q4_2004\PROGRAMS\ConsumerWatch\CONSUMERWATCH-R.SAS - Run regional TRICARE Consumer Watch reports.

```
*****
*
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-R.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*          TO PRODUCE EXCEL TABLE FOR REGIONS.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004 DATA.
*
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\LOADWEB\CONUS_Q.SD2
*          INTENT TO DISENROLL: DISENRL.SD2
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO.INC
*****
* ;

/*****/
/* UPDATE REGIONAL LIBNAMES */
/*****/

/* LIBNAMES for Regional Consumer Watch */
LIBNAME CURNTR '..\LOADWEB';

LIBNAME IN    '.';

/*****/
/* TIME PERIOD MACROS: UPDATE EACH QUARTER */
/*****/

%LET CURRNT   = 'October, 2003 to September, 2004';
%LET CURRNTQ  = Q4;

%LET PREV1    = 'July, 2003 to June, 2004';
%LET PREV1Q   = Q3;

%LET PREV2    = 'April, 2003 to March, 2004';
%LET PREV2Q   = Q2;

%LET PREV3    = 'January, 2003 to December, 2003';
%LET PREV3Q   = Q1;

TITLE "6077-420 DOD CONSUMER WATCH &CURRNTQ CY 2004";

%INCLUDE "CONSUMERWATCH-MACRO.INC";

%RUNCW(AREA=NORTH,
       FOLDER=North,
```

```
        CURRENT=CURNTR.CONUS_Q);  
%RUNCW(AREA=SOUTH,  
        FOLDER=South,  
        CURRENT=CURNTR.CONUS_Q);  
%RUNCW(AREA=WEST,  
        FOLDER=West,  
        CURRENT=CURNTR.CONUS_Q);  
%RUNCW(AREA=OVERSEAS,  
        FOLDER=Overseas,  
        CURRENT=CURNTR.CONUS_Q);
```

I.6 ..\..\Q4_2004\PROGRAMS\ConsumerWatch\CONSUMERWATCH-S.SAS - Run service affiliation TRICARE Consumer Watch reports.

```
*****
*
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-S.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*          TO PRODUCE EXCEL TABLE FOR SERVICE AFFILIATION.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004 DATA.
*
*
* INPUT  : DATA FROM CONSUMER REPORTS
*          (2004-Q4) Q4_2004\CONUS_Q.SD2
*          (2004-Q3) Q3_2004\CONUS_Q.SD2
*          (2004-Q2) Q2_2004\CONUS_Q.SD2
*          (2004-Q1 PREVENTIVE CARE ONLY) ..\..\Q1_2004\LOADWEB\CONUS_Q.SD2
*          INTENT TO DISENROLL
*          (ALL) DISENRL.SD2
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO.INC
*****
*;
```

LIBNAME CURNTR '..\LOADWEB';

LIBNAME IN '..';

```
/* ***** /
/* TIME PERIOD MACROS: UPDATE EACH QUARTER */
/* ***** /
```

```
%LET CURRNT = 'October, 2003 to September, 2004';
%LET CURRNTQ = Q4;
```

```
%LET PREV1 = 'July, 2003 to June, 2004';
%LET PREV1Q = Q3;
```

```
%LET PREV2 = 'April, 2003 to March, 2004';
%LET PREV2Q = Q2;
```

```
%LET PREV3 = 'January, 2003 to December, 2003';
%LET PREV3Q = Q1;
```

TITLE "6077-420 DOD CONSUMER WATCH &CURRNTQ CY 2004";

%INCLUDE "CONSUMERWATCH-MACRO.INC";

```
%RUNCW(AREA=NAVY,
        FOLDER=Navy,
        CURRENT=CURNTR.CONUS_Q);
%RUNCW(AREA=AIR FORCE,
```

```
FOLDER=AirForce,  
CURRENT=CURNTR.CONUS_Q);  
%RUNCW(AREA=ARMY,  
FOLDER=Army,  
CURRENT=CURNTR.CONUS_Q);
```

I.7 ..\.\.Q4_2004\PROGRAMS\ConsumerWatch\DISENRL.SAS - Calculate
 disenrollment scores for quarterly TRICARE Consumer Watch.

```

OPTIONS PS=63 LS=200 COMPRESS=NO ERRORS=2 NOCENTER SOURCE2 NOFMterr;
*****
*
*****
*
* PROJECT: 8860-420
* PROGRAM: DISENRL.SAS
* PURPOSE: To produce numbers that go into INTENT TO DISENROLL chart in
*          TRICARE consumer watch
* AUTHOR  : MIKI SATAKE and NATALIE JUSTH
* DATE    : 5/08/01
* UPDATED: 7/16/01 FOR QUARTER 2
* UPDATED: 10/01/01 FOR QUARTER 3
* UPDATED: 1/15/01 FOR QUARTER 4
* UPDATED: 4/11/02 FOR QUARTER 1 2002
* UPDATED: 7/2/02 FOR QUARTER 2 2002
* UPDATED: 10/11/02 FOR QUARTER 3 2002
* UPDATED: 11/12/02 FOR QUARTER 4 2002
* UPDATED: 4/3/03 FOR QUARTER 1 2003
* UPDATED: 5/19/03 FOR QUARTER 2 2003
* UPDATED: 8/28/03 FOR QUARTER 3 2003
* UPDATED: 11/14/03 FOR QUARTER 4 2003
* UPDATED: 05/18/2004 FOR QUARTER 1 2004 BY KEITH RATHBUN.
* UPDATED: 06/8/2004 FOR QUARTER 2 2004 BY KEITH RATHBUN.
* UPDATED: 09/28/2004 LUCY LU. CHANGING XREGION TO XTNEXREG IN QUATER 3 2004,
*          ADDING VARIABLE XTNEXREG TO PREVIOUS THREE QUATERS.
* UPDATED: 01/20/2005 FOR QUARTER 4 2003 BY LUCY LU.
*
*
* INPUT   : (2004-Q4) ..\.\.DATA\AFINAL\HCS044_1.SD2
*          (2004-Q3) ..\.\.\.Q3_2004\DATA\AFINAL\HCS043_1.SD2
*          (2004-Q2) ..\.\.\.Q2_2004\DATA\AFINAL\HCS042_1.SD2
*          (2004-Q1) ..\.\.\.Q1_2004\DATA\AFINAL\HCS041_1.SD2
*
* OUTPUT  : DISENRL.SD2
*****
*
*****
*
LIBNAME CURRNT V612 '..\.\.DATA\AFINAL';*1/20/05, LLU;
LIBNAME PRIOR1 V612 '..\.\.\.Q3_2004\DATA\AFINAL';
LIBNAME PRIOR2 V612 '..\.\.\.Q2_2004\DATA\AFINAL';
LIBNAME PRIOR3 V612 '..\.\.\.Q1_2004\DATA\AFINAL';

LIBNAME OUT V612 '.';

TITLE '6077-420 DOD CONSUMER WATCH Q4 2004';

PROC FORMAT;

VALUE XSRVAFF
  1 = "Army"
  2 = "Air Force"
  3 = "Navy";

```

RUN;

```
LIBNAME LIBRARY '..\..\DATA\AFINAL\FMTLIB';
DATA HCS044_1(KEEP=TOTAL CONUS H04055 XBNFGRP XENRLLMT WRWT XTNEXREG XSRVAFF
XINS_COV STRATUMN
                DEPVARD DENOMD);
SET CURRNT.HCS044_1;
TOTAL = 1;

IF SERVAFF = 'A' THEN XSRVAFF = 1;
  ELSE IF SERVAFF = 'F' THEN XSRVAFF = 2;
  ELSE IF SERVAFF = 'N' THEN XSRVAFF = 3;
FORMAT XSRVAFF XSRVAFF. XTNEXREG TNEX.;
STRATUMN = STRATUM + 0;
IF (H04055 IN (4,5) AND XBNFGRP IN (2,3,4) AND XENRLLMT = 2) THEN DEPVARD =
1;
  ELSE DEPVARD = 0;
IF (XBNFGRP IN (2,3,4) AND XENRLLMT = 2) THEN DENOMD = 1;
  ELSE DENOMD = 0;
```

RUN;

```
*LIBNAME LIBRARY '..\..\Q2_2004\DATA\AFINAL\FMTLIB';
DATA HCS043_1(KEEP=TOTAL CONUS H04055 XBNFGRP XENRLLMT WRWT XTNEXREG XSRVAFF
XINS_COV STRATUMN
                DEPVARD DENOMD);
SET PRIOR1.HCS043_1;
TOTAL = 1;

IF XREGION IN (1,2,5) THEN XTNEXREG=1;                /*LLU, 9/30/04*/
IF XREGION IN (3,4,6) THEN XTNEXREG=2;
IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG=3;
IF XREGION IN (13,14,15) THEN XTNEXREG=4;

IF SERVAFF = 'A' THEN XSRVAFF = 1;
  ELSE IF SERVAFF = 'F' THEN XSRVAFF = 2;
  ELSE IF SERVAFF = 'N' THEN XSRVAFF = 3;
FORMAT XSRVAFF XSRVAFF. XTNEXREG TNEX.;
STRATUMN = STRATUM + 0;
IF (H04055 IN (4,5) AND XBNFGRP IN (2,3,4) AND XENRLLMT = 2) THEN DEPVARD =
1;
  ELSE DEPVARD = 0;
IF (XBNFGRP IN (2,3,4) AND XENRLLMT = 2) THEN DENOMD = 1;
  ELSE DENOMD = 0;
```

RUN;

```
*LIBNAME LIBRARY '..\..\Q1_2004\DATA\AFINAL\FMTLIB';
DATA HCS042_1(KEEP=TOTAL CONUS H04055 XBNFGRP XENRLLMT WRWT XTNEXREG XSRVAFF
XINS_COV STRATUMN
                DEPVARD DENOMD);
SET PRIOR2.HCS042_1;
TOTAL = 1;

IF XREGION IN (1,2,5) THEN XTNEXREG=1;                /*LLU, 9/30/04*/
IF XREGION IN (3,4,6) THEN XTNEXREG=2;
IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG=3;
```

```

IF XREGION IN (13,14,15) THEN XTNEXREG=4;

IF SERVAFF = 'A' THEN XSRVAFF = 1;
ELSE IF SERVAFF = 'F' THEN XSRVAFF = 2;
ELSE IF SERVAFF = 'N' THEN XSRVAFF = 3;
FORMAT XSRVAFF XSRVAFF. XTNEXREG TNEX.;
STRATUMN = STRATUM + 0;
IF (H04055 IN (4,5) AND XBNFGRP IN (2,3,4) AND XENRLLMT = 2) THEN DEPVARD =
1;
ELSE DEPVARD = 0;
IF (XBNFGRP IN (2,3,4) AND XENRLLMT = 2) THEN DENOMD = 1;
ELSE DENOMD = 0;
RUN;

```

```

*LIBNAME LIBRARY '..\..\..\Q4_2003\DATA\AFINAL\FMTLIB';
DATA HCS041_1(KEEP=TOTAL CONUS H04055 XBNFGRP XENRLLMT WRWT XTNEXREG XSRVAFF
XINS_COV STRATUMN
DEPVARD DENOMD);
SET PRIOR3.HCS041_1;
TOTAL = 1;

```

```

IF XREGION IN (1,2,5) THEN XTNEXREG=1; /*LLU, 9/30/04*/
IF XREGION IN (3,4,6) THEN XTNEXREG=2;
IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG=3;
IF XREGION IN (13,14,15) THEN XTNEXREG=4;

```

```

IF SERVAFF = 'A' THEN XSRVAFF = 1;
ELSE IF SERVAFF = 'F' THEN XSRVAFF = 2;
ELSE IF SERVAFF = 'N' THEN XSRVAFF = 3;
FORMAT XSRVAFF XSRVAFF. XTNEXREG TNEX.;
STRATUMN = STRATUM + 0;
IF (H04055 IN (4,5) AND XBNFGRP IN (2,3,4) AND XENRLLMT = 2) THEN DEPVARD =
1;
ELSE DEPVARD = 0;
IF (XBNFGRP IN (2,3,4) AND XENRLLMT = 2) THEN DENOMD = 1;
ELSE DENOMD = 0;
RUN;

```

```

*****
*
*****
*
* Intent to Disenroll
*****
*
*****
*

```

```
TITLE2 'Intent to Disenroll';
```

```
%MACRO DISENRL (DATASET,QUARTER,BENTYPE,ROW,VAR);
```

```

/*****/
/* RUN SIGNIFICANCE TESTS */
/*****/

```

```

%MACRO RUNSE (DS,DEPVAR,INDEPVAR,NUMCOL,SUBPOP,QTR,BYVAR);
***CALCULATE VALUES FOR EACH COLUMN FOR ENTIRE POPULATION***;
PROC SORT DATA=&DS;
    BY STRATUMN;
RUN;

PROC DESCRIPT DATA=&DS DESIGN=STRWR /*NOPRINT*/;
    WEIGHT WRWT;***** FINAL SURVEY WEIGHT *****;
    NEST STRATUMN / MISSUNIT;
    VAR &DEPVAR;***** VARIABLES TO BE ESTIMATED**;
    SUBPOPN &SUBPOP;
    TABLES &INDEPVAR;
    SUBGROUP &INDEPVAR;
    LEVELS &NUMCOL;
    setenv/decwidth=6;
    PRINT /STYLE=NCHS;
    OUTPUT / TABLECELL=DEFAULT FILENAME=&QTR&BYVAR;
RUN;

PROC PRINT DATA=&QTR&BYVAR;
RUN;
%MEND RUNSE;

%RUNSE (HCS044_1,DEPVAR,XTNEXREG,4,(DENOMD=1),Q4,REG);           /*LLU, 1/20/05*/
%RUNSE (HCS044_1,DEPVAR,XSRVAFF,3,(DENOMD=1),Q4,SRV);
%RUNSE (HCS043_1,DEPVAR,XTNEXREG,4,(DENOMD=1),Q3,REG);
%RUNSE (HCS043_1,DEPVAR,XSRVAFF,3,(DENOMD=1),Q3,SRV);
%RUNSE (HCS042_1,DEPVAR,XTNEXREG,4,(DENOMD=1),Q2,REG);
%RUNSE (HCS042_1,DEPVAR,XSRVAFF,3,(DENOMD=1),Q2,SRV);
%RUNSE (HCS041_1,DEPVAR,XTNEXREG,4,(DENOMD=1),Q1,REG);
%RUNSE (HCS041_1,DEPVAR,XSRVAFF,3,(DENOMD=1),Q1,SRV);

%MACRO RUNSEC (DS,DEPVAR,SUBPOP,QTR);
***CALCULATE VALUES FOR EACH COLUMN FOR ENTIRE POPULATION***;
PROC SORT DATA=&DS;
    BY STRATUMN;
RUN;

PROC DESCRIPT DATA=&DS DESIGN=STRWR /*NOPRINT*/;
    WEIGHT WRWT;***** FINAL SURVEY WEIGHT *****;
    NEST STRATUMN / MISSUNIT;
    VAR &DEPVAR;***** VARIABLES TO BE ESTIMATED**;
    SUBPOPN &SUBPOP;
    setenv/decwidth=6;
    PRINT /STYLE=NCHS;
    OUTPUT / TABLECELL=DEFAULT FILENAME=&QTR;
RUN;

PROC PRINT DATA=&QTR;
RUN;
%MEND RUNSEC;

%RUNSEC (HCS044_1,DEPVAR,(DENOMD=1 AND CONUS=1),Q4);           /*LLU, 1/20/05*/
%RUNSEC (HCS043_1,DEPVAR,(DENOMD=1 AND CONUS=1),Q3);
%RUNSEC (HCS042_1,DEPVAR,(DENOMD=1 AND CONUS=1),Q2);
%RUNSEC (HCS041_1,DEPVAR,(DENOMD=1 AND CONUS=1),Q1);

%MACRO SIGFLAG(NUMCOL,QTR,BYVAR,INDEPVAR);

```

```

DATA N&QTR&BYVAR (KEEP=COL4 &INDEPVAR);
  MERGE &QTR(RENAME=(MEAN=DOM_MEAN SEMEAN=DOM_SE wsum=dom_w NSUM=DOM_N))
    &QTR&BYVAR;
  BY TABLENO;
  RETAIN NCOL 0;
  ARRAY COLUMNS COL1-COL&NUMCOL;
  IF &INDEPVAR > 0;
  NCOL+1;
  IF &INDEPVAR IN (1,2,3) THEN                                /*9/29/04 LLU, CHANGE TO
XTNEXREG CODE*/
    VARDIF = ((1 - 2*wSUM/DOM_w)*DOM_SE**2 + SEMEAN**2);
  IF &INDEPVAR =4 THEN VARDIF = DOM_SE**2 + SEMEAN**2;
  SEDIF = SQRT(VARDIF);
  N=MIN(NSUM,DOM_N);
  ***SIGNIFICANCE TEST***;
  IF SEDIF >0 THEN DO;                                         /*9/29/04 LLU,*/
  TESTVAL = 2*(1-PROBT(ABS(MEAN - DOM_MEAN) / SEDIF,N));
  PUT VARDIF= SEDIF= TESTVAL=;
  END;
  IF TESTVAL<.05 & MEAN>DOM_MEAN THEN COLUMNS(NCOL) = 1;
  ELSE IF TESTVAL <.05 & MEAN<DOM_MEAN THEN COLUMNS(NCOL) = -1;
  ELSE COLUMNS(NCOL) = 0;
  DO I=1 TO &NUMCOL;
    IF COLUMNS(I) NE . THEN COL4=COLUMNS(I);
  END;
RUN;

PROC PRINT DATA=N&QTR&BYVAR;
RUN;
%MEND SIGFLAG;

%SIGFLAG(4,Q4,REG,XTNEXREG);                                /*LLU, 1/20/05*/
%SIGFLAG(4,Q3,REG,XTNEXREG);
%SIGFLAG(4,Q2,REG,XTNEXREG);
%SIGFLAG(4,Q1,REG,XTNEXREG);
%SIGFLAG(3,Q4,SRV,XSRVAFF);
%SIGFLAG(3,Q3,SRV,XSRVAFF);
%SIGFLAG(3,Q2,SRV,XSRVAFF);
%SIGFLAG(3,Q1,SRV,XSRVAFF);

/*****/
/*MHS*/
/*****/

PROC FREQ DATA=&DATASET NOPRINT;
  WHERE (CONUS=1 AND &VAR IN (4,5) AND XBNFGRP IN (2,3,4) AND XENRLLMT=2);
  TABLES TOTAL / OUT=MHSNUM&QUARTER(RENAME=(COUNT=MHSNUM));
  WEIGHT WRWT;
RUN;
PROC FREQ DATA=&DATASET NOPRINT;
  WHERE (CONUS=1 AND XBNFGRP IN (2,3,4) AND XENRLLMT=2);
  TABLES TOTAL / OUT=MHSDEN&QUARTER(RENAME=(COUNT=MHSDEN));
  WEIGHT WRWT;
RUN;
/******/
/*UNWEIGHTED*/
/******/
PROC FREQ DATA=&DATASET NOPRINT;

```

```

WHERE (CONUS=1 AND XBNFGRP IN (2,3,4) AND XENRLMT=2);
TABLES TOTAL / OUT=MHSDEU&QUARTER(RENAME=(COUNT=MHSDENU));
RUN;

/*****/
/*Region*/
/*****/

PROC SORT DATA=&DATASET;BY XTNEXREG;RUN;
PROC FREQ DATA=&DATASET NOPRINT;
  WHERE (&VAR IN (4,5) AND XBNFGRP IN (2,3,4) AND XENRLMT=2);
  TABLES TOTAL / OUT=FIGDN&QUARTER(RENAME=(COUNT=FIGDNUM));
  WEIGHT WRWT;
  BY XTNEXREG;
RUN;
PROC FREQ DATA=&DATASET NOPRINT;
  WHERE (XBNFGRP IN (2,3,4) AND XENRLMT=2);
  TABLES TOTAL / OUT=FIGDD&QUARTER(RENAME=(COUNT=FIGDDEN));
  WEIGHT WRWT;
  BY XTNEXREG;
RUN;
/*****/
/*UNWEIGHTED*/
/*****/
PROC FREQ DATA=&DATASET NOPRINT;
  WHERE (XBNFGRP IN (2,3,4) AND XENRLMT=2);
  TABLES TOTAL / OUT=FIGDDU&QUARTER(RENAME=(COUNT=FIGDDENU));
  BY XTNEXREG;
RUN;

/*****/
/*Service Affiliation*/
/*****/

PROC SORT DATA=&DATASET;BY XSRVAFF;RUN;
PROC FREQ DATA=&DATASET NOPRINT;
  WHERE (&VAR IN (4,5) AND XBNFGRP IN (2,3,4) AND XENRLMT=2);
  TABLES TOTAL / OUT=FIGDSN&QUARTER(RENAME=(COUNT=FIGDNUMS));
  WEIGHT WRWT;
  BY XSRVAFF;
RUN;
PROC FREQ DATA=&DATASET NOPRINT;
  WHERE (XBNFGRP IN (2,3,4) AND XENRLMT=2);
  TABLES TOTAL / OUT=FIGDSD&QUARTER(RENAME=(COUNT=FIGDDENS));
  WEIGHT WRWT;
  BY XSRVAFF;
RUN;
/*****/
/*UNWEIGHTED*/
/*****/
PROC FREQ DATA=&DATASET NOPRINT;
  WHERE (XBNFGRP IN (2,3,4) AND XENRLMT=2);
  TABLES TOTAL / OUT=FGDSU&QUARTER(RENAME=(COUNT=FGDDENSU));
  BY XSRVAFF;
RUN;

DATA MHSD&QUARTER;
  MERGE MHSNUM&QUARTER MHSDEN&QUARTER MHSDEU&QUARTER;

```

```

BY TOTAL;
LENGTH BENTYPE $35;
BENTYPE = &BENTYPE;
ROW=&ROW;
IF (MHSDEN<200 OR MHSDENU<30) THEN COL2=.;
ELSE COL2 = (MHSNUM / MHSDEN)*100;
RUN;
DATA REGD&QUARTER;
MERGE FIGDN&QUARTER FIGDD&QUARTER FIGDDU&QUARTER N&QUARTER.REG;
BY XTNEXREG;
LENGTH BENTYPE $35;
BENTYPE = &BENTYPE;
ROW=&ROW;
IF (FIGDDEN<200 OR FIGDDENU<30) THEN COL3=.;
ELSE COL3 = (FIGDNUM / FIGDDEN)*100;
RUN;
DATA SRVD&QUARTER;
MERGE FIGDSN&QUARTER FIGDSD&QUARTER FGDSU&QUARTER N&QUARTER.SRV;
BY XSRVAFF;
LENGTH BENTYPE $35;
BENTYPE = &BENTYPE;
ROW=&ROW;
IF (FIGDDENS<200 OR FGDDENSU<30) THEN COL3=.;
ELSE COL3 = (FIGDNUMS / FIGDDENS)*100;
RUN;
DATA FIGD&QUARTER(DROP=TOTAL PERCENT MHSNUM MHSDEN MHSDENU FIGDNUM FIGDDEN
FIGDDENU FIGDNUMS FIGDDENS FGDDENSU);
SET MHS&QUARTER REGD&QUARTER SRVD&QUARTER;
LENGTH FIGURE $19;
FIGURE = 'INTENT TO DISENROLL';
RUN;
PROC PRINT;RUN;
%MEND DISENRL;

%DISENRL (HCS044_1,Q4, 'October, 2003 to September, 2004',34,H04055); /*LLU,
1/21/05*/
%DISENRL (HCS043_1,Q3, 'July, 2003 to June, 2004', 33,H04055);
%DISENRL (HCS042_1,Q2, 'April, 2003 to March, 2004', 32,H04055);
%DISENRL (HCS041_1,Q1, 'January, 2003 to December, 2003', 31,H04055);

*****
*****
*****
* Combine all temporary datasets into one dataset for inclusion in consumer
watch
*****
*****
*****;

DATA OUT.DISENRL;
SET FIGDQ1 FIGDQ2 FIGDQ3 FIGDQ4;
LENGTH REGION $20;
IF XTNEXREG=1 THEN REGION='NORTH'; *CHANGE TO TNEXREG, LLU 9/28/04;
ELSE IF XTNEXREG=2 THEN REGION='SOUTH';

```

```
ELSE IF XTNEXREG=3 THEN REGION='WEST';
ELSE IF XTNEXREG=4 THEN REGION='OVERSEAS';

IF XSRVAFF=1 THEN REGION='ARMY';
ELSE IF XSRVAFF=3 THEN REGION='NAVY';
ELSE IF XSRVAFF=2 THEN REGION='AIR FORCE';

PROC SORT;
  BY ROW;
RUN;
PROC PRINT;
RUN;
```

I.8 ..\..\Q4_2004\PROGRAMS\ConsumerWatch\CONSUMERWATCH-MACRO.INC - Produce numbers for quarterly Consumer Watch reports.

```

*****
*
* 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.
*
* INPUT   : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\LOADWEB\CONUS_Q.SD2
*          INTENT TO DISENROLL: DISENRL.SD2
* OUTPUT  : INTO EXCEL SPREADSHEET
*****
* ;

OPTIONS PS=60 LS=120 ERRORS=2 NOCENTER NOFMterr NOXWAIT SPOOL MPRINT;

%MACRO RUNCW (AREA=,          /* Region/Service/conus      */
              FOLDER=,       /* Folder containing excel template      */
              CURRENT=,      /* Libname and dataset for the current quarter */
              );

/* Change parameter for each area */
%LET VAL = &AREA.;

x "COPY &FOLDER.\TEMPLATE.XLS &FOLDER.\&FOLDER..XLS";

```

```

DATA _NULL_;
  X=SLEEP(3);
RUN;

X "START &FOLDER.\&FOLDER..XLS";
DATA _NULL_;
  X=SLEEP(3);
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 */
                QUARTER=      /* Data is processed for current quarter and each
of 3 previous quarters */
                );
DATA FIG&FIGURE&QUARTER FIGB&QUARTER(KEEP=SCORE);
  SET FIG&FIGURE&QUARTER;
  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;
        SCORE=SCORE-RSCORE;
RUN;
%MEND NEWSCORE;

%MACRO COMBDATA (FIGURE=      /* Figure number in consumer watch reports */
                );
DATA FIG&FIGURE(DROP=BSCORE);
    SET BENCH FIG&FIGURE.Q1 FIG&FIGURE.Q4 FIG&FIGURE.Q3 FIG&FIGURE.Q2;
    RETAIN BSCORE;
    IF REGION = 'Benchmark' THEN DO;
        ROW = 3;
        BSCORE=SCORE;
    END;
    ELSE IF TIMEPD = &PREV3 THEN DO;
        ROW = 4;
        SCORE=SCORE+BSCORE;
        IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
    END;
    ELSE IF TIMEPD = &PREV2 THEN DO;
        ROW = 5;
        SCORE=SCORE+BSCORE;
        IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
    END;
    ELSE IF TIMEPD = &PREV1 THEN DO;
        ROW = 6;
        SCORE=SCORE+BSCORE;
        IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
    END;
    ELSE IF TIMEPD = &CURRNT THEN DO;
        ROW=7;
        SCORE=SCORE+BSCORE;
    END;
    COL2 = SCORE / 100;
    COL3 = SIG;
RUN;
PROC SORT;
    BY ROW;
RUN;
%MEND COMBDATA;

```

```

*****
*
* 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=&CURRNT,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL", 'Benchmark'),

```

```

        REGCAT=("&VAL", 'Benchmark'),
        BENEFIT=('Health Care'),
        BENTYPE=('Composite'),
        TIMEPD=&CURRNT,
        OUTDATA=FIG1&CURRNTQ);
%GETDATA (DATASET=&CURRENT,
        MAJGRP='Prime Enrollees',
        REGION=("&VAL", 'Benchmark'),
        REGCAT=("&VAL", 'Benchmark'),
        BENEFIT=('Health Care'),
        BENTYPE=('Composite'),
        TIMEPD=&PREV1,
        OUTDATA=FIG1&PREV1Q);
%GETDATA (DATASET=&CURRENT,
        MAJGRP='Prime Enrollees',
        REGION=("&VAL", 'Benchmark'),
        REGCAT=("&VAL", 'Benchmark'),
        BENEFIT=('Health Care'),
        BENTYPE=('Composite'),
        TIMEPD=&PREV2,
        OUTDATA=FIG1&PREV2Q);
%GETDATA (DATASET=&CURRENT,
        MAJGRP='Prime Enrollees',
        REGION=("&VAL", 'Benchmark'),
        REGCAT=("&VAL", 'Benchmark'),
        BENEFIT=('Health Care'),
        BENTYPE=('Composite'),
        TIMEPD=&PREV3,
        OUTDATA=FIG1&PREV3Q);

%NEWSCORE (FIGURE=1,
        QUARTER=&CURRNTQ);
%NEWSCORE (FIGURE=1,
        QUARTER=&PREV1Q);
%NEWSCORE (FIGURE=1,
        QUARTER=&PREV2Q);
%NEWSCORE (FIGURE=1,
        QUARTER=&PREV3Q);

%COMBDATA (FIGURE=1);

*PROC PRINT;
RUN;

*****
* DDE LINK
*****;
FILENAME TBL DDE "EXCEL|RATINGS!R18C2:R22C3";

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';
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&CURRNT,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL", 'Benchmark'),
          REGCAT("&VAL", 'Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&CURRNT,
          OUTDATA=FIG2&CURRNTQ);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL", 'Benchmark'),
          REGCAT("&VAL", 'Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&PREV1,
          OUTDATA=FIG2&PREV1Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL", 'Benchmark'),
          REGCAT("&VAL", 'Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&PREV2,
          OUTDATA=FIG2&PREV2Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL", 'Benchmark'),
          REGCAT("&VAL", 'Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&PREV3,
          OUTDATA=FIG2&PREV3Q);

%NEWSCORE (FIGURE=2,
           QUARTER=&CURRNTQ);
%NEWSCORE (FIGURE=2,
           QUARTER=&PREV1Q);
%NEWSCORE (FIGURE=2,
           QUARTER=&PREV2Q);
%NEWSCORE (FIGURE=2,
           QUARTER=&PREV3Q);

%COMBDATA (FIGURE=2);

*PROC PRINT;
RUN;

```

```

*****
* DDE LINK (EXCEL file has to be open )
*****;
FILENAME TBL DDE "EXCEL|RATINGS!R18C6:R22C7";

DATA _NULL_;
  SET FIG2;
  FILE TBL NOTAB LRECL=200;
  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=('Primary Care Manager'),
  BENTYPE=('Composite'),
  TIMEPD=&CURRNT,
  OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
  MAJGRP='Prime Enrollees',
  REGION("&VAL",'Benchmark'),
  REGCAT("&VAL",'Benchmark'),
  BENEFIT=('Primary Care Manager'),
  BENTYPE=('Composite'),
  TIMEPD=&CURRNT,
  OUTDATA=FIG3&CURRNTQ);
%GETDATA (DATASET=&CURRENT,
  MAJGRP='Prime Enrollees',
  REGION("&VAL",'Benchmark'),
  REGCAT("&VAL",'Benchmark'),
  BENEFIT=('Primary Care Manager'),
  BENTYPE=('Composite'),
  TIMEPD=&PREV1,
  OUTDATA=FIG3&PREV1Q);
%GETDATA (DATASET=&CURRENT,
  MAJGRP='Prime Enrollees',
  REGION("&VAL",'Benchmark'),
  REGCAT("&VAL",'Benchmark'),
  BENEFIT=('Primary Care Manager'),
  BENTYPE=('Composite'),
  TIMEPD=&PREV2,
  OUTDATA=FIG3&PREV2Q);
%GETDATA (DATASET=&CURRENT,
  MAJGRP='Prime Enrollees',
  REGION("&VAL",'Benchmark'),
  REGCAT("&VAL",'Benchmark'),
  BENEFIT=('Primary Care Manager'),
  BENTYPE=('Composite'),
  TIMEPD=&PREV3,
  OUTDATA=FIG3&PREV3Q);

```

```

%NEWSCORE (FIGURE=3,
            QUARTER=&CURRNTQ);
%NEWSCORE (FIGURE=3,
            QUARTER=&PREV1Q);
%NEWSCORE (FIGURE=3,
            QUARTER=&PREV2Q);
%NEWSCORE (FIGURE=3,
            QUARTER=&PREV3Q);

%COMBDATA (FIGURE=3);

*PROC PRINT;
RUN;

*****
* DDE LINK (EXCEL file has to be open )
*****;
FILENAME TBL DDE "EXCEL|RATINGS!R18C10:R22C11";

DATA _NULL_;
  SET FIG3;
  FILE TBL NOTAB LRECL=200;
  PUT COL2 '09'X COL3;
RUN;

*****
*
* FIGURE 4: Intent to Disenroll
*****;
TITLE2 'Figure 4: Intent to Disenroll';
PROC FREQ NOPRINT DATA=IN.DISENRL;
  WHERE BENTYPE = &CURRNT
        AND FIGURE='INTENT TO DISENROLL'
        AND REGION = "&VAL";
  TABLES BENTYPE*REGION*FIGURE*COL3*COL4*ROW/ OUT=FIG4&CURRNTQ(DROP=COUNT
PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
  WHERE BENTYPE = &CURRNT
        AND FIGURE='INTENT TO DISENROLL'
        AND COL2 NE .;
  TABLES BENTYPE*REGION*FIGURE*COL2*ROW/ OUT=FIG4&CURRNTQ.C(DROP=COUNT
PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
  WHERE BENTYPE = &PREV1
        AND FIGURE='INTENT TO DISENROLL'
        AND REGION = "&VAL";
  TABLES BENTYPE*REGION*FIGURE*COL3*COL4*ROW/ OUT=FIG4&PREV1Q(DROP=COUNT
PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
  WHERE BENTYPE = &PREV1
        AND FIGURE='INTENT TO DISENROLL'
        AND COL2 NE .;
  TABLES BENTYPE*REGION*FIGURE*COL2*ROW/ OUT=FIG4&PREV1Q.C(DROP=COUNT PERCENT);
RUN;

```

```

PROC FREQ NOPRINT DATA=IN.DISENRL;
  WHERE BENTYPE = &PREV2
    AND FIGURE='INTENT TO DISENROLL'
    AND REGION = "&VAL";
  TABLES BENTYPE*REGION*FIGURE*COL3*COL4*ROW/ OUT=FIG4&PREV2Q(DROP=COUNT
PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
  WHERE BENTYPE = &PREV2
    AND FIGURE='INTENT TO DISENROLL'
    AND COL2 NE .;
  TABLES BENTYPE*REGION*FIGURE*COL2*ROW/ OUT=FIG4&PREV2Q.C(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
  WHERE BENTYPE = &PREV3
    AND FIGURE='INTENT TO DISENROLL'
    AND REGION = "&VAL";
  TABLES BENTYPE*REGION*FIGURE*COL3*COL4*ROW/ OUT=FIG4&PREV3Q(DROP=COUNT
PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
  WHERE BENTYPE = &PREV3
    AND FIGURE='INTENT TO DISENROLL'
    AND COL2 NE .;
  TABLES BENTYPE*REGION*FIGURE*COL2*ROW/ OUT=FIG4&PREV3Q.C(DROP=COUNT PERCENT);
RUN;

DATA COL2(DROP=COL3 COL4)
  COL3(DROP=COL2 COL4)
  COL4(DROP=COL2 COL3);
  SET FIG4Q1 FIG4Q1C FIG4Q4 FIG4Q4C FIG4Q3 FIG4Q3C FIG4Q2 FIG4Q2C;

  IF COL2>=0 THEN OUTPUT COL2;
  IF COL3>=0 THEN OUTPUT COL3;
  IF COL4>=-1 THEN OUTPUT COL4;
RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;

DATA FIG4;
  MERGE COL2 COL3 COL4;
  BY ROW;
RUN;

*TITLE2 'FIGURE 4';
*PROC PRINT;
RUN;

*****
* DDE LINK (EXCEL file has to be open )
*****;
FILENAME TBL DDE "EXCEL|DISENROLL!R19C2:R22C4";

DATA _NULL_;
  SET FIG4;

```

```

FILE TBL NOTAB LRECL=200;
PUT COL2 '09'X COL3 '09'X COL4;
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=&CURRNT,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL",'Benchmark'),
          REGCAT("&VAL",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=&CURRNT,
          OUTDATA=FIG5&CURRNTQ);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL",'Benchmark'),
          REGCAT("&VAL",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=&PREV1,
          OUTDATA=FIG5&PREV1Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL",'Benchmark'),
          REGCAT("&VAL",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=&PREV2,
          OUTDATA=FIG5&PREV2Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL",'Benchmark'),
          REGCAT("&VAL",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=&PREV3,
          OUTDATA=FIG5&PREV3Q);

%MACRO COMPSCORE (QUARTER=, /*Data is processed for current quarter and each
of 3 previous quarters*/
                  FIGNUM= /*Use macro for figures 5, 6, and 7 */
                  );
DATA FIG&FIGNUM.Q&QUARTER FIGB&QUARTER(KEEP=SCORE BENEFIT SIG);
SET FIG&FIGNUM.Q&QUARTER;
IF REGION = 'Benchmark' THEN OUTPUT FIGB&QUARTER;

```

```

        ELSE OUTPUT FIG&FIGNUM.Q&QUARTER;
RUN;
PROC SORT DATA=FIG&FIGNUM.Q&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.Q&QUARTER;
    SET FIG&FIGNUM.Q&QUARTER;

KEEP MAJGRP REGION BENEFIT BENTYPE TIMEPD SCORE SIG;
RUN;

DATA FIG&FIGNUM.Q&QUARTER(DROP=RSCORE);
    MERGE FIGB&QUARTER(RENAME=(SCORE=RSCORE))
        FIG&FIGNUM.Q&QUARTER;
    BY BENEFIT;
    SCORE=SCORE-RSCORE;
RUN;
%MEND COMPSCORE;

%COMPSCORE (QUARTER=1,
            FIGNUM=5);
%COMPSCORE (QUARTER=2,
            FIGNUM=5);
%COMPSCORE (QUARTER=3,
            FIGNUM=5);
%COMPSCORE (QUARTER=4,
            FIGNUM=5);

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
    COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
    COL4(DROP=SCORE RENAME=(SCORE1=COL4))
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 FIG5Q4 FIG5Q3 FIG5Q2 FIG5Q1;
BY BENEFIT;
RETAIN BSCORE;
IF REGION = 'Benchmark' THEN DO;
    BSCORE=SCORE;
    ROW = 18;
    SCORE1 = SCORE;
END;
ELSE IF TIMEPD = &PREV3 THEN DO;
    ROW = 18;
    SCORE=BSCORE+SCORE;
    IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;

```

/*LLU 10/8/04, TO PRESERVE

```

        ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = &PREV2 THEN DO;
        ROW = 19;
        SCORE=BSCORE+SCORE;
        IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
        ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = &PREV1 THEN DO;
        ROW = 20;
        SCORE=BSCORE+SCORE;
        IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
        ELSE SCORE1=SCORE;
    END;
    ELSE IF TIMEPD = &CURRNT 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;

*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';

```

```

%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors
Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&CURRNT,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL",'Benchmark'),
          REGCAT("&VAL",'Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors
Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&CURRNT,
          OUTDATA=FIG6&CURRNTQ);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL",'Benchmark'),
          REGCAT("&VAL",'Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors
Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&PREV1,
          OUTDATA=FIG6&PREV1Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL",'Benchmark'),
          REGCAT("&VAL",'Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors
Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&PREV2,
          OUTDATA=FIG6&PREV2Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP='Prime Enrollees',
          REGION("&VAL",'Benchmark'),
          REGCAT("&VAL",'Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors
Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&PREV3,
          OUTDATA=FIG6&PREV3Q);

%COMPSCORE (QUARTER=1,
            FIGNUM=6);
%COMPSCORE (QUARTER=2,
            FIGNUM=6);
%COMPSCORE (QUARTER=3,
            FIGNUM=6);
%COMPSCORE (QUARTER=4,
            FIGNUM=6);

```

```

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 FIG6Q4 FIG6Q3 FIG6Q2 FIG6Q1;
BY BENEFIT;
RETAIN BSCORE;
IF REGION = 'Benchmark' THEN DO;
  BSCORE=SCORE;
  ROW = 18;
  SCORE1 = SCORE;
END;
ELSE IF TIMEPD = &PREV3 THEN DO;
  ROW = 18;
  SCORE=BSCORE+SCORE;
  IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
  ELSE SCORE1=SCORE;
END;
ELSE IF TIMEPD = &PREV2 THEN DO;
  ROW = 19;
  SCORE=BSCORE+SCORE;
  IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
  ELSE SCORE1=SCORE;
END;
ELSE IF TIMEPD = &PREV1 THEN DO;
  ROW = 20;
  SCORE=BSCORE+SCORE;
  IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
  ELSE SCORE1=SCORE;
END;
ELSE IF TIMEPD = &CURRNT THEN DO;
  ROW = 21;
  SCORE=BSCORE+SCORE;
  SCORE1 = SCORE;
END;

  IF (BENEFIT = 'Courteous and Helpful Office Staff' AND REGION NE 'Benchmark')
THEN OUTPUT COL2 COL6;
  IF (BENEFIT = 'Courteous and Helpful Office Staff' AND REGION = 'Benchmark')
THEN OUTPUT COL3;
  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=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 6. LLU 10/7/04*/
```

```
DATA FIG6A;  
  MERGE COL2 COL6;  
  BY ROW;  
RUN;
```

```
DATA FIG6B;  
  MERGE COL4 COL7;  
  BY ROW;  
RUN;
```

```
DATA FIG6AB;  
  SET FIG6A FIG6B;  
  BY ROW;  
RUN;
```

```
DATA FIG6;  
  MERGE COL2 COL3 COL4(KEEP=ROW COL4)  
  COL5 COL6 COL7;  
  BY ROW;  
RUN;
```

```
*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 COL2;  
RUN;
```

```
FILENAME TBL DDE "EXCEL|COMPOSITES!R18C9:R18C9";
```

```
DATA _NULL_;  
  SET FIG6;  
  FILE TBL NOTAB LRECL=200;  
  PUT COL3;  
RUN;
```

```
FILENAME TBL DDE "EXCEL|COMPOSITES!R18C10:R21C10";
```

```
DATA _NULL_;  
  SET FIG6;  
  FILE TBL NOTAB LRECL=200;  
  PUT COL4;  
RUN;
```

```
FILENAME TBL DDE "EXCEL|COMPOSITES!R18C11:R18C11";
```

```

DATA _NULL_ ;
  SET FIG6 ;
  FILE TBL NOTAB LRECL=200 ;
  PUT COL5 ;
RUN ;

```

```
FILENAME TBL DDE "EXCEL|COMPOSITES!R23C8:R26C10";
```

```

DATA _NULL_ ;
  SET FIG6 ;
  FILE TBL NOTAB LRECL=200 ;
  PUT COL6 '09'X '09'X 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=&CURRNT,
  OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
  MAJGRP='Prime Enrollees',
  REGION=("&VAL",'Benchmark'),
  REGCAT=("&VAL",'Benchmark'),
  BENEFIT=('Customer Service','Claims Processing'),
  BENTYPE=('Composite'),
  TIMEPD=&CURRNT,
  OUTDATA=FIG7&CURRNTQ);
%GETDATA (DATASET=&CURRENT,
  MAJGRP='Prime Enrollees',
  REGION=("&VAL",'Benchmark'),
  REGCAT=("&VAL",'Benchmark'),
  BENEFIT=('Customer Service','Claims Processing'),
  BENTYPE=('Composite'),
  TIMEPD=&PREV1,
  OUTDATA=FIG7&PREV1Q);
%GETDATA (DATASET=&CURRENT,
  MAJGRP='Prime Enrollees',
  REGION=("&VAL",'Benchmark'),
  REGCAT=("&VAL",'Benchmark'),
  BENEFIT=('Customer Service','Claims Processing'),
  BENTYPE=('Composite'),
  TIMEPD=&PREV2,
  OUTDATA=FIG7&PREV2Q);
%GETDATA (DATASET=&CURRENT,
  MAJGRP='Prime Enrollees',
  REGION=("&VAL",'Benchmark'),
  REGCAT=("&VAL",'Benchmark'),
  BENEFIT=('Customer Service','Claims Processing'),

```

```

        BENTYPE=('Composite'),
        TIMEPD=&PREV3,
        OUTDATA=FIG7&PREV3Q);

%COMPSCORE (QUARTER=1,
            FIGNUM=7);
%COMPSCORE (QUARTER=2,
            FIGNUM=7);
%COMPSCORE (QUARTER=3,
            FIGNUM=7);
%COMPSCORE (QUARTER=4,
            FIGNUM=7);

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 FIG7Q4 FIG7Q3 FIG7Q2 FIG7Q1;
BY BENEFIT;
RETAIN BSCORE;
IF REGION = 'Benchmark' THEN DO;
    BSCORE=SCORE;
    ROW = 18;
    SCORE1 = SCORE;
END;
ELSE IF TIMEPD = &PREV3 THEN DO;
    ROW = 18;
    SCORE=BSCORE+SCORE;
    IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
    ELSE SCORE1=SCORE;
END;
ELSE IF TIMEPD = &PREV2 THEN DO;
    ROW = 19;
    SCORE=BSCORE+SCORE;
    IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
    ELSE SCORE1=SCORE;
END;
ELSE IF TIMEPD = &PREV1 THEN DO;
    ROW = 20;
    SCORE=BSCORE+SCORE;
    IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
    ELSE SCORE1=SCORE;
END;
ELSE IF TIMEPD = &CURRNT 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;

*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
* CHANGED MAJGRP TO 'Prime Enrollees' (from 'All Users') in Q2_2002
* ADD SMOKING CASSATION TO PREVENTIVE CARE TABLE
*****
*

```

```

PROC FREQ NOPRINT DATA=&CURRENT;
  WHERE MAJGRP IN ('Prime Enrollees','Benchmark')
    AND REGION = "&VAL"
    AND REGCAT = "&VAL"
    AND BENEFIT IN ('Preventive Care','Smoking Cessation')
    AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal
Care',

```

```

'Cholesterol Testing', 'Non-Smoking Rate','Counselled To Quit')
  AND TIMEPD = &CURRNT;

```

```

  TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/
OUT=TAB1_&CURRNTQ(DROP=COUNT PERCENT);

```

```

  TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*N_OBS/
OUT=TAB2_&CURRNTQ(DROP=COUNT PERCENT);

```

```

RUN;

```

```

PROC FREQ NOPRINT DATA=&CURRENT;
  WHERE MAJGRP = 'Prime Enrollees'
    AND REGION = "&VAL"
    AND REGCAT = "&VAL"
    AND BENEFIT IN ('Preventive Care','Smoking Cessation')
    AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal
Care',

```

```

'Cholesterol Testing', 'Non-Smoking Rate','Counselled To Quit')
  AND TIMEPD = &PREV1;

```

```

  TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/
OUT=TAB1_&PREV1Q(DROP=COUNT PERCENT);

```

```

RUN;

```

```

PROC FREQ NOPRINT DATA=&CURRENT;
  WHERE MAJGRP = 'Prime Enrollees'
    AND REGION = "&VAL"

```

```

AND REGCAT = "&VAL"
AND BENEFIT IN ('Preventive Care','Smoking Cessation')
AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal
Care',
'Cholesterol Testing','Non-Smoking Rate','Counselled To Quit')
AND TIMEPD = &PREV2;
TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/
OUT=TAB1_&PREV2Q(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=&CURRENT;
WHERE MAJGRP = 'Prime Enrollees'
AND REGION = "&VAL"
AND REGCAT = "&VAL"
AND BENEFIT IN ('Preventive Care','Smoking Cessation')
AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal
Care',
'Cholesterol Testing','Non-Smoking Rate','Counselled To Quit')
AND TIMEPD = &PREV3;
TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/
OUT=TAB1_&PREV3Q(DROP=COUNT PERCENT);
RUN;
DATA TAB1&CURRNTQ;
SET TAB1_&CURRNTQ;
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='Cholesterol Testing' 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='Cholesterol Testing' 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&CURRNTQ;
SET TAB2_&CURRNTQ;
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='Cholesterol Testing' 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&PREV1Q;
SET TAB1_&PREV1Q;
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='Cholesterol Testing' 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&PREV2Q;

```

```

SET TAB1_&PREV2Q;
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='Cholesterol Testing' 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;
proc print;
RUN;
DATA TAB1&PREV3Q;
SET TAB1_&PREV3Q;
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='Cholesterol Testing' 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&PREV3Q TAB1&PREV2Q TAB1&PREV1Q TAB1&CURRNTQ TAB2&CURRNTQ;
    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;
*TITLE2 'TABLE 1';
*PROC PRINT;
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;
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;
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 10/07/2004
*****
****;
```

```

PROC SORT DATA=FIG1(DROP=SCORE);
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.Q1
    CFIG&I.Q2
    CFIG&I.Q3
    CFIG&I.Q4
;

```

```
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 <=3 THEN DO;
SCORE2=COL2*100;
SIG2=COL3;
END;

```

```

ELSE IF FIG >3 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 "CONSUMER WATCH, &AREA ";
TITLE2 "*****";
```

```
PROC PRINT L NOOBS;
TITLE3 "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=5, TITL=Access composites);
```

```
%COMPARE(I=6, TITL=Office composites);
%COMPARE(I=7, TITL=Claims/Service composites);
```

```
%MEND RUNCW;
```

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APPENDIX J

SUDAAN CODE FOR VARIANCE ESTIMATION

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```

*****
*   program:    SUDTEST.SAS
*   purpose:    to demonstrate SAS callable SUDAAN procedures to get
*               SEs for survey estimates
*   input:      j:\dod\q1_2004\data\Afinal\hcs041_1.sd2
*****
*
options ps=79 ls=132;
libname in 'j:\dod\q1_2004\data\Afinal\hcs041_1.sd2';
libname library 'j:\dod\q1_2004\data\Afinal\fmtlib';

***SORT FILE BY STRATUM***;
data hcsq1;
set in.hcs041_1;
***make xregion = 7 to xregion = 8 for tables ***;
if xregion = 7 then xregion = 8;
run;

PROC SORT DATA=HCSQ1(keep=xregion h04014 h04015 h04056 xenrllmt
                    wrwt poststr);
BY poststr;
RUN;

*****
if you want to estimate means
*****;
title 'Output file from SUDAAN for estimating means';
title2 'Overall ratings among all beneficiaries in the past 12 months';
title3 'who saw a specilist (H04014=1) for each region (XREGION)';

PROC DESCRIPT DATA=HCSQ1 DESIGN=STRWR NOPRINT;
WEIGHT WRWT;          ***** sampling/FINAL SURVEY WEIGHT *****;
NEST POSTSTR / missunit;
VAR H04015;           ***** VARIABLES TO BE ESTIMATED**;;
SUBPOPN H04014=1;    *****specify domains to be reported;
TABLES XREGION;
SUBGROUP XREGION;
LEVELS 16;
OUTPUT MEAN SEMEAN deffmean/ TABLECELL=DEFAULT FILENAME=mnsDAT;
***SEMEAN=standard error and deffmean=design effect**;
RUN;

proc print data=mnsdat;
run;

*****
if you want to estimate percentage
*****;
title 'Output file from SUDAAN for estimating percentages';
title2 'Those who last had a blood pressure reading less than 12 months;
title3 'ago, 1 to 2 years ago, and more than 2years ago (H04056)';
title4 'by TRICARE enrollment (XENRLLMT) in region 3';
TITLE5 'PROC CROSSTAB';
PROC CROSSTAB DATA=HCSQ1 DESIGN=STRWR NOPRINT;
WEIGHT WRWT;

```

```
NEST POSTSTR / missunit;
SUBPOPN XREGION=3;
SUBGROUP H04056 XENRLLMT;
LEVELS 3 5;
TABLES H04056*XENRLLMT;          /* DEP * INDEP */
OUTPUT NSUM WSUM SEWGT COLPER SECOL
  / TABLECELL=DEFAULT FILENAME=OUTDAT;
RUN;

proc print data=outdat;
run;
```