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2010 Health Care Survey of DoD Beneficiaries:

Child Technical Manual

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Chapter 1

Introduction

The 2010 Child 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 parents' opinions concerning their child's experience in the military health system (MHS). The Child HCSDB is closely modeled to the Consumer Assessment of Health Plans Survey (CAHPS) 4.0 survey instrument so that findings for children in the MHS can be compared to the results of CAHPS surveys of privately insured children in the private sector. The Child HCSDB is intended to answer the following questions:

- How *satisfied* are sponsors of children in the MHS with their child's health care and their health plan?
- Does *access* for children at military and civilian facilities meet TRICARE standards?
- What aspects of MHS care contribute most to beneficiary satisfaction with their child's health care experiences? With which aspects are beneficiaries least satisfied?
- What are the demographic characteristics of children in the MHS and their sponsors?
- How do children in the MHS compare with children in the private sector on issues related to satisfaction and access to care?
- What are special health care needs of MHS children?
- Are special health care needs met by TRICARE?

The HCSDB is a 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). Altarum prepared the sampling frame, which consists of selected variables for each MHS beneficiary in the Defense Enrollment Eligibility Reporting System (DEERS) database in December 2009. 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). The frame includes children of those on active duty, those retired from military careers and surviving children of people who had military careers.

Mathematica Policy Research, Inc. (Mathematica, Washington, D.C.) prepared the sample of 36,000 child beneficiaries (Rahman et al, 2010). Synovate fielded the survey from March 2010 to June 2010. Mathematica analyzed the survey data, reported on the results, and prepared this document, the "2010 Health Care Survey of DoD Beneficiaries: Child Technical Manual".

This manual is designed as a reference tool to be used by analysts 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 report. The manual 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

This section represents an overview of the methodology used in the survey. A sample of 36,000 parents or sponsors of MHS beneficiaries younger than 18 years of age (dependent, non-active duty) received a 2010 Child HCSDB questionnaire between March 2010 and June 2010.

1. Sample Design

The 2010 child sample design is based on three sample stratifications—enrollment status, geographic area, and age group. Enrollment type is defined by enrollment in TRICARE Prime with a military primary care manager (PCM), enrollment in TRICARE Prime with a civilian PCM, and not enrolled in TRICARE Prime. The effect of this stratification is to allocate a greater proportion of the sample to those enrolled in Prime and a smaller proportion to those not enrolled in Prime.

Geographic area refers to the beneficiary's TRICARE Next Generation of Contracts (TNEX) regional assignment. The beneficiary's regional assignment is determined by the MTF that bears the financial responsibility for the beneficiary's health care. Beneficiaries were assigned to one of four regions: (1) North, (2) South, (3) West, and (4) Other.

Beneficiaries were assigned to one of three age groups: younger than 6 years old, between 6 and 12, and between 13 and 17 years old. Sampling procedures ensured that only one child per household was surveyed. A summary of sampling stratification is given in the chart in Appendix F.

2. 2010 Child HCSDB

The HCSDB is an annual health care survey that was first fielded in 1995 for active duty military personnel, retirees, and their adult family members. In 1996 and 1997, the survey was expanded to include topics related to health care of children. In those years, the survey consisted of two separate questionnaires: Form A for adults and Form C for children's topics. The 1998 HCSDB did not include a child survey. In 2000, fielding of the child survey was resumed. The child survey assesses parents' satisfaction with their child's access to health care, TRICARE Prime, communication and customer service related to pediatric care. Note that prior to 2002, the title of the survey referred to the survey reference period. For example, the survey fielded in 2000 described children's experiences beginning in 1999 and was known as the 1999 Child HCSDB. Beginning in 2002, the survey title refers to the year the survey was fielded.

The 1999, 2000, 2002, and 2003 Child HCSDB were closely modeled on CAHPS 2.0H survey instruments. In 2004, 2005, 2006, 2007, and 2008, questions in the Child HCSDB were modified to conform to CAHPS 3.0 so that findings for children in the MHS could be compared with the results of recent CAHPS surveys of privately insured children. In 2009 and 2010, questions were closely modeled on CAHPS 4.0. Most of the survey questions are identical to the CAHPS questions. CAHPS is a survey program sponsored by the Agency for Health Care Research and Quality (AHRQ), U.S. Department of Health and Human Services, and the Picker Institute. The program is designed to monitor the satisfaction and access of civilian health care plan beneficiaries. A few of the questions in the Child HCSDB survey are "CAHPS-like" but are modified slightly to better fit the MHS context; some questions are unique to issues related to TRICARE.

The Child HCSDB covers the following topics:

- **Health Plan.** This section collects data on TRICARE Prime enrollment and the use of supplemental insurance and/or other private insurance by the child in the past 12 months.
- **Your Child's Health Care in the Last 12 Months.** This section collects information on the care children of DoD beneficiaries received in the past 12 months. These questions cover topics such as availability of providers and rating of child's health care. These questions are similar in content and format to questions in CAHPS.
- **Emergency and After Hours Care.** Questions in this supplement are about a child's use of an emergency room and access to after hours care. Respondents are asked questions on

whether their decision to go to the emergency room was made after contacting a doctor or health professional or considering any other alternative for treatment. They are also asked if the reason for the emergency visit was due to an accident/injury or for the treatment of another health problem and also if they were admitted for an overnight stay.

- **Your Child's Personal Doctor.** In this section, respondents are asked about their relationship with their child's personal doctor. They are asked to rate their child's personal doctor on a scale of 0 to 10 where 0 is the worst and 10 is the best.
- **Getting Health Care from a Specialist.** This section collects information about the child's need for and access to care from specialists. Respondents rate the specialist that their child sees most frequently on a scale from 0 to 10 where 0 is the worst and 10 is the best. In addition, respondents are questioned about the child's mental and emotional health and need for and access to mental health specialist.
- **Your Child's Health Plan.** This section is designed to measure beneficiaries' satisfaction with their child's primary health plan. Respondents are asked to rate their child's health plan on a scale of 0 to 10, where 0 is the worst and 10 is the best. Additionally, respondents are asked questions on finding and understanding written materials from their child's health plan, customer service, and processing paperwork.
- **Prescription Medications.** This section collects information on obtaining prescription medication for beneficiaries' children.
- **About Your Child and You.** This section collects demographic information about the child, including general and special health conditions, age, gender, and race. Respondents also report their age, gender, education level, and relationship to the child. This section includes a battery of questions designed to identify children with special health care needs.

3. Survey Response

The survey was fielded by mail. Out of the initial sample of 36,000, a total of 7,931 complete and unduplicated questionnaires were returned either by mail or Internet, for a unweighted response rate of 22.2. Please refer to Section 4.A for the details on response rate calculation.

4. Database Development

Mathematica edited the data, selected the records for inclusion in the final database, and constructed variables to be used in the reports. To ensure that the survey data was representative of the DEERS population, Mathematica developed weights to take account of the initial sampling and the sampled individuals who chose not to respond to the survey.

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, and weighting procedures. Chapter 4 describes how the database was analyzed. The description includes rules for developing response rates, 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
- Appendix B: Materials sent to the respondents during the fielding of the survey
- Appendix C: Data Processing Architecture
- Appendix D: Coding Scheme
- Appendix E: SAS Code for File Development
- Appendix F: Child Sampling Stratification Summary

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Chapter 2

Survey of Children

This chapter presents information on the survey administration cycle for the 2010 Child Health Care Survey of DoD Beneficiaries (HCSDB), with specific details on the survey mailing cycle and the number of surveys returned. Those who received the mailing were given the option of responding on the Internet instead of by mail. This chapter describes the mailings and the surveys received by mail. Both mail and Internet responses are included in the dataset, frequency tables and response rate calculations.

A. SURVEY OPERATIONS ACTIVITIES

Operational support for the Child HCSDB involved four mailings to beneficiaries between 31 March 2010 to 16 June 2010.

The mailings include:

1. Pre-Notification Letter – Letter of explanation encouraging participation
2. Questionnaire 1 – The survey, including a brief letter of explanation
3. Postcard – A reminder to complete the survey and a thank you for completion
4. Questionnaire 2 – The survey, including a brief letter of explanation.

The Pre-Notification letter includes instructions on how to do the survey via the Internet. This change was initiated in Quarter II, FY2007. Prior to that, the Internet survey option was first given to the beneficiaries in the letter accompanying the Questionnaire 1 mailing.

A change initiated in Quarter I, FY2008 was to send the respondent a double postcard which can be closed with a wafer seal. This enabled Synovate to provide the respondent with their Internet password in order to complete the survey online.

B. SAMPLE

The Child HCSDB was conducted during the 3rd quarter of the fiscal year and surveyed 36,000 child beneficiaries.

C. SURVEY PROCESSING

Synovate applies a Bar Code, Control Number (MIQ) & 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=adult 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

D. ADDRESSES

The HCSDB is designed so that beneficiaries may receive up to four mailings. Synovate may collect up to seven address changes for each beneficiary in order to maximize the receipt rate for mailing. Addresses from Center for Health Care Strategies, Inc (CHCS) were used starting in Quarter I, 2008.

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

1. Respondent Updated
2. USPS Updated
3. Updated CHCS
4. Updated Residential
5. Updated Sponsor
6. Updated Unit
7. National Change of Address (NCOA)
8. Original CHCS
9. Original Residential
10. Original Sponsor
11. Original Unit

The origin of the addresses is as follows:

- Altarum/DEERS Addresses

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

  Altarum also provides updates on each of the four addresses prior to the Questionnaire, Postcard and 2nd Questionnaire mailings. Synovate records these addresses as CHCS Updated, Residential Updated, Sponsor Updated, Unit Updated.

- NCOA Address

  Upon receipt of the initial sample and prior to the Pre-Notification mailing, Synovate sends the first available address for each beneficiary to a NCOA vendor for updating and hygiene services. The updated address returned by the vendor is marked as the NCOA address.

- Respondent Address Changes

  Respondents were able to report address and status changes via regular mail, telephone, voicemail, fax, and email. Address changes submitted by the 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 2.1 gives the address breakdown for each mailing by Beneficiary Category.

TABLE 2.1

FREQUENCY OF ADDRESS BY BENEFICIARY CATEGORY – SAMPLE

	Dependent of Active Duty (DA)	Dependent of Guard / Reserve (DGR)	Dependent of Inactive Guard / Reserve (IDG)	Dependent of Retiree (DR)	Survivor (DS)	Other (OTH)	Total
PRENOTIFICATION LETTER	**18133**	**4708**	**2137**	**10155**	**492**	**261**	**35886**
NCOA Updated CHCS	45 0.13%	4 0.01%	0 0.00%	10 0.03%	1 0.00%	0 0.00%	60 0.17%
Original CHCS	2100 5.85%	80 0.22%	7 0.02%	503 1.40%	18 0.05%	3 0.01%	2711 7.55%
NCOA Updated Residence	1008 2.81%	293 0.82%	133 0.37%	715 1.99%	44 0.12%	38 0.11%	2231 6.22%
Original Residence	14955 41.67%	4317 12.03%	1996 5.56%	8889 24.77%	428 1.19%	219 0.61%	30804 85.84%
NCOA Updated Sponsor	2 0.01%	0 0.00%	0 0.00%	2 0.01%	0 0.00%	0 0.00%	4 0.01%
Original Sponsor	23 0.06%	14 0.04%	1 0.00%	36 0.10%	1 0.00%	1 0.00%	76 0.21%
QUESTIONNAIRE 1	**17605**	**4545**	**2058**	**9736**	**472**	**215**	**34631**
Respondent/USPS Update	13 0.04%	2 0.01%	3 0.01%	7 0.02%	0 0.00%	1 0.00%	26 0.08%
NCOA Updated CHCS	44 0.13%	4 0.01%	0 0.00%	10 0.03%	0 0.00%	0 0.00%	58 0.17%
Default CHCS	304 0.88%	27 0.08%	13 0.04%	138 0.40%	9 0.03%	15 0.04%	506 1.46%
Original CHCS	2010 5.80%	76 0.22%	7 0.02%	469 1.35%	18 0.05%	3 0.01%	2583 7.46%
NOCA Updated Residence	959 2.77%	282 0.81%	128 0.37%	682 1.97%	40 0.12%	31 0.09%	2122 6.13%
Default Residence	102 0.29%	40 0.12%	26 0.08%	82 0.24%	12 0.03%	2 0.01%	264 0.76%
Original Residence	13820 39.91%	4008 11.57%	1844 5.32%	8068 23.30%	375 1.08%	157 0.45%	28272 81.64%
NCOA Updated Sponsor	2 0.01%	0 0.00%	0 0.00%	2 0.01%	0 0.00%	0 0.00%	4 0.01%
Default Sponsor	335 0.97%	93 0.27%	36 0.10%	247 0.71%	17 0.05%	5 0.01%	733 2.12%
Original Sponsor	16 0.05%	13 0.04%	1 0.00%	31 0.09%	1 0.00%	1 0.00%	63 0.18%

TABLE 2.1 CONTINUED

	Dependent of Active Duty (DA)	Dependent of Guard/ Reserve (DGR)	Dependent of Inactive Guard/ Reserve (IDG)	Dependent of Retiree (DR)	Survivor (DS)	Other (OTH)	Total
POSTCARD	**17418**	**4500**	**2038**	**9532**	**466**	**215**	**34169**
Respondent/USPS Update	13 0.04%	2 0.01%	3 0.01%	7 0.02%	0 0.00%	1 0.00%	26 0.08%
NCOA Updated CHCS	42 0.12%	4 0.01%	0 0.00%	10 0.03%	0 0.00%	0 0.00%	56 0.16%
Default CHCS	304 0.89%	27 0.08%	13 0.04%	137 0.40%	9 0.03%	15 0.04%	505 1.48%
Original CHCS	1982 5.80%	74 0.22%	7 0.02%	456 1.33%	17 0.05%	3 0.01%	2539 7.43%
NCOA Updated Residence	947 2.77%	282 0.83%	127 0.37%	674 1.97%	40 0.12%	31 0.09%	2101 6.15%
Default Residence	102 0.30%	40 0.12%	26 0.08%	82 0.24%	12 0.04%	2 0.01%	264 0.77%
Original Residence	13677 40.03%	3967 11.61%	1825 5.34%	7888 23.09%	370 1.08%	157 0.46%	27884 81.61%
NCOA Updated Sponsor	2 0.01%	0 0.00%	0 0.00%	2 0.01%	0 0.00%	0 0.00%	4 0.01%
Default Sponsor	333 0.97%	93 0.27%	36 0.11%	246 0.72%	17 0.05%	5 0.01%	730 2.14%
Original Sponsor	16 0.05%	11 0.03%	1 0.00%	30 0.09%	1 0.00%	1 0.00%	60 0.18%
QUESTIONNAIRE 2	**16402**	**4192**	**1910**	**8536**	**410**	**208**	**31658**
Respondent/ USPS Updated	440 1.39%	74 0.23%	41 0.13%	103 0.33%	7 0.02%	8 0.03%	673 2.13%
NCOA Updated CHCS	41 0.13%	4 0.01%	0 0.00%	9 0.03%	0 0.00%	0 0.00%	54 0.17%
Default CHCS	1 0.00%	0 0.00%	0 0.00%	1 0.00%	1 0.00%	1 0.00%	4 0.01%
Altarum Updated CHCS	514 1.62%	41 0.13%	22 0.07%	197 0.62%	10 0.03%	20 0.06%	804 2.54%
Original CHCS	1788 5.65%	65 0.21%	6 0.02%	400 1.26%	14 0.04%	3 0.01%	2276 7.19%
NCOA Updated Residence	875 2.76%	262 0.83%	116 0.37%	596 1.88%	36 0.11%	30 0.09%	1915 6.05%
Default Residence	0 0.00%	0 0.00%	1 0.00%	0 0.00%	1 0.00%	0 0.00%	2 0.01%
Original Residence	12131 38.32%	3576 11.30%	1659 5.24%	6732 21.26%	312 0.99%	133 0.42%	24543 77.53%
NCOA Updated Sponsor	1 0.00%	0 0.00%	0 0.00%	2 0.01%	0 0.00%	0 0.00%	3 0.01%
Altarum Updated Sponsor	595 1.88%	159 0.50%	63 0.20%	469 1.48%	29 0.09%	12 0.04%	1327 4.19%
Default Sponsor	3 0.01%	1 0.00%	1 0.00%	0 0.00%	0 0.00%	0 0.00%	5 0.02%
Original Sponsor	13 0.04%	10 0.03%	1 0.00%	27 0.09%	0 0.00%	1 0.00%	52 0.16%

E. SURVEY ADMINISTRATION TIMELINE

File Receipt	11 Mar 10
NCOA Update	12 Mar 10
Pre-Notification	31 Mar 10
Questionnaire 1	21 Apr 10
Postcard	6 May 10
Altarum-DEERS Update	4 May 10
Questionnaire 2	19 May 10
Close of Field	16 Jun 10
File to MPR	25 Jun 10
Final Report to DoD	30 Jun 10

F. DISPOSITION CODES

Synovate assignes disposition codes to each sample member as the information is received and questionnaire is returned. These codes are outlined below.

- 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 fielding date, retired. Survey was returned blank along with information that the beneficiary left the military after fielding date, divorced after fielding date, or retired. These sample members were eligible.

- FLAG_FIN=7
  Returned blank – not eligible on fielding date. Survey was returned blank along with information that the beneficiary was not eligible for Military Health System Plan on fielding 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 had unknown eligibility.

- 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. The information came in by phone. 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 fielding date, retired. Survey was not returned, beneficiary left service after fielding date, divorced after fielding date, or retired. These sample members were eligible.

- FLAG_FIN=15
  No return – not eligible on fielding date. Survey was not returned, beneficiary was not eligible for Military Health System Plan on fielding date. These sample members were ineligible.

  Example: Beneficiary turned 21 and is no longer covered under parents' plan.

- 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.

  Examples: Beneficiary claims they have not used benefits in past 12 months.
  Beneficiary is away at college, on a religious mission, lives overseas.
  Received information that beneficiary chosen for survey does not speak English well enough to participate.

- FLAG_FIN=17
  No return – no reason. Survey was not returned, beneficiary gave no reason. These sample members had unknown eligibility.

- FLAG_FIN=18
  Postal Non Deliverable (PND) – no address remaining. All addresses were attempted, mailing was returned PND. These sample members had unknown eligibility.

- 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. These sample members had unknown eligibility.

- 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. These sample members had unknown eligibility.

- FLAG_FIN=21
  Beneficiary provides written documentation declining to participate but doesn't specify a reason. These sample members were eligible.

- 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. These sample members had unknown eligibility.

- FLAG_FIN=23
  Returned blank – deployed. Survey was returned blank along with information that the beneficiary was deployed. These sample members were eligible.

- FLAG_FIN=24
  No return – deployed. Survey was not returned, beneficiary was deployed. These sample members were eligible.

- FLAG_FIN=25
  Deceased. Beneficiary coded as deceased due to refresh sample sent by Altarum. These sample members were ineligible.

- FLAG_FIN=26
  No match. Not eligible indicated by DEERS update

Table 2.2 documents the final disposition of the survey sample by each beneficiary group.

TABLE 2.2

FREQUENCY OF DISPOSITION BY BENEFICIARY CATEGORY – SAMPLE

	Dependent of Active Duty (DA)	Dependent of Guard/ Reserve (DGR)	Dependent of Inactive Guard/ Reserve (IDG)	Dependent of Retiree (DR)	Survivor (DS)	Other (OTH)	Total
RETURNED	**3356**	**991**	**439**	**3526**	**150**	**9**	**8471**
Completed (1)	3272 9.03%	965 2.66%	428 1.18%	3447 9.51%	146 0.40%	9 0.02%	8267 22.80%
Ineligible (2)	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%
Deceased (4)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Incarcerated or Permanently Incapacitated (5)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Left Military or divorced after 1.31.10, retired (6)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Not Eligible on 1.31.10 (7)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Other Eligible (8)	1 0.00%	0 0.00%	0 0.00%	3 0.01%	1 0.00%	0 0.00%	5 0.01%
No Reason (9)	83 0.23%	26 0.07%	11 0.03%	76 0.21%	3 0.01%	0 0.00%	199 0.55%
NO RETURN	**13513**	**3504**	**1595**	**6261**	**286**	**139**	**25298**
Temporarily Ill or Incapacitated (10)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Active Refusal (11)	9 0.02%	4 0.01%	0 0.00%	9 0.02%	0 0.00%	0 0.00%	22 0.06%
Deceased (12)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Incarcerated or Permanently Incapacitated (13)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Left Military or divorced after 1.31.10, retired (14)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Not Eligible on 1.31.10 (15)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%

Table 2.2 (continued)

	Dependent of Active Duty (DA)	Dependent of Guard/ Reserve (DGR)	Dependent of Inactive Guard/ Reserve (IDG)	Dependent of Retiree (DR)	Survivor (DS)	Other (OTH)	Total
Other Eligible (16)	8 0.02%	2 0.01%	1 0.00%	10 0.03%	0 0.00%	1 0.00%	22 0.06%
No Reason (17)	13496 37.23%	3498 9.65%	1594 4.40%	6242 17.22%	286 0.79%	138 0.38%	25254 69.66%
PND	**1287**	**225**	**93**	**476**	**65**	**42**	**2188**
No Address Remaining (18)	1221 3.37%	219 0.60%	90 0.25%	468 1.29%	61 0.17%	40 0.11%	2099 5.79%
Address Remains at Close of Field (19)	49 0.14%	6 0.02%	3 0.01%	7 0.02%	3 0.01%	2 0.01%	70 0.19%
No Address at Start of Mailing (20)	17 0.05%	0 0.00%	0 0.00%	1 0.00%	1 0.00%	0 0.00%	19 0.05%
MISCELLANEOUS	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Written Refusal without Reason (21)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 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%	0 0.00%
DEPLOYED	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Returned Blank (23)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
No Return (24)	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
SAMPLE REFRESH	**129**	**17**	**23**	**14**	**2**	**109**	**294**
Deceased Indicated by Altarum-DEERS Update(25)	2 0.01%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	2 0.01%
Not Eligible Indicated by Altarum-DEERS Update (26)	127 0.35%	17 0.05%	23 0.06%	14 0.04%	2 0.01%	109 0.30%	292 0.81%
TOTALS	**18285**	**4737**	**2150**	**10277**	**503**	**299**	**36251**
YIELD RATE	**17.89%**	**20.37%**	**19.91%**	**33.54%**	**29.03%**	**3.01%**	**22.80%**

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Chapter 3

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; constructing variables; and weighting.

A. DATABASE DESIGN

The 2010 Child HCSDB consists of variables from various sources. When Synovate delivered the file to Mathematica after fielding the sample, the following types of variables were present:

- DEERS information on beneficiary group, social security number, sex, age, etc.
- Sampling variables used to place beneficiaries in appropriate strata
- Questionnaire responses
- Synovate information from fielding the sample, such as scan date and flags developed during the fielding to assist us in determining eligibility

Mathematica added 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

Mathematica also removed any personally identifiable information such as social security number.

In addition, Mathematica updated and cleaned the questionnaire responses using the Coding Scheme tables found in Appendix D. This year the final file does not include both the original and recoded responses, but only the cleaned 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 database by source and briefly describes each variable. For specific information on variable location within the database, refer to the "2010 Health Care Survey of DoD Beneficiaries: Child Codebook and User's Guide".

1. Data Sources

a. Sampling Variables

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

b. DEERS

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

c. Questionnaire Responses

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

d. Survey Fielding Variables

In the process of fielding the survey, Synovate 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 D) has a flag associated with it that indicates the pattern of original responses and any recodes that were done. For example, the table for Note 5 has a flag N5.

f. Constructed Variables

Mathematica constructed additional variables that were used in the child report cards. 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

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

- To compensate for variable probabilities of selection
- To adjust for differential response rates
- To improve the precision of survey-based estimates through poststratification

Weighting procedures are discussed in section 3.E.

TABLE 3.1

VARIABLES IN THE 2010 CHILD HCSDB DATA FILE

SAMPLE VARIABLES	
MPRID	- Unique MPR Identifier
MPCSMPL	- MPCSMPL - Military Personnel Category
SVCSMPL	- SVCSMPL - Branch of Service
SEXSMPL	- SEXSMPL - Sex
AGESMPL	- AGESMPL - Age (As of December 31, 2008)
BGCSMPL	- BGCSMPL - Beneficiary Group
ENBGSMPL	- Enrollment by beneficiary category
ENLSMPL	- ENLSMPL - Enrollment Sampling Group
STRATUM	- Sampling STRATUM
TNEXREG	- Beneficiary's TNEX Region
TNEXSMPL	- TNEXSMPL - Beneficiary TNEX region
BWT	- BWT - Basic Sampling Weight
DEERS VARIABLES	
RACEETHN	- Race/Ethnic Code
PCM	- Primary Manager Code (CIV or MIL)
PNTYPCD	- Person Type Code
DBENCAT	- Beneficiary Category
DSPONSVC	- Derived Sponsor Branch of Service
PATCAT	- Aggregated Beneficiary Category
ACV	- ACV - Alternate Care Value
QUESTIONNAIRE RESPONSES	
C10001	- Are you adult responsible for child
C10002A	- Last 12 mos child covered by TRICARE Prime
C10002B	- Last 12 mos child covered by TRICARE Extra/Standard
C10002C	- Last 12 mos child covered by civilian HMO
C10002D	- Last 12 mos child covered by other civilian insurance
C10002E	- Last 12 mos child covered by Medicaid
C10002F	- Last 12 mos child covered by Uniform Services Family Health Plan(USFHP)
C10002G	- Last 12 mos child covered by Federal Employees Health Benefit Program(FEHBP)
C10002H	- Last 12 mos not sure who child is covered by
C10002I	- Last 12 mos child was not covered by health plan
C10002J	- Last 12 mos child covered by government health insurance from a Non-US country
C10002K	- Last 12 mos child covered by TRICARE Reserve Select
C10002L	- Last 12 mos child covered by other government program
C10003	- Last 12 mos Which health plan did you use most for child's health care
C10004	- Last 12 mos number months in a row child enrolled in health plan
C10005	- Last 12 mos type of facility child used most often
C10006	- Last 12 mos have illness/injury that child needed care right away
C10007	- Last 12 mos, did child get needed care as soon as wanted
C10008	- Last 12 mos not counting times child needed immediate care did you make appointment for regular/routine healthcare
C10009	- Last 12 mos how often child got appointment for care as soon as wanted
C10010	- Last 12 mos times child to doctor's office/clinic (excluding ER)
C10011	- Rating of child's healthcare in last 12 mos
C10012	- Last 12 mos, times child to ER for care
C10013	- Child visit ER to treat accident or injury or other problem
C10014	- Before going to ER were you able to contact a doctor or other health professional
C10015	- Doctor or health professional tell you to take child to ER
C10016	- Why did you take child to ER instead of doctor's office or clinic
C10017	- Child admitted to the hospital for an overnight stay
C10018	- In last 12 mos did child need visit to doctor's office or clinic for after hours care

C10019 - In last 12 mos how easy to get after hours care for child
C10020A - Not easy to get after hours care: did not know where to go
C10020B - Not easy to get after hours care: could not find list of doctor's offices or clinics in network open for after hours care
C10020C - Not easy to get after hours care: doctor's office or clinic too far away
C10020D - Not easy to get after hours care: office or clinic hours did not meet your needs
C10020E - Not easy to get after hours care for other reason
C10021 - Does child have personal Dr/Nurse
C10022 - Past 12 mos number visits child had with personal doctor
C10023 - Past 12 mos how often did child's personal doctor explain things to you
C10024 - Past 12 mos how often did child's personal doctor listen carefully
C10025 - Past 12 mos how often child's personal doctor respect what had to say
C10026 - Child able to talk to doctors about his or her health care
C10027 - Last 12 mos how often does doctor explain in way for child to understand
C10028 - Last 12 mos how often did doctor spend enough time with child
C10029 - Last 12 mos did doctor talk about feeling/growing/behaving
C10030 - Rating of child's personal Dr/Nurse
C10031 - Had same personal doctor or nurse before joining this health plan
C10032 - How much problem to get personal Dr/Nurse
C10033 - Last 12 mos did child get care from more than one kind of health care provider
C10034 - Last 12 mos someone from health plan/Dr's office helped coordinate child's care from different services
C10035 - Child has medical, behavioral, or other condition lasting more than 3 months
C10036 - Dr understands medical, behavioral, or other condition's effect on child's daily life
C10037 - Dr understands medical, behavioral, or other condition's effect on family's daily life
C10038 - In last 12 mos try to get appointment for child with specialist
C10039 - In last 12 mos how easy to get appointment for child with specialist
C10040A - Not easy to get specialist: child's doctor did not think specialist was needed
C10040B - Not easy to get specialist: child's health plan approval delayed
C10040C - Not easy to get specialist: unsure where to find list of specialists in network
C10040D - Not easy to get specialist: specialists too far away
C10040E - Not easy to get specialist: not enough specialists to choose from
C10040F - Not easy to get specialist: specialist did not belong to child's health plan
C10040G - Not easy to get specialist: could not get appointment at convenient time
C10040H - Not easy to get specialist: other reason
C10041 - In last 12 mos number specialists child has seen
C10042 - Rating of specialist child saw most often in last 12 mos
C10043 - Last 12 mos was specialist same doctor as child's personal doctor
C10044 - Rating of child's mental or emotional health
C10045 - Last 12 mos did you or doctor think child needed mental health services
C10046 - Last 12 mos did child see mental health specialist
C10047A - Reason mental health specialist not seen: did not think child needed to visit specialist
C10047B - Reason mental health specialist not seen: child's personal Dr was able to help
C10047D - Reason mental health specialist not seen: not enough choice of specialist
C10047E - Reason mental health specialist not seen: specialist was too far
C10047F - Reason mental health specialist not seen: wanted specialist not in child's health plan or network
C10047G - Reason mental health specialist not seen: could not get appointment at convenient time
C10047H - Reason mental health specialist not seen: wanted specialist not taking new patients
C10047I - Reason mental health specialist not seen: other
C10047J - Reason mental health specialist not seen: not sure how to locate specialist in child's health plan or network
C10047K - Reason mental health specialist not seen: couldn't find a mental health specialist
C10047L - Reason mental health specialist not seen: plan would not approve services
C10047M - Reason mental health specialist not seen: couldn't find a mental health specialist who understood the effects of military deployment
C10047N - Reason mental health specialist not seen: couldn't find a mental health specialist that

would treat your child's condition
C10047O - Reason mental health specialist not seen: couldn't find a specialist in a facility accessible for persons with disabilities
C10048 - Last 12 mos how often child get needed care from mental health specialist
C10049 - Last 12 mos how often did you use the services of a Case Manager/Coordinator or Behavioral Health Case Manager to assist obtaining care your child needed from a mental health specialist/facility
C10050 - In last 12 mos did you try to get care, tests, treatment for child through health plan
C10051 - In last 12 mos ease of getting care, test, or treatment
C10052 - Last 12 mos did you look for information in written materials or on Internet
C10053 - In last 12 mos how often written material or web provide needed info about child's health plan
C10054 - Last 12 mos did you call customer service to get info
C10055 - In last 12 mos how often customer service at health plan give needed info
C10056 - In last 12 mos how often customer service treat you with courtesy and respect
C10057 - Last 12 mos did child's health plan give you forms to fill out
C10058 - In last 12 mos how often were forms from health plan easy to fill out
C10059 - Rating of experience with child's health plan
C10060 - Last 12 mos child get prescription or you refilled child's prescription
C10061 - In last 12 mos how often easy to get prescription for child through health plan
C10062 - Someone from health plan or doctor's office help get child's prescription
C10063 - Did anyone provide patient education on side effects of prescription medications
C10064 - Did anyone provide information on lab tests/follow-up related to prescription medications
C10065 - Did anyone inform child about not sharing prescription medications
C10066 - Rate child's overall health
C10067 - Child currently need or use medicine prescribed by doctor
C10068 - Medicine: medical, behavioral, or other condition
C10069 - Condition expected to last at least 12 mos
C10070 - Child needs or uses more medical, mental,educational services than is usual
C10071 - Uses more services: because of medical, behavioral, or other health condition
C10072 - Greater use of services for condition that has lasted or is expected to last at least 12 mos
C10073 - Child limited or prevented in ability to do things most children of same age do
C10074 - Limited: medical, behavioral, other condition
C10075 - Limited: condition expected to last at least 12 mos
C10076 - Does child need special therapy
C10077 - Therapy: medical, behavioral, other condition
C10078 - Therapy: condition expected to last at least 12 mos
C10079 - Child have problem for which gets treatment or counseling
C10080 - Treatment counseling: condition expected to last at least 12 mos
C10081 - Child's disorder requires care from specialist
C10082 - Family enrolled in EFMP
C10083A - Child not enrolled EFMP: not eligible
C10083B - Child not enrolled EFMP: programs unknown
C10083C - Child not enrolled EFMP: did not want duty limits
C10083D - Child not enrolled EFMP: services not needed
C10083E - Child not enrolled EFMP: EFMP not offered by sponsors service branch
C10083F - Child not enrolled EFMP: child does not live with sponsor and not required to enroll
C10083G - Child not enrolled EFMP: other reason
C10084 - Ever returned to update child's status at EFMP
C10085A - Child receives services under PFPWD/ECHO
C10085B - Child receives services under ICMP-PEC
C10085C - Child receives services under CCTP
C10085D - Child doesn't receive PFPWD/ECHO/ICMP-PEC/CCTP
C10086A - Doctor or nurse says: child has anxiety problems
C10086B - Doctor or nurse says: child has attention problems

C10086C	- Doctor or nurse says: child has conduct problems
C10086D	- Doctor or nurse says: child has depression
C10086E	- Doctor or nurse says: child has development delay/mental retardation
C10086F	- Doctor or nurse says: child has learning problems/disability
C10086G	- Doctor or nurse says: child has sleep disturbance
C10086H	- Doctor or nurse says: child has other problems
C10086I	- Doctor or nurse says: child has self-injurious behavior
C10087F	- Feet portion of child's height without shoes
C10087I	- Inches portion of child's height without shoes
C10088	- Child's weight without shoes on in pounds
C10089	- In last 12 mos, child's doctor discuss child's weight
C10090	- Did you want child's doctor to discuss child's weight
C10091	- How many fruit and vegetable servings child eats on average day
C10092	- Past 7 days: number times child ate fast food
C10093	- Past 7 days: times child participated in hard physical activity for at least 20 mins
C10094	- Past 7 days: times child participated in easier phyiscal activity for at least 30 mins
C10095	- Past 7 days: how many hrs did child watch TV
C10096	- Past 7 days: how many hrs did child play video games
C10097	- How old is your child
C10098	- Is child male or female
C10099	- Has child ever had the HPV vaccination
C10100	- How many HPV shots received
C10101	- Past 10 years has child received tetanus shot
C10102	- Tetanus shot given in 2005 or later
C10103	- Did most recent tetanus shot include whooping cough vaccine
C10104	- In last 12 mos has child had flu vaccination
C10105	- Prefer civilian or military health care for your child
C10106	- Is child Hispanic/Latino
C10106A	- Child Hispanic/Latino: no
C10106B	- Child Hispanic: Mexican/Mexican American/Chicano
C10106C	- Child Hispanic: Puerto Rican
C10106D	- Child Hispanic: Cuban
C10106E	- Child Hispanic: other Spanish/Hispanic/Latino
C10107A	- Child race: White
C10107B	- Child race: Black
C10107C	- Child race: American Indian/Alaskan
C10107D	- Child race: Asian
C10107E	- Child race: Native Hawaiian/Pacific Islander
C10108	- Your age now
C10109	- Are you male or female
C10110	- Highest grade/level you completed
C10111	- How are you related to the policy holder
C10112	- How related to child
C10113	- In last 12 mos, was service member in household deployed
SURVEY FIELDING VARIABLES	
FNSTATUS	- Final Status
ONTIME	- On time indicator
KEYCOUNT	- # of Key Questions Answered
FLAG_FIN	- Final Disposition
DUPFLAG	- Multiple Response Indicator
WEB	- Web/mail-out survey indicator
CODING SCHEME FLAGS AND COUNTS	
N1	- Coding Scheme Note 1
N2	- Coding Scheme Note 2
N3	- Coding Scheme Note 3
N4	- Coding Scheme Note 4
N5	- Coding Scheme Note 5

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
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
N19	- Coding Scheme Note 19
N20	- Coding Scheme Note 20
N21	- Coding Scheme Note 21
N22	- Coding Scheme Note 22
N23	- Coding Scheme Note 23
N24	- Coding Scheme Note 24
N25	- Coding Scheme Note 25
N26	- Coding Scheme Note 26
N27	- Coding Scheme Note 27
N28	- Coding Scheme Note 28
N29	- Coding Scheme Note 29
N30	- Coding Scheme Note 30
N31	- Coding Scheme Note 31
N32A	- Coding Scheme Note 32A
N32B	- Coding Scheme Note 32B
N33	- Coding Scheme Note 33
N34	- Coding Scheme Note 34
N35	- Coding Scheme Note 35
MISS_1	- Count of: violates Skip Pattern
MISS_4	- Count of: incomplete grid error
MISS_5	- Count of: don't know or not sure
MISS_6	- Count of: not applicable - valid skip
MISS_7	- Count of: out-of-range error
MISS_9	- Count of: no response - invalid skip
MISS_TOT	- Total number of missing responses
CONSTRUCTED VARIABLES	
XSEXA	- Male or Female – R
CONUS	- CONUS - CONUS/OCONUS Indicator
XENRLLMT	- Enrollment in TRICARE Prime
XENR_PCM	- Enrollment by PCM type
XINS_COV	- Insurance Coverage
XBNFGRP	- Constructed Beneficiary Group
XBMIPCT	- Body Mass Index Percentile
XBMICAT	- Body Mass Index Category
XTNEXREG	- TNEX Region
KMILOP	- Outpatient visits to military facility
KCIVOP	- Outpatient visits to civilian facility
KCIVINS	- Beneficiary covered by civilian insurance
POST STRATIFICATION	
POSTSTR	- Post Stratification Cell
ADJWT	- ADJWT -Adjusted Weight
POP	- DEERS population by post stratification cell
WEIGHTS	
WRWT	- Final Weight

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
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WRWT41 - Replicated/JackKnife Weight 41
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WRWT60 - Replicated/JackKnife Weight 60

2. Variable Naming Conventions

To preserve continuity with survey data from previous years, Mathematica followed the same variable naming conventions used in 2010 as for the 1999, 2000, 2002, 2003, 2004, 2005, 2006, 2007, 2008, and 2009 Child survey data. Variable naming conventions for the 2010 Child HCSDB are shown in Table 3.2. The public use files for the child survey will contain only recoded variables.

TABLE 3.2

NAMING CONVENTIONS FOR 2010 CHILD HCSDB VARIABLES
(VARIABLES REPRESENTING SURVEY QUESTIONS)

1st Character: Survey Type	2nd – 3rd Characters: Survey Year	4th – 6th Characters: Question #	Additional Characters: Additional Information
C= Health Beneficiaries (17 and younger, Child Questionnaire)	10	001-113	A to O are used to label responses associated with a multiple response question

(CONSTRUCTED VARIABLES)

1st Characters: Variable Group	Additional Characters: Additional Information
N=Coding scheme notes	Number referring to Note, e.g., N2
X=Constructed independent variable	Descriptive text, e.g., XENRLLMT
K=Constructed dependent variables	Descriptive text, e.g., KMILOP (total number of outpatient visits to military facility)
W=Quarterly weighting variables	Descriptive text, e.g., WRWT for the overall final quarterly weight; Number referring to replicate weights, e.g., WRWT10

3. Missing Value Conventions

The 2010 conventions for missing variables are the same as the 2010 Adult HCSDB conventions and the child HCSDB in prior years. All missing value conventions used in the 2010 Child HCSDB are shown in Table 3.3

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
-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. CLEANING AND EDITING

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

- Checks for multiple surveys returned for any one person
- Range checks for appropriate values within a single question
- Logic checks for consistent responses throughout the questionnaire

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

1. Scan Review

Synovate 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 Synovate Editing and Coding

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

3. Duplicate or Multiple Surveys

Synovate delivered to Mathematica a file containing one record for every beneficiary in the sample, plus additional records for every duplicate survey or multiple surveys received from any beneficiary. These duplicates and multiples were eliminated during record selection, and only the most complete questionnaire in the group was retained in the final database. Record selection is discussed in Section 3.C.

4. Removal of Sensitive or Confidential Information

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

5. Initial Frequencies

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

6. Data Cleaning and Recoding of Variables

Mathematica's plan for data quality for the child questionnaire is found in the 2010 Child 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 D. 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 E.2.

a. 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 2010 Child Coding Scheme (see Appendix D) 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.

b. Missing Values

Synovate initially encoded any question with a missing response to a SAS missing value code of '.'. After verifying skip patterns, Mathematica recoded some of these responses to reflect valid skips (SAS missing value code of '.N'). The complete list of codes for types of missing values such as incomplete grids, and questions that should not have been answered is shown in Table 3.3.

Occasionally, missing questionnaire responses can be inferred by examining other responses. For example, if a respondent fails to answer Question 8 regarding appointments made by sponsors for their child for regular or routine care, but answers Question 9 about how often their child got an appointment for regular or routine care as soon as they wanted, we can reason that they did make an appointment in the past 12 months. Using this technique, we successfully recoded some missing questionnaire responses to legitimate responses.

7. Quality Assurance

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

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

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 Synovate for each sampled beneficiary. This information is contained in the FLAG_FIN variable and is described in Table 3.4.

TABLE 3.4

FLAG_FIN VARIABLE

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 12/31/09 , or retired	Eligible
7	Returned blank	Information sent that beneficiary was not eligible on 12/31/09	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

Value	Questionnaire Return Disposition	Reason/Explanation Given	Eligibility
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 12/31/09, or retired. Information came in by phone	Eligible
15	No return	Not eligible on 12/31/09. 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	Survey was returned blank along with information that the beneficiary was deployed.	Eligible
24	No return- deployed	Survey was not returned, beneficiary was 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 on December 31, 2009, that is, not deceased, not incarcerated, and 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, divorce, or no longer being in the MHS as of December 31, 2009 (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, 21 key questions were adapted from the complete questionnaire rule for the CAHPS 4.0. The key questions are: C10003, C10004, C10005, C10006, C10008, C10010, C10012, C10031, C10038, C10052, C10054, C10058, C10059, C10066, C10098, C10106, C10108, C10109, C10110, C10112, and the race indicator. If eleven 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 Altarum address update

G3-1 consists of ineligible beneficiaries who responded to the survey request, but told us that 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 non-deliverable/no address, postal non-deliverable/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 242 duplicate questionnaires in the data set Synovate 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. If one of a pair of questionnaires belongs to Group 3 (FNSTATUS = 3, i.e., ineligible), then we regarded the questionnaire as being ineligible. However, if questionnaires from the same beneficiary have FNSTATUS code values of 31 and 32, we retained the value of 32.

Only beneficiaries with FNSTATUS = 11 were retained in the final child HCSDB file. All other records were dropped.

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 2010. 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 E.

1. Demographic Variables

a. Sex (XSEXA)

This variable uses SEXSMPL and responses to gender specific questions to update the sex variable.

1 = Male
2 = Female

```
/* 1/21/98 use SEXSMPL & responses to gender specific questions */
/* set imputed FMALE based on gender specific questions */


  ARRAY fmaleval C10099 C10100
                ;

  cntfmale=0;
  DO OVER fmaleval;          /* HPV*/
    IF fmaleval not in (.) THEN cntfmale=cntfmale+1;
  END;

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

  IF C10098=. THEN DO;
    IF (SEX='F' AND FMALE) THEN DO;
      N32A=1;
      XSEXA=2;
    END;
    ELSE IF (SEX='F' AND FMALE=0) THEN DO;
      N32A=2;
      XSEXA=2;
    END;
    ELSE IF (SEX='M' AND FMALE) THEN DO;
      N32A=3;
      XSEXA=1;
    END;
    ELSE IF (SEX='M' AND FMALE=0) THEN DO;
      N32A=4;
      XSEXA=1;
    END;
    ELSE IF ((SEX IN (' ') AND FMALE)) THEN DO;
      N32A=5;
      XSEXA=2;
    END;
    ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
      N32A=6;
      XSEXA=.;
```

```
  END;
END;
ELSE IF (C10098=1) THEN DO;
  IF FMALE=0 THEN DO;
    N32A=7;
    XSEXA=1;
  END;
  ELSE IF FMALE THEN DO;
    IF SEX='F' THEN DO;
      N32A=8;
      XSEXA=2;
    END;
    ELSE DO;
      N32A=9;
      XSEXA=1;
    END;
  END;
END;
ELSE IF (C10098=2) THEN DO;
 IF FMALE THEN DO;
   N32A=10;
   XSEXA=2;
  END;
  ELSE IF FMALE=0 THEN DO;
    IF SEX='M' THEN DO;
      N32A=11;
      XSEXA=1;
    END;
    ELSE DO;
      N32A=12;
      XSEXA=2;
    END;
  END;
END;
```

b. Region (XTNEXREG)

This variable groups the CONUS regions into 4 regions: north, south, west, and overseas.

North contains regions ‘01’, ‘02’, and ‘05’. South contains regions ‘03’,’04’, and ‘06’. West consists of regions ‘07’, ‘08’, ‘09’, ‘10’, ‘11’, ‘12’, and ‘AK’. Overseas is comprised of the regions ‘13’, ‘14’, and ‘15’.

```
/* CREATE XTNEXREG. */
  IF DHSRGN IN ('01','02','05')                    THEN XTNEXREG=1;
  ELSE IF DHSRGN IN ('03','04','06')                 THEN XTNEXREG=2;
  ELSE IF DHSRGN IN ('07','08','09','10','11','12','AK') THEN XTNEXREG=3;
  ELSE IF DHSRGN IN ('13','14','15')                 THEN XTNEXREG=4;
  ELSE IF DHSRGN IN ('16')                         THEN XTNEXREG=.;
```

c. Continental United States (CONUS)

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

```
CONUS stands for Continental 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=.;
```

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 the enrollment type (ENBGSMPL), based on DEERS data, indicates that they were enrolled at the time of data collection. The two categories for TRICARE Prime enrollment are as follows:

1 = Enrollees
2 = Not enrolled in TRICARE Prime

. = Unknown

```
/* XENRLLMT--ENROLLMENT STATUS */
IF ENBGSMPL IN ('01','02','03','05','06') THEN XENRLLMT = 1; /*   Enrolled  */
ELSE IF ENBGSMPL IN ('04','07') THEN XENRLLMT = 2;          /*   Not Enrolled */
```

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

This variable determines if a child has a civilian or a military primary care manager (PCM).

1 = Enrolled with a military PCM
2 = Enrolled with a civilian PCM
3 = Not enrolled

```
/* XENR_PCM--ENROLLMENT BY PCM TYPE */
IF ENBGSMPL IN ('01','03','06') THEN XENR_PCM=1;          /* 1=Enrolled  - mil PCM */
ELSE IF ENBGSMPL IN ('02','05') THEN XENR_PCM=2;      /* 2=Enrolled  - civ PCM */
ELSE IF ENBGSMPL IN ('04','07') THEN XENR_PCM=3;      /* 3=Not Enrolled        */
```

c. Most–Used Health Plan (XINS_COV)

The respondent's most–used health plan comes directly from Question 3. The three categories for this variable are as follows:

1 = TRICARE Prime
2 = TRICARE Standard/Extra (CHAMPUS)
3 = Other civilian health insurance or civilian HMO
4 = TRICARE Reserve Select
. = Unknown

```
/* XINS_COV--INSURANCE COVERAGE */
IF C10003 = 1 THEN XINS_COV = 1;                          /* Prime */
ELSE IF C10003 = 3  THEN XINS_COV = 2;                    /* Standard/Extra */
ELSE IF C10003 IN (5,6,7,8,9,10,12) THEN XINS_COV = 3;    /* Other Insurance */
ELSE IF C10003 = 11 THEN XINS_COV = 4;                    /* TRICARE Reserve Select */
```

d. Types of Coverage (KCIVINS)

This variable was created to indicate if the respondent is covered by civilian insurance (KCIVINS):

This variable has the following values:

1 = Yes
2 = No
.= Unknown

```
  /* KCIVINS--IS BENEFICIARY COVERED BY CIVILIAN INSURANCE */
IF (C10002C=1 OR C10002D=1 OR C10002E=1 OR C10002G=1 OR C10002L=1)
THEN KCIVINS=1;                          /* YES  */
ELSE KCIVINS=2;                          /* NO   */
```

e. Beneficiary group (XBNFGRP)

- This variable is equal to the sampling variable BGCSMPL and has the following values:

2 = Family of active duty
3 = Family of retirees or survivors
.= Unknown

```
/* XBNFGRP-Beneficiary Group that excludes those 65 and over-
Active Duty and Family Members of Active Duty */
XBNFGRP=BGCSMPL;
```

3. Utilization

a. Outpatient Utilization (KMILOP, KCIVOP)

Question 10 contains the total number of outpatient visits. This is renamed to KMILOP or KCIVOP depending on the answer to Question 5, which type of facility did you use most. The new variables have the following values:

1 = no visits
2 = 1 visit
3 = 2 visits
4 = 3 visits
5 = 4 visits
6 = 5 to 9 visits
7 = 10 or more visits

```
/* KMILOP--OUTPATIENT VISITS TO MILITARY FACILITY
   KCIVOP--OUTPATIENT VISITS TO CIVILIAN FACILITY */
IF C10005 = 1 THEN KMILOP=C10010;
 ELSE IF (C10005=. AND C10010=.) THEN KMILOP=.;
ELSE KMILOP = 1 ;
 IF C10005 = 2 THEN KCIVOP=C10010;
 ELSE IF (C10005=. AND C10010=.) THEN KCIVOP=.;
ELSE KCIVOP = 1 ;
```

4. Child Body Mass Index

a. Percentile for Child Body Mass Index (XBMIPCT)

The reported body mass index of children over age 24 months is assigned a percentile based on the 2000 Centers for Disease Control and Prevention (CDC) growth charts. The body mass index (BMI) is equal to the child's weight in kilograms divided by the square of his or her height in meters. The program Create BMI.sas (Appendix E.5) first creates a dataset with the variables needed to call gc-calculate.sas (Appendix E.6). Gc-calculate calculates the percentiles for child body mass index (BMIPCT) based on the CDC growth charts. If a child is in the 70^{th} percentile, this means compared to children of the same age and gender, 70 percent have a lower BMI. BMIPCT is renamed to XBMIPCT. Note: Qc-calculate.sas uses two variables, BMI and the child's age in months, not retained in the public use file.

b. Child Body Mass Index Category (XBMICAT)

First, certain observations are excluded (exclude=2) as extreme height or weight outliers by comparison with CDC's growth charts. Then the variable OVER is defined by comparing BMIPCT to cutoff points identifying underweight and overweight children. It is renamed XBMICAT. This new variable has the following values:

1 = underweight
2 = at risk
3 = normal
4 = underweight

```
IF exclude NE 2 THEN DO;
  if BMIPCT ge 95 then over = 4;
  else if 85 le BMIPCT lt 95 then over = 3;
  else if 5 lt BMIPCT lt 85 then over = 2;
  else if 0 le BMIPCT le 5 then over = 1;
END;
XBMICAT = over;
```

E. WEIGHTING PROCEDURES

Estimates based on the 2010 HCSDB must account for the survey's complex sample design and for the potential biasing effects due to nonresponse. As a part of sample selection, Mathematica 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 child health care beneficiaries. Adjustments were made to these sampling weights, BWT, to compensate for such distortions, using a weighting class method. These adjusted weights were also adjusted through the poststratification procedure to form the analysis weights, which we included in the final deliverable database. 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 2010 Child HCSDB.

1. Constructing the Sampling Weight

The sampling weight was constructed on the basis of the sample design. In the 2010 Child HCSDB, stratified sampling was used to select the samples that would receive the questionnaire. Sampling for the child survey was independently executed within strata defined by combinations of the three domains: enrollment status groups; age 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 2010 child sample

design, see the "2010 Health Care Survey of DoD Beneficiaries: Child Sample Report". 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 that each sampled beneficiary represents. The sampling weight was defined as the inverse of the beneficiary's selection probability or:

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

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 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). To reduce this bias, we developed procedures to deal with the problems caused by nonresponse. Two types of nonresponse were associated with the 2010 Child 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).

With high item response rates observed in the survey, statistical imputation was not used to compensate for item nonresponse in the 2010 Child HCSDB. To account for unit nonresponse, we implemented a weighting class adjustment followed by a poststratification adjustment.

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 class.

The 2010 Child HCSDB weighting classes were defined on the basis of the stratification variables: TRICARE Prime enrollment status, age group, and geographic area. To avoid excessive variance inflation, we required that each weighting class have at least 20 eligible respondents and that the adjustment factor not exceed 4.

Nonresponse adjustment factors for the 2010 Child 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 grouped as follows according to their response status d:

d=1 Eligible — completed questionnaire returned (FNSTATUS = 11)

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

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

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

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

Within weighting class *c*, the weights of the cases for which eligibility was known (*d*=1,2,3) were adjusted to account for nonrespondents with unknown eligibility (*d*=4) by distributing the weights of cases in *d*=4 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 to be one for *d*=5 and defined as:

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

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

By definition, all *d*=3 and *d*=5 ineligible beneficiaries "respond," so the *d*=3 and *d*=5adjustment 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) $W_{wc2}(c,d,i) = A_{wc2}(c,d)\, W_{wc1}(c,d,i)$

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.

3. Poststratification

During the sample selection process, we minimized selecting more than one child per household by assigning all children from a household to the same sampling stratum (please see Rahman et al. 2010). As a consequence, the sum of weights across sampled beneficiaries within a stratum may not reflect a correct stratum total. Therefore, we needed to compensate for the resulting discrepancy in population totals by using poststratification for the 2010 HCSDB. Poststratification adjustments forced the adjusted weight totals to the DEERS population totals for the specified population groups that formed the *poststrata*. We used DEERS data as of December 31, 2009 as poststratification values for certain variables. Like stratum variables, poststratum variables are also a combination of three key domain variables: enrollment group, age group, and geographic area (TNEX regions). After creating the cross-classification of the three poststrata variables, enrollment group, age group, and TNEX regions, an additional usual poststratification adjustment was implemented. To illustrate the use of poststratification, let g index poststrata, where g = 1, 2, ..., G. The poststratification adjustment factor for the g-th poststrata was defined as:

(6) $$A_{ps}(g) = \frac{N(g)}{\sum_{h,i \in S(g)} W_{wc2}(h,i)}$$

where:

$N(g)$ is the total number of beneficiaries in the DEERS frame associated with the g-th post-stratum, and

$S(g)$ is the set of sample records that are found in the g-th poststratum.

The poststratified adjusted weight for the i-th sample record from the h-th design stratum and the g-th poststratum was then calculated as:

(7) $W_{ps}(g,h,i) = A_{ps}(g)\, W_{wc2}(h,i)$

When summed over members of poststratum g, the poststratified weights now total $N(g)$. This poststratified weight is the final analysis weight used for all reporting and analysis.

4. Calculation of Jackknife Replicates

We constructed the 60 jackknife replicates as follows. First, the entire file of sampled beneficiaries was sorted according to stratification variables. Next, 60 mutually exclusive and exhaustive systematic sub-samples of the full sample were identified in the sorted file.[5] A jackknife replicate was then obtained by dropping one subsample from the full sample. By dropping each subsample in turn, the same number of different jackknife replicates as subsamples was defined. The entire weighting process as applied to the full sample was then applied separately to each of the jackknife replicates to produce a set of replicate weights for each record. A series of jackknife replicate

[5]With 60 replicates, further statistical analyses such as confidence intervals and hypothesis tests can be based on approximate normal distribution. Inferences with finite replicate number k are based on the student t distribution with k-1 degrees of freedom. Thus, with 60 replicates, normal approximation can be used in constructing confidence intervals or hypothesis testing.

weights (WRWT01-WRWT60) was then attached to each beneficiary record in the final database. Given jackknife replicate weights, WesVarPC® (Brick et al. 1996) and SUDAAN (Research Triangle Institute 2004) can be used to construct jackknife replication variance estimates.

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Chapter 4

Analysis

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

This year's results are being presented in an electronic format.

A. RESPONSE RATES

In this section, we present the procedures for response rate calculation along with a brief analysis of response rates for domains of interest. Response rates for the 2010 Child HCSDB were calculated in the same way as they were calculated for the 2010 Adult HCSDB. The procedure is based on the guidelines established by the Council of American Survey Research Organizations (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 2010 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.C, all sampled beneficiaries were completely classified into these four main (eight detailed) groups: Group 1 (G1-1 and G1-2), Group 2, Group 3, 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): returned ineligible
- Group 3 (G3-2): ineligible at time of Altarum address update
- Group 4 (G4-1): eligibility unknown and locatable; and
- Group 4 (G4-2): eligibility unknown and unlocatable

The unweighted counts reflect the number of sampled cases (n_i for Group i, where i =1,2,3,4), and the weighted counts reflect the estimated population size[1] ($\hat{N}_i$ 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, G3-2, G4-1, and G4-2, where we denote the unweighted counts by $n_{1,1}$, $n_{1,2}$, $n_{3,1}$, $n_{3,2}$, $n_{4,1}$, and $n_{4,2}$,and the weighted counts by $\hat{N}_{1,1}, \hat{N}_{1,2}, \hat{N}_{3,1}, \hat{N}_{3,2}, \hat{N}_{4,1}$, 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)

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

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

(2)

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

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

(3)

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

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

(4)

$$FRR = LRxCR \; and \; FRR_w = LR_w xCR_w$$

In the definitions in Equations (1) through (4), the subscript "*w*" indicates that all calculations involve weighted counts. The method that we 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 are often 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 2010 Child HCSDB as a whole, by enrollment status by age groups, and by TNEX regions.

- Overall: The overall unweighted response rate for the 2010 Child HCSDB was about 22 percent (which is found in Table 4.1 in the row of "Overall" under the column of "RR" in "Unweighted").
- Enrollment status: Conus nonenrollees had an unweighted response rate of 22 percent, which is less than the rate for children enrolled in Prime (24 percent).
- Age group: Unweighted response rates according to age groups are: Sponsors of children younger than 6 years old - 19 percent; between 6 and 12 years old - 22 percent; between 13 and 17 years old - 26 percent
- Geographic area: Unweighted response rates according to region are: North – 25 percent; South – 21 percent; West – 23 percent; and overseas – 16 percent.

TABLE 4.1

UNWEIGHTED AND WEIGHTED RESPONSE RATES OVERALL, BY ENROLLMENT GROUP, BY AGE GROUP, REGION AND TNEX REGION

		RR Unweighted Response Rate	RR_w Weighted Response Rate
Overall		22.2	23.0
Enrollment Group	CONUS-Enrolled	23.9	23.7
	CONUS-Not enrolled	22.0	22.4
	OCONUS	16.4	15.5
Age Group	Younger than 6 years old	18.7	19.9
	Between 6 and 12 years old	21.8	22.7
	Between 13 and 17 years old	26.3	26.9
CONUS/OCONUS	CONUS	23.0	23.4
	OCONUS	16.4	15.5
TNEX Region	North	24.5	24.5
	South	21.0	22.0
	West	23.4	23.7
	Overseas	16.4	15.5

B. VARIANCE ESTIMATION

To calculate the standard errors (the squared roots of variances) of estimates for the 2010 HCSDB analyses, we used SUDAAN™ (Research Triangle Institute. 2004) and the Taylor series linearization method. For analysts who prefer a replication method, 60 replicate weights for jackknife replication are provided in the public use file. Here we describe variance estimation methods for the Taylor series linearization method and the jackknife replication method.

1. Taylor Series Linearization

Mathematica uses Taylor series linearization to produce standard errors for the estimates from the 2010 Child HCSDB. For most sample designs, including the 2010 HCSDB, design-based variance estimates for linear estimators such as totals can be obtained with explicit formulas. Estimators for nonlinear parameters such as weighted means and 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 the 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 sampling design and includes variables recording stratum and the analysis weight for each record. Mathematica uses SAS to make camera-ready tables for numerical results from SUDAAN. There is no restriction to the number of strata in SUDAAN, 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 variance 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) Let

L=Number of strata
n_h=Number of beneficiaries within *h-th* stratum

$$\text{and let } \bar{y} = \frac{\sum_{h=1}^{L}\sum_{i=1}^{n_h} W_{hi}Y_{hi}}{\sum_{h}\sum_{i} W_{hi}}$$

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

(6)

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

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

(7)

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

where v_j is a variance estimator of $\bar{x}_j$.

All of the variance components can be obtained from the usual survey specific software such as SUDAAN and WesVarPC, which are described above.

2. Jackknife Replication

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.

a. Calculation Using Jackknife Replicates

A series of jackknife replicate weights are calculated and attached to each beneficiary record in the database. In jackknife replication, a prescribed number of replicates are generated by deleting selected cases from the full sample. Given jackknife replicate weights, WesVarPC® or SUDAAN can 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. The 2010 HCSDB for children involves 21 strata. To use WesVarPC, we must modify the actual design to create appropriate replicates. The two options for doing this are to (1) form fewer than 256 replicates by ignoring stratification or (2) form replicates by assigning each unit to one of two pseudo primary sampling units (PSUs) within each of the 21 strata. For either option, the entire weighting process as described in the previous sections must be applied for each jackknife replicate.

To be consistent with the adult survey, we use option 1 to construct the jackknife replicates as follows. First, the entire file of sampled beneficiaries is sorted in sample selection order in which stratification variables are only used in the sorting process. Next, 60 mutually exclusive and exhaustive systematic subsamples[1] 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 (WRWT01 – WRWT60) is attached to the final data in order to construct jackknife replication variance estimates.

b. Software for Jackknife Replication

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 and SUDAAN are popular software packages that calculate 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 mean, proportion, 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. 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.

[1]With 60 replicates, further statistical analyses such as confidence intervals and hypothesis tests can be based on an approximate normal distribution. Inferences with finite replicate numbers *k* are based on the student *t* distribution with *k*-1 degrees of freedom. Thus, with 60 replicates, normal approximation can be used in constructing confidence intervals or hypothesis testing.

Independent, or explanatory, variables do not directly represent research questions, but they may help to explain the differences in one or more of the outcome variables. They may also be correlated with one or more dependent variables. For example, a beneficiary's satisfaction with health care may be correlated with their age and/or TRICARE Prime enrollment status. Each table is designed to help determine whether a particular dependent variable is correlated with a particular independent variable. Independent variables form the columns of the tables and the horizontal axis of the charts.

In analyzing the relationship between dependent and independent variables, Mathematica produced charts and tables that are found in the Child HCSDB Annual Report. Beginning with the Child HCSDB in a SAS format, Mathematica programmers developed SAS procedures such as PROC FREQ and PROC MEANS and SAS-callable SUDAAN procedures such as PROC DESCRIPT and PROC CROSSTAB to generate relevant statistics (e.g., per cents, means, and standard errors).

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APPENDIX A

ANNOTATED QUESTIONNAIRE

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Health Care Survey of DoD Beneficiaries

Child Survey 2010

TRICARE

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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 706, Public Law 102-484; E.O. 9397.

Purpose: This survey helps 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.

YOUR PRIVACY

All information that would let someone identify you or your family will be kept private. Providing information in this questionnaire is voluntary. There is no penalty if you choose not to respond. You may notice a number on the last page of this survey. This number is ONLY used to let us know if you returned your survey so we don't have to send you reminders.

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 42*
☐ No

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

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

SURVEY STARTS HERE

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

Please answer the questions for the child whose name appears on the envelope. Please do not answer for any other children.

1. Are you an adult who is responsible for the child listed on the envelope? C10001

Percent of Responses*		
99.8%	1 ☐	Yes ➔ *Go to Question 2*
0.2%	2 ☐	No ➔ Please give this questionnaire to a person responsible for that child.

2. By which of the following health care plans was your child covered in the last 12 months? *MARK ALL THAT APPLY.* C10002A-C10002L See Note 1

Percent of Responses*		
		Military Health Plans
77.1%	A ☐	TRICARE Prime (including TRICARE Prime Remote and TRICARE Overseas)
16.7%	B ☐	TRICARE Extra/Standard (CHAMPUS)
4.4%	K ☐	TRICARE Reserve Select
		Civilian Health Plans
1.7%	G ☐	Federal Employees Health Benefit Program (FEHBP)
2.5%	E ☐	Medicaid
0.6%	L ☐	Other government program, like SCHIP
1.7%	C ☐	A civilian HMO (such as Kaiser)
8.0%	D ☐	Other civilian health insurance (such as Blue Cross)
1.2%	F ☐	Uniformed Services Family Health Plan (USFHP)
0.2%	J ☐	Government health insurance from a country other than the US
0.2%	I ☐	My child was not covered by any health plan in the last 12 months
2.6%	H ☐	Not sure

3. Which health plan did you use for most of your child's health care in the last 12 months? *MARK ONLY ONE.* C10003

Percent of Responses*		
		Military Health Plans
71.8%	1 ☐	TRICARE Prime (including TRICARE Prime Remote and TRICARE Overseas)
11.3%	3 ☐	TRICARE Extra/Standard (CHAMPUS)
3.4%	11 ☐	TRICARE Reserve Select
		Civilian Health Plans
1.4%	5 ☐	Federal Employees Health Benefit Program (FEHBP)
1.1%	6 ☐	Medicaid
0.4%	12 ☐	Other government program, like SCHIP
1.4%	7 ☐	A civilian HMO (such as Kaiser)
6.1%	8 ☐	Other civilian health insurance (such as Blue Cross)
1.0%	9 ☐	Uniformed Services Family Health Plan (USFHP)
0.2%	10 ☐	Government health insurance from a country other than the US
	-6 ☐	My child did not use any health plan in the last 12 months
1.7%	-5 ☐	Not sure

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

4. In the last 12 months, how many months in a row was your child in this health plan? C10004

Percent of Responses*		
1.6%	2 ☐	Less than 2 months
3.5%	3 ☐	2-6 months
94.9%	4 ☐	7-12 months
	-6 ☐	Not enrolled in a health plan in the last 12 months

5. In the last 12 months, what type of facility did your child go to most often for health care? Select the facility your child used most often.

MARK ONLY ONE.

C10005

Percent of Responses*			
40.5%	1	☐	A military facility – This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
58.6%	2	☐	A civilian facility – This includes: Civilian doctor's office, Civilian clinic, Hospital, Civilian TRICARE contractor
0.9%	3	☐	Uniformed Services Family Health Plan Facility (USFHP)
	-6	☐	My child went to none of the listed types of facilities in the last 12 months

YOUR CHILD'S HEALTH CARE IN THE LAST 12 MONTHS

The next questions ask about your child's health care. Do not include care your child got when he or she stayed overnight in a hospital. Do not include the times your child went for dental care visits.

6. In the last 12 months, did your child have an illness, injury or condition that needed care right away in a clinic, emergency room, or doctor's office?

C10006

See Note 2

Percent of Responses*			
51.3%	1	☐	Yes
48.7%	2	☐	No ➔ *Go to Question 8*

7. In the last 12 months, when your child needed care right away for an illness, injury, or condition, how often did your child get care as soon as you thought he or she needed?

C10007

See Note 2

3.0%	1	☐	Never
9.0%	2	☐	Sometimes
20.4%	3	☐	Usually
67.6%	4	☐	Always

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

C10008

See Note 3

88.3%	1	☐	Yes
11.7%	2	☐	No ➔ *Go to Question 10*

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

C10009

See Note 3

1.8%	1	☐	Never
12.6%	2	☐	Sometimes
28.2%	3	☐	Usually
57.4%	4	☐	Always

10. In the last 12 months, not counting times your child went to an emergency room, how many times did he or she go to a doctor's office or clinic to get health care?

C10010

See Note 4

Percent of Responses*			
8.5%	0	☐	None ➔ *Go to Question 12*
12.9%	1	☐	1
20.3%	2	☐	2
19.0%	3	☐	3
15.5%	4	☐	4
19.2%	5	☐	5 to 9
4.6%	6	☐	10 or more

11. 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 child's health care in the last 12 months?

C10011

See Note 4

0.2%	0	☐	0	Worst health care possible
0.2%	1	☐	1	
0.5%	2	☐	2	
0.8%	3	☐	3	
1.5%	4	☐	4	
4.2%	5	☐	5	
5.3%	6	☐	6	
13.5%	7	☐	7	
26.3%	8	☐	8	
21.8%	9	☐	9	
25.8%	10	☐	10	Best health care possible

EMERGENCY AND AFTER HOURS CARE

12. In the last 12 months, how many times did your child go to an emergency room for care?

C10012

See Note 5

Percent of Responses*			
68.5%	1	☐	None ➔ *Go to Question 18*
18.9%	2	☐	1
7.7%	3	☐	2
3.0%	4	☐	3
1.3%	5	☐	4
0.5%	6	☐	5 to 9
0.1%	7	☐	10 or more

13. The last time your child visited an emergency room, did he or she go to the emergency room to treat an accident or injury or for some other health problem?

C10013

See Note 5

35.5%	1	☐	Accident or injury
63.2%	2	☐	Some other reason
1.2%	-5	☐	Don't know

14. Before going to the emergency room or calling for emergency medical assistance for your child, were you able to contact a doctor or other health professional about your child's problem?

C10014

See Notes 5, 6

33.7%	1	☐	Yes
61.2%	2	☐	No ➔ *Go to Question 16*
5.1%	-5	☐	Don't know

15. Did the doctor or health professional tell you to take your child to the emergency room? C10015

*Percent of Responses**

72.0% 1 ☐ Yes ➔ *Go to Question 17*
17.6% 2 ☐ No
10.5% -5 ☐ Don't know

See Notes 5, 6, 7

16. Why did you decide to take your child to an emergency room instead of a doctor's office or clinic? C10016

69.5% 1 ☐ Other choices were closed at the time
2.9% 2 ☐ Other choices were too far away
0.9% 3 ☐ Other choices cost too much
25.5% 4 ☐ Other reason
1.2% -5 ☐ Don't know

See Notes 5, 7

17. As a result of this emergency room visit, was your child admitted to the hospital for an overnight stay? C10017

5.2% 1 ☐ Yes
94.8% 2 ☐ No
0.1% -5 ☐ Don't know

See Note 5

18. After hours care is health care when your child's usual doctor's office or clinic is closed. In the last 12 months, did your child need to visit a doctor's office or clinic for after hours care? C10018

24.1% 1 ☐ Yes
75.9% 2 ☐ No ➔ *Go to Question 21*

See Note 8

19. In the last 12 months, how often was it easy to get the after hours care you thought you needed for your child? C10019

14.4% 1 ☐ Never
15.5% 2 ☐ Sometimes
24.1% 3 ☐ Usually
46.0% 4 ☐ Always ➔ *Go to Question 21*

See Note 8

20. Were any of the following a reason it was not easy to get the after hours care you thought you needed for your child? C10020A-C10020E

MARK ALL THAT APPLY.

See Note 8

18.1% A ☐ You did not know where to go for after hours care
17.7% B ☐ You weren't sure where to find a list of doctor's offices or clinics in your child's health plan or network that are open for after hours care
7.3% C ☐ The doctor's office or clinic that had after hours care was too far away
21.2% D ☐ Office or clinic hours for after hours care did not meet your needs
36.3% E ☐ Some other reason

YOUR CHILD'S PERSONAL DOCTOR

21. A personal doctor is the one your child would see if he or she needs a checkup or gets hurt or sick. Does your child have a personal doctor? C10021

*Percent of Responses**

84.5% 1 ☐ Yes
15.5% 2 ☐ No ➔ *Go to Question 32*

See Note 9

22. In the last 12 months, how many times did your child visit his or her personal doctor for care? C10022

9.2% 0 ☐ None ➔ *Go to Question 32*
18.8% 1 ☐ 1
22.3% 2 ☐ 2
17.5% 3 ☐ 3
13.7% 4 ☐ 4
16.3% 5 ☐ 5 to 9
2.3% 6 ☐ 10 or more

See Notes 9, 10

23. In the last 12 months, how often did your child's personal doctor explain things in a way that was easy to understand? C10023

0.5% 1 ☐ Never
3.7% 2 ☐ Sometimes
20.5% 3 ☐ Usually
75.2% 4 ☐ Always

See Notes 9, 10

24. In the last 12 months, how often did your child's personal doctor listen carefully to you? C10024

0.7% 1 ☐ Never
5.6% 2 ☐ Sometimes
21.4% 3 ☐ Usually
72.4% 4 ☐ Always

See Notes 9, 10

25. In the last 12 months, how often did your child's personal doctor show respect for what you had to say? C10025

0.7% 1 ☐ Never
4.5% 2 ☐ Sometimes
17.3% 3 ☐ Usually
77.5% 4 ☐ Always

See Notes 9, 10

26. Is your child able to talk with doctors about his or her health care? C10026

68.0% 1 ☐ Yes
32.0% 2 ☐ No ➔ *Go to Question 28*

See Notes 9, 10, 11

27. In the last 12 months, how often did your child's doctor explain things in a way that was easy for <u>your child</u> to understand? C10027

0.8% 1 ☐ Never
7.0% 2 ☐ Sometimes
29.8% 3 ☐ Usually
62.5% 4 ☐ Always

See Notes 9, 10, 11

28. In the last 12 months, how often did your child's personal doctor spend enough time with your child?

Percent of Responses*

C10028

1.5% 1 ☐ Never
8.1% 2 ☐ Sometimes
29.2% 3 ☐ Usually
61.2% 4 ☐ Always

See Notes 9, 10

29. In the last 12 months, did your child's personal doctor talk with you about how your child is feeling, growing or behaving?

C10029

83.5% 1 ☐ Yes
16.5% 2 ☐ No

See Notes 9, 10

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

C10030

0.2% 0 ☐ 0 Worst personal doctor possible
0.3% 1 ☐ 1
0.4% 2 ☐ 2
0.9% 3 ☐ 3
1.3% 4 ☐ 4
2.8% 5 ☐ 5
3.1% 6 ☐ 6
9.1% 7 ☐ 7
19.7% 8 ☐ 8
26.0% 9 ☐ 9
36.1% 10 ☐ 10 Best personal doctor possible

See Notes 9, 10

31. Did your child have the same personal doctor before he or she joined this health plan?

C10031

33.9% 1 ☐ Yes ➔ *Go to Question 33*
66.1% 2 ☐ No

See Notes 9, 10, 12

32. Since your child joined his or her health plan, how much of a problem, if any, was it to get a personal doctor for your child you are happy with?

C10032

10.5% 1 ☐ A big problem
22.3% 2 ☐ A small problem
67.2% 3 ☐ Not a problem

See Note 12

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

In the last 12 months, did your child get care from more than one kind of health care provider or use more than one kind of health care service?

C10033

51.4% 1 ☐ Yes
48.6% 2 ☐ No ➔ *Go to Question 35*

See Note 13

34. In the last 12 months, did anyone from your child's health plan, doctor's office or clinic help coordinate your child's care among these different providers or services?

Percent of Responses*

C10034

60.1% 1 ☐ Yes
39.9% 2 ☐ No

See Note 13

35. Does your child have any medical, behavioral or other health conditions that have lasted for more than 3 months?

C10035

28.6% 1 ☐ Yes
71.4% 2 ☐ No ➔ *Go to Question 38*

See Note 14

36. Does your child's personal doctor understand how these medical, behavioral or other health conditions affect your child's day-to-day life?

C10036

88.3% 1 ☐ Yes
11.7% 2 ☐ No
-6 ☐ My child does not have a personal doctor

See Note 14

37. Does your child's personal doctor understand how your child's medical, behavioral or other health conditions affect your family's day-to-day life?

C10037

86.0% 1 ☐ Yes
14.0% 2 ☐ No
-6 ☐ My child does not have a personal doctor

See Note 14

GETTING HEALTH CARE FROM A SPECIALIST

When you answer the next questions, do not include dental visits or care your child got when he or she stayed overnight in a hospital.

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

Percent of Responses*

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

C10038

34.7% 1 ☐ Yes
65.3% 2 ☐ No ➔ *Go to Question 44*

See Note 15

39. In the last 12 months, how often was it easy to get appointments for your child with specialists?

C10039

7.8% 1 ☐ Never
15.9% 2 ☐ Sometimes
31.5% 3 ☐ Usually
44.7% 4 ☐ Always ➔ *Go to Question 41*

See Notes 15, 16

40. Were any of the following a reason it was not easy to get an appointment for your child with a specialist?

Percent of Responses*

C10040A-C10040H

MARK ALL THAT APPLY.

See Notes 15, 16

6.9%	A ☐	Your child's doctor did not think he or she needed to see a specialist
17.3%	B ☐	Your child's health plan approval or authorization was delayed
5.7%	C ☐	You weren't sure where to find a list of specialists in your child's health plan or network
13.4%	D ☐	The specialists you had to choose from for your child were too far away
14.5%	E ☐	You did not have enough specialists to choose from for your child
11.4%	F ☐	The specialist you wanted did not belong to your child's health plan or network
39.4%	G ☐	You could not get an appointment for your child at a time that was convenient
24.3%	H ☐	Some other reason

41. How many specialists has your child seen in the last 12 months?

C10041

8.4%	0 ☐	None ➔	*Go to Question 44*
59.9%	1 ☐	1 specialist	
21.3%	2 ☐	2	
6.3%	3 ☐	3	
2.6%	4 ☐	4	
1.4%	5 ☐	5 or more specialists	

See Notes 15, 17

42. We want to know your rating of the specialist your child 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 that specialist?

C10042

0.5%	0 ☐	0	Worst specialist possible
0.7%	1 ☐	1	
0.8%	2 ☐	2	
1.1%	3 ☐	3	
1.4%	4 ☐	4	
3.3%	5 ☐	5	
3.9%	6 ☐	6	
9.8%	7 ☐	7	
19.6%	8 ☐	8	
25.6%	9 ☐	9	
33.3%	10 ☐	10	Best specialist possible

See Notes 15, 17

43. In the last 12 months, was the specialist your child saw most often the same doctor as your child's personal doctor?

C10043

6.2%	1 ☐	Yes
93.8%	2 ☐	No
	-6 ☐	My child does not have a personal doctor

See Notes 15, 17

44. In general, how would you rate your child's overall mental or emotional health?

Percent of Responses*

C10044

63.7%	5 ☐	Excellent
24.3%	4 ☐	Very Good
8.6%	3 ☐	Good
2.8%	2 ☐	Fair
0.7%	1 ☐	Poor

45. In the last 12 months, did you or a doctor think that your child needed to see a mental health specialist, like a family therapist, a counselor, psychologist, psychiatrist, social worker, pastoral counselor, or an Applied Behavior Analyst?

C10045

10.4%	1 ☐	Yes
89.6%	2 ☐	No

46. In the last 12 months, did your child see a mental health specialist, like a family therapist, a counselor, psychologist, psychiatrist, social worker, pastoral counselor, or an Applied Behavior Analyst?

C10046

9.5%	1 ☐	Yes ➔	*Go to Question 48*
90.5%	2 ☐	No	

See Note 18

47. Why did your child not see a mental health specialist?

MARK ALL THAT APPLY.

C10047A-C10047O

See Note 18

71.2%	A ☐	You did not think that your child needed to visit a specialist
4.8%	B ☐	Your child's personal doctor or nurse was able to help with the problem
0.8%	J ☐	You were not sure how to find a specialist who participated in your child's health plan or network
0.5%	D ☐	You did not have enough specialists to choose from for your child
0.5%	E ☐	The specialists you had to choose from for your child were too far away
0.5%	F ☐	The specialist you wanted did not belong to your child's health plan or network
0.6%	G ☐	You could not get an appointment for your child at a time that was convenient
0.3%	H ☐	The specialist you wanted was not taking new patients
0.2%	K ☐	You could not find a mental health specialist
0.2%	L ☐	Your child's health plan would not approve the services
0.2%	M ☐	You could not find a mental health specialist who understood the effects of military deployment
0.2%	N ☐	You could not find a mental health specialist that would treat your child's condition
0.1%	O ☐	You could not find a specialist in a facility accessible for persons with disabilities
9.4%	I ☐	Other

48. In the last 12 months, how often did your child get the care that he or she needed from a mental health specialist?

Percent of Responses*

C10048

83.6% 1 ☐ Never
2.3% 2 ☐ Sometimes
3.1% 3 ☐ Usually
11.1% 4 ☐ Always

49. In the last 12 months, how often did you use the services of a Case Manager, Care Coordinator, or Behavioral Health Case Manager to assist you in obtaining care your child needed from a mental health specialist or facility?

C10049

96.1% 0 ☐ None
1.4% 1 ☐ 1
0.6% 2 ☐ 2
0.3% 3 ☐ 3
0.4% 4 ☐ 4
0.6% 5 ☐ 5 to 9
0.6% 6 ☐ 10 or more

YOUR CHILD'S HEALTH PLAN

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

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

Percent of Responses*

C10050

See Note 19

59.3% 1 ☐ Yes
40.7% 2 ☐ No ➔ *Go to Question 52*

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

C10051

See Note 19

3.3% 1 ☐ Never
11.2% 2 ☐ Sometimes
30.5% 3 ☐ Usually
55.0% 4 ☐ Always

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

C10052

See Note 20

26.4% 1 ☐ Yes
73.6% 2 ☐ No ➔ *Go to Question 54*

53. In the last 12 months, how often did the written materials or the Internet provide the information you needed about how your child's health plan works?

C10053

See Note 20

9.2% 1 ☐ Never
30.8% 2 ☐ Sometimes
40.6% 3 ☐ Usually
19.4% 4 ☐ Always

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

Percent of Responses*

C10054

See Note 21

25.6% 1 ☐ Yes
74.4% 2 ☐ No ➔ *Go to Question 57*

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

C10055

See Note 21

11.7% 1 ☐ Never
20.5% 2 ☐ Sometimes
31.6% 3 ☐ Usually
36.2% 4 ☐ Always

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

C10056

See Note 21

5.5% 1 ☐ Never
9.7% 2 ☐ Sometimes
28.1% 3 ☐ Usually
56.6% 4 ☐ Always

57. In the last 12 months, did your child's health plan give you any forms to fill out?

C10057

See Note 22

27.8% 1 ☐ Yes
72.2% 2 ☐ No ➔ *Go to Question 59*

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

C10058

See Note 22

4.3% 1 ☐ Never
10.9% 2 ☐ Sometimes
41.4% 3 ☐ Usually
43.4% 4 ☐ Always

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

C10059

0.5% 0 ☐ 0 Worst health plan possible
0.2% 1 ☐ 1
0.8% 2 ☐ 2
0.9% 3 ☐ 3
1.5% 4 ☐ 4
5.5% 5 ☐ 5
5.0% 6 ☐ 6
13.5% 7 ☐ 7
24.9% 8 ☐ 8
22.6% 9 ☐ 9
24.5% 10 ☐ 10 Best health plan possible

PRESCRIPTION MEDICATIONS

60. In the last 12 months, did you get or refill any prescription medicines for your child?

Percent of Responses*

C10060

67.3% 1 ☐ Yes
32.7% 2 ☐ No ➔ *Go to Question 65*

See Note 23

61. In the last 12 months, how often was it easy to get prescription medicines for your child through his or her health plan?

C10061

2.0% 1 ☐ Never
5.2% 2 ☐ Sometimes
20.1% 3 ☐ Usually
72.8% 4 ☐ Always

See Note 23

62. Did anyone from your child's health plan, doctor's office, or clinic help you get your child's prescription medicines?

C10062

52.8% 1 ☐ Yes
47.2% 2 ☐ No

See Note 23

63. Did anyone from your child's health plan, doctor's office, or clinic provide patient education on the side effects of prescription medication?

C10063

72.1% 1 ☐ Yes
27.9% 2 ☐ No

See Note 23

64. Did anyone from your child's health plan, doctor's office, or clinic provide information on laboratory tests or follow-up appointments related to prescription medication?

C10064

44.6% 1 ☐ Yes
55.4% 2 ☐ No

See Note 23

65. Did anyone from your child's health plan, doctor's office, or clinic inform your child about not sharing prescription medication with others and/or not using other people's prescription medications?

C10065

44.5% 1 ☐ Yes
55.5% 2 ☐ No

ABOUT YOUR CHILD AND YOU

Information in this section will be used to study how different kinds of people view our health care system. This information will not be used to identify you or your child personally.

Percent of Responses*

66. In general, how would you rate your child's overall health now?

C10066

58.9% 5 ☐ Excellent
30.8% 4 ☐ Very good
8.6% 3 ☐ Good
1.5% 2 ☐ Fair
0.2% 1 ☐ Poor

67. Does your child currently need or use medicine prescribed by a doctor (other than vitamins)?

Percent of Responses*

C10067

30.2% 1 ☐ Yes
69.8% 2 ☐ No ➔ *Go to Question 70*

See Note 24

68. Is this because of any medical, behavioral or other health condition?

C10068

81.3% 1 ☐ Yes
18.7% 2 ☐ No ➔ *Go to Question 70*

See Note 24

69. Is this a condition that has lasted or is expected to last for at least 12 months?

C10069

83.8% 1 ☐ Yes
16.2% 2 ☐ No

See Note 24

70. Does your child need or use more medical care, more mental health services, or more educational services than is usual for most children of the same age?

C10070

12.6% 1 ☐ Yes
87.4% 2 ☐ No ➔ *Go to Question 73*

See Note 25

71. Is this because of any medical, behavioral or other health condition?

C10071

91.4% 1 ☐ Yes
8.6% 2 ☐ No ➔ *Go to Question 73*

See Note 25

72. Is this a condition that has lasted or is expected to last for at least 12 months?

C10072

95.6% 1 ☐ Yes
4.4% 2 ☐ No

See Note 25

73. Is your child limited or prevented in any way in his or her ability to do the things most children of the same age can do?

C10073

7.1% 1 ☐ Yes
92.9% 2 ☐ No ➔ *Go to Question 76*

See Note 26

74. Is this because of any medical, behavioral or other health condition?

C10074

91.8% 1 ☐ Yes
8.2% 2 ☐ No ➔ *Go to Question 76*

See Note 26

75. Is this a condition that has lasted or is expected to last for at least 12 months?

C10075

96.5% 1 ☐ Yes
3.5% 2 ☐ No

See Note 26

76. Does your child need or get special therapy, such as physical, occupational, or speech therapy?

C10076

*Percent of Responses**

7.5% 1 ☐ Yes
92.5% 2 ☐ No ➔ *Go to Question 79*

See Note 27

77. Is this because of any medical, behavioral, or other health condition?

C10077

68.5% 1 ☐ Yes
31.5% 2 ☐ No ➔ *Go to Question 79*

See Note 27

78. Is this a condition that has lasted or is expected to last for at least 12 months?

C10078

89.4% 1 ☐ Yes
10.6% 2 ☐ No

See Note 27

79. Does your child have any kind of emotional, developmental or behavioral problem for which he or she needs or gets treatment or counseling?

C10079

11.1% 1 ☐ Yes
88.9% 2 ☐ No ➔ *Go to Question 81*

See Note 28

80. Has this problem lasted or is it expected to last for at least 12 months?

C10080

83.2% 1 ☐ Yes
16.8% 2 ☐ No

See Note 28

81. Does your child have a physical, emotional, developmental or intellectual disorder that requires care from a medical specialist, therapy, education, training or counseling?

C10081

10.8% 1 ☐ Yes
89.2% 2 ☐ No ➔ *Go to Question 86*

See Note 29

82. Is your family enrolled in the Exceptional Family Member Program (EFMP)? In the Air Force, this is called Special Needs Identification and Assignment Coordination.

C10082

24.9% 1 ☐ Yes ➔ *Go to Question 84*
75.1% 2 ☐ No

See Notes 29, 30

83. If your child is not enrolled in the Exceptional Family Member Program (EFMP), also known as the Special Needs Identification and Assignment Coordination, why not?

*Percent of Responses**

MARK ALL THAT APPLY.

C10083A-C10083G

See Notes 29, 30

13.8% A ☐ Child was not eligible for the programs
47.0% B ☐ Did not know about the programs
3.1% C ☐ Did not want to limit duty assignments
18.8% D ☐ Did not feel my child needed the services offered by these programs
0.8% E ☐ EFMP/Special Needs Identification and Assignment Coordination is not offered by the sponsor's (active duty family member's) service branch
6.7% F ☐ Child does not live with the sponsor (active duty family member) and is not required to enroll
25.0% G ☐ Other *Please specify*:

_____

➔ *ALL RESPONSES, GO TO QUESTION 85*

84. Have you ever returned to the EFMP office to update your child's status?

C10084

52.5% 1 ☐ Yes
47.5% 2 ☐ No

See Notes 29, 30

85. Does your child receive any services under the Program for Persons with Disabilities (PFPWD) or Extended Care Health Option (its replacement, ECHO), Individual Case Management Program for Persons with Extraordinary Conditions (ICMP-PEC), or Custodial Care Transition Policy (CCTP)?

C10085A-C1085D

MARK ALL THAT APPLY.

See Notes 29, 31

4.5% A ☐ PFPWD or ECHO
0.4% B ☐ ICMP-PEC
0.2% C ☐ CCTP
95.1% D ☐ None of these programs

86. Have you ever been told by a doctor, nurse or other health professional that your child has any of the following emotional, developmental, or behavioral problems?

MARK ALL THAT APPLY.

C10086A-C100861I

3.9% A ☐ Anxiety problems
8.6% B ☐ Attention problems
2.1% C ☐ Conduct problems
2.7% D ☐ Depression
2.8% E ☐ Developmental delay or mental retardation
4.3% F ☐ Learning problems or disabilities
0.5% I ☐ Self-injurious behavior
1.7% G ☐ Sleep disturbance
8.1% H ☐ Other

87. How tall is your child without his/her shoes on?

Percent of Responses*
90.6%

Directions: Write your child's height in the shaded blank boxes. Check the box next to the matching number.

C10087F, C10087I

Example:

Height	
Feet	Inches
4	6
☐ 1	☐ 0
☐ 2	☐ 1
☐ 3	☐ 2
☑ 4	☐ 3
☐ 5	☐ 4
☐ 6	☐ 5
☐ 7	☑ 6
	☐ 7
	☐ 8
	☐ 9
	☐ 10
	☐ 11

Height	
Feet	Inches
☐ 1	☐ 0
☐ 2	☐ 1
☐ 3	☐ 2
☐ 4	☐ 3
☐ 5	☐ 4
☐ 6	☐ 5
☐ 7	☐ 6
	☐ 7
	☐ 8
	☐ 9
	☐ 10
	☐ 11

88. How much does your child weigh without his/her shoes on?

C10088

Percent of Responses*
94.4%

Directions: Write your child's weight in the shaded blank boxes. Check the box next to the matching number.

Example:

Weight		
Pounds		
0	6	0
☑ 0	☐ 0	☑ 0
☐ 1	☐ 1	☐ 1
☐ 2	☐ 2	☐ 2
☐ 3	☐ 3	☐ 3
	☐ 4	☐ 4
	☐ 5	☐ 5
	☑ 6	☐ 6
	☐ 7	☐ 7
	☐ 8	☐ 8
	☐ 9	☐ 9

Weight		
Pounds		
☐ 0	☐ 0	☐ 0
☐ 1	☐ 1	☐ 1
☐ 2	☐ 2	☐ 2
☐ 3	☐ 3	☐ 3
	☐ 4	☐ 4
	☐ 5	☐ 5
	☐ 6	☐ 6
	☐ 7	☐ 7
	☐ 8	☐ 8
	☐ 9	☐ 9

89. In the last 12 months, did your child's doctor or other health provider discuss your child's weight with you?

Percent of Responses*

C10089

27.8% 1 ☐ Yes
72.2% 2 ☐ No

90. Did you want your child's doctor or other health provider to discuss your child's weight with you?

C10090A-C10090D

26.8% 1 ☐ Yes
73.2% 2 ☐ No

91. How many servings of fruits and vegetables does your child eat on an average day?

C10091

2.0% 1 ☐ None
44.1% 2 ☐ One to two
44.2% 3 ☐ Three to four
9.6% 4 ☐ Five or more

92. In the past 7 days, how many times did your child eat fast food? Fast food is the kind of food served at the following or similar types of restaurants: McDonald's, Burger King, Wendy's, Dairy Queen, Hardee's, Jack in the Box, KFC, Popeye's, Taco Bell.

C10092

28.6% 1 ☐ Never
61.3% 2 ☐ 1 or 2 times
8.5% 3 ☐ 3 or 4 times
1.1% 4 ☐ 5 or 6 times
0.4% 5 ☐ 7 or more times

93. On how many of the past 7 days did your child exercise or participate in physical activity for at least 20 minutes that made him/her sweat and breathe hard such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities?

C10093

9.3% 1 ☐ 0 days
3.1% 2 ☐ 1 day
7.4% 3 ☐ 2 days
12.4% 4 ☐ 3 days
12.2% 5 ☐ 4 days
19.3% 6 ☐ 5 days
8.7% 7 ☐ 6 days
27.6% 8 ☐ 7 days

94. On how many of the past 7 days did your child participate in physical activity for at least 30 minutes that did not make him/her sweat or breathe hard, such as fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors?

C10094

Percent of Responses*

17.1% 1 ☐ 0 days
6.5% 2 ☐ 1 day
11.8% 3 ☐ 2 days
11.8% 4 ☐ 3 days
8.5% 5 ☐ 4 days
11.4% 6 ☐ 5 days
4.6% 7 ☐ 6 days
28.3% 8 ☐ 7 days

95. In the past 7 days, how many hours did your child watch TV, including television programs, DVDs, and videos?

C10095

4.0% 1 ☐ My child did not watch any TV
17.4% 2 ☐ Less than 1 hour per day
30.5% 3 ☐ 1 or more hours per day but less than 2 hours per day
27.6% 4 ☐ 2 or more hours per day but less than 3 hours per day
13.0% 5 ☐ 3 or more hours per day but less than 4 hours per day
4.3% 6 ☐ 4 or more hours per day but less than 5 hours per day
3.1% 7 ☐ 5 or more hours per day

96. In the past 7 days, not including time spent watching TV, how many hours did your child spend playing video games, or using the computer?

C10096

29.5% 1 ☐ My child did not play video games, or use the computer
29.8% 2 ☐ Less than 1 hour per day
20.2% 3 ☐ 1 or more hours per day but less than 2 hours per day
11.7% 4 ☐ 2 or more hours per day but less than 3 hours per day
5.4% 5 ☐ 3 or more hours per day but less than 4 hours per day
1.8% 6 ☐ 4 or more hours per day but less than 5 hours per day
1.8% 7 ☐ 5 or more hours per day

97. What is your child's age?

Percent of Responses*

96.1%

Directions: Write your child's age in the shaded blank boxes. Check the box next to the matching number.

C10097

Example:

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

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

98. Is your child male or female?

C10098

Percent of Responses*

51.5% 1 ☐ Male ➔ *Go to Question 101*
48.5% 2 ☐ Female

See Note 32A

99. A vaccine to prevent the human papilloma virus or HPV infection is available and is called cervical cancer vaccine, HPV shot, or GARDASIL®. Has your child EVER had the HPV vaccination?

C10099

17.9% 1 ☐ Yes
75.4% 2 ☐ No ➔ *Go to Question 101*
0.0% 3 ☐ Doctor refused when asked ➔ *Go to Question 101*
6.6% -5 ☐ Don't know ➔ *Go to Question 101*

See Notes 32A, 32B, 33

100. How many HPV shots did she receive?

C10100

16.6% 1 ☐ 1 shot
20.9% 2 ☐ 2 shots
48.6% 3 ☐ 3 shots
1.2% 4 ☐ More than 3 shots
12.6% -5 ☐ Don't know

See Notes 32A, 32B, 33

101. Has your child received a tetanus shot in the past 10 years?

C10101

64.5% 1 ☐ Yes
14.9% 2 ☐ No ➔ *Go to Question 104*
20.6% -5 ☐ Don't know ➔ *Go to Question 104*

See Note 34

102. Was your child's most recent tetanus shot given in 2005 or later?

C10102

63.8% 1 ☐ Yes
13.6% 2 ☐ No ➔ *Go to Question 104*
22.6% -5 ☐ Don't know ➔ *Go to Question 104*

See Note 34

103. There are currently two types of tetanus shots available today for older children and teenagers. One contains the tetanus diphtheria vaccine. The other type contains tetanus diphtheria and pertussis or whooping cough vaccine. Did the doctor say your child's most recent tetanus shot included the pertussis or whooping cough vaccine?

C10103

37.9% 1 ☐ Yes (included pertussis)
5.6% 2 ☐ No (did not include pertussis)
56.5% -5 ☐ Don't know

See Note 34

104. During the past 12 months, has your child had a flu vaccination? There are two types of flu vaccinations. One is a shot and the other is a spray in the nose.

C10104

60.0% 1 ☐ Yes
37.6% 2 ☐ No
2.4% -5 ☐ Don't know

105. If you were free to choose between civilian and military facilities for all of your child's health care, which would you prefer? Would you say...

C10105

Percent of Responses*			
14.9%	1	☐	All care from military facilities
36.1%	2	☐	All care from civilian facilities
48.9%	3	☐	Some care from both military and civilian facilities

106. Is your child of Hispanic or Latino origin or descent?
Mark "NO" if not Spanish/Hispanic/Latino.

C10106A-C10106E, C10106 | See Note 35

85.6%	A	☐	No, not Spanish, Hispanic, or Latino
6.9%	B	☐	Yes, Mexican, Mexican American, Chicano
3.5%	C	☐	Yes, Puerto Rican
0.4%	D	☐	Yes, Cuban
4.4%	E	☐	Yes, other Spanish, Hispanic, or Latino

107. What is your child's race?
Mark ONE OR MORE races to indicate what you consider your child to be.

C10107A-C10107E

77.3%	A	☐	White
14.6%	B	☐	Black or African-American
2.5%	C	☐	American Indian or Alaska Native
9.6%	D	☐	Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
1.4%	E	☐	Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

108. What is <u>your</u> age now?

C10108

5.7%	1	☐	Under 18
3.4%	2	☐	18 to 24
26.0%	3	☐	25 to 34
36.7%	4	☐	35 to 44
21.8%	5	☐	45 to 54
4.7%	6	☐	55 to 64
1.5%	7	☐	65 to 74
0.2%	8	☐	75 or older

109. Are you male or female?

C10109

29.5%	1	☐	Male
70.5%	2	☐	Female

110. What is the highest grade or level of school that you have <u>completed</u>?

C10110

Percent of Responses*			
0.5%	1	☐	8th grade or less
0.9%	2	☐	Some high school, but did not graduate
11.4%	3	☐	High school graduate or GED
42.0%	4	☐	Some college or 2-year degree
21.6%	5	☐	4-year college graduate
23.6%	6	☐	More than 4-year college degree

111. How are you related to the policyholder?

C10111

33.5%	1	☐	I am the policyholder
59.3%	2	☐	Spouse or partner of policyholder
0.9%	3	☐	Child of policyholder
1.6%	4	☐	Other family member
0.1%	5	☐	Friend
4.6%	6	☐	Someone else (please print):

_____

112. How are you related to the child?

C10112

96.8%	1	☐	Mother or father
1.8%	2	☐	Grandparent
0.1%	3	☐	Aunt or uncle
0.0%	4	☐	Older sibling
0.2%	5	☐	Other relative
1.1%	6	☐	Legal guardian

113. In the last 12 months, was a service member in your household deployed?

C10113

25.5%	1	☐	Yes
74.5%	2	☐	No

THANK YOU

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

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

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APPENDIX B

CHILD SURVEY FIELDING MATERIALS

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Sample Notification Letter

March 31, 2010

12345678 26C3 0350 301
TO THE PARENT OR GUARDIAN OF
DAVE BRYANT JR
222 S. RIVERSIDE DRIVE
CHICAGO, IL 60606-5809

Dear Parent/Guardian:

The Department of Defense needs your help in completing the ***2010 Child Health Care Survey of DoD Beneficiaries.*** Our mission is to provide beneficiaries with the highest quality health care that we can. To accomplish this, we need to know what we are doing right and what needs improvement. We depend on you to keep us informed. By sharing your thoughts and feelings about your child's health care experiences, you can help us make health care better for all beneficiaries.

This survey includes questions about the health care services your child may have received in the past 12 months. **Even if your child did not receive health care from a military facility, we still ask that you complete the survey.**

The survey will be mailed to you within a few weeks. However, you may complete it now on our web site using the following address and password.

www.synovate.net/childsurvey10

Password: 7654321

If you have questions about the survey, need the survey sent to your new address or do not wish to participate, please contact the Survey Processing Center. You can reach them by email at survey-dodq2@synovate.net; by calling 1-877-236-2390; or sending a fax to 1-800-409-7681. Please reference your ID number, 12345678, in all communication.

For information about the legitimacy of the survey, please go to the TRICARE Web site at www.tricare.mil/hpae/home and click on the List of Approved Surveys. The DoD Report Control Symbol for this survey is RCS# DD-HA(A) 1942. Thank you for your time and assistance in this very important effort.

Sincerely,

Thomas V. Williams, Ph.D.
Director, Health Program Analysis and Evaluation Directorate
Office of the Assistant Secretary of Defense (Health Affairs)/TRICARE Management Activity

Sample First Survey Cover Letter

April 21, 2010

12345678 26C3 0350 301
TO THE PARENT OR GUARDIAN OF
DAVE BRYANT JR
222 S. RIVERSIDE DRIVE
CHICAGO, IL 60606-5809

Dear Parent/Guardian:

We need your help! You have been selected to comment on the health care experiences of your child in the *2010 Child Health Care Survey of DoD Beneficiaries.* **If you have already completed the survey for your child online, please disregard this letter**.

The Department of Defense asks for your opinions on topics related to your child's health care including the availability of health care and your satisfaction with health care services. This is your opportunity to impact formulation of government health care policies that may affect your child. **Even if your child did not receive health care from a military facility, we still ask that you complete the survey.** Your participation is valuable and necessary.

Please fill out and return the enclosed survey or complete it online using the following web address and password:

www.synovate.net/childsurvey10
Password: 7654321

If you have questions about the survey, need the survey sent to your new address or do not wish to participate, please contact the Survey Processing Center. You can reach them by email at survey-dodq2@synovate.net; by calling 1-877-236-2390; or sending a fax to 1-800-409-7681. Please reference your ID number, 12345678, in all communication.

For information about the legitimacy of the survey, please go to the TRICARE Web site at www.tricare.mil/hpae/home and click on the List of Approved Surveys. The DoD Report Control Symbol for this survey is RCS# DD-HA(A) 1942. Thank you for your time and assistance in this very important effort.

Thomas V. Williams, Ph.D.
Director, Health Program Analysis and Evaluation Directorate
Office of the Assistant Secretary of Defense (Health Affairs)/TRICARE Management Activity

Sample Reminder/Thank You Postcard

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS/TRICARE MANAGEMENT ACTIVITY
SURVEY PROCESSING CENTER
C/O SYNOVATE
PO BOX 5030
CHICAGO, IL 60680

87654321 5V73 9359 301
TO THE PARENT OR GUARDIAN OF
DAVE BRYANT JR
222 S. RIVERSIDE DR.
APARTMENT 5
WHEATON, IL 60187

WE NEED YOUR HELP!

HELLO! 26C3-35

Recently, we mailed you the *2010 Child Health Care Survey of DoD Beneficiaries*, a Department of Defense sponsored survey. If you already filled it out and returned it, please accept our thanks. If you have not returned a completed survey, please do so because your opinion matters.

As an eligible military beneficiary, we want to know about the health care services your child has received within military and civilian facilities. Even if your child did not receive health care from a military facility, please complete the survey for them.

If you would like to complete the survey online, please visit our website:

www.synovate.net/childsurvey10

Your password: 7654321

If you have any questions or did not receive the survey, please call toll free 1-877-236-2390 (within the U.S.) or email us at survey-dodq2@synovate.net. Please reference your ID number, 12345678, in all communication.

For information about the legitimacy of the survey, please go to the TRICARE Web site at www.tricare.mil/hpae/home and click on the List of Approved Surveys. The DoD Report Control Symbol for this survey is RCS# DD-HA(A) 1942.

THANK YOU!

Thomas V. Williams, Ph.D.
Director, Health Program Analysis and Evaluation Directorate
Office of the Assistant Secretary of Defense (Health Affairs)/TRICARE Management Activity

Sample Second Survey Cover Letter

May 21, 2010

12345678 26C3 0350 301
TO THE PARENT OR GUARDIAN OF
DAVE BRYANT JR
222 S. RIVERSIDE DRIVE
CHICAGO, IL 60606-5809

Dear Parent/Guardian:

We still need your help! You have been selected to comment on the health care experiences of your child in the *2010 Child Health Care Survey of DoD Beneficiaries.* **If you have already mailed in the survey for your child or completed it online, please disregard this letter and survey.**

The survey asks for your opinions on topics related to your child's health care. This is your opportunity to directly assist us in the development of policies and programs to improve the health care services for the entire DoD community.

Please take the time today to either complete and return the enclosed survey or access the web survey by going to this web site:

www.synovate.net/childsurvey10

Password: 7654321

If you have questions about the survey, need the survey sent to your new address or do not wish to participate, please contact the Survey Processing Center. You can reach them by email at survey-dodq2@synovate.net; by calling 1-877-236-2390; or sending a fax to 1-800-409-7681. Please reference your ID number, 12345678, in all communication.

For information about the legitimacy of the survey, please go to the TRICARE Web site at www.tricare.mil/hpae/home and click on the List of Approved Surveys. The DoD Report Control Symbol for this survey is RCS# DD-HA(A) 1942. Thank you for your time and assistance in this very important effort.

Sincerely,

Thomas V. Williams, Ph.D.
Director, Health Program Analysis and Evaluation Directorate
Office of the Assistant Secretary of Defense (Health Affairs)/TRICARE Management Activity

APPENDIX C

DATA PROCESSING ARCHITECTURE

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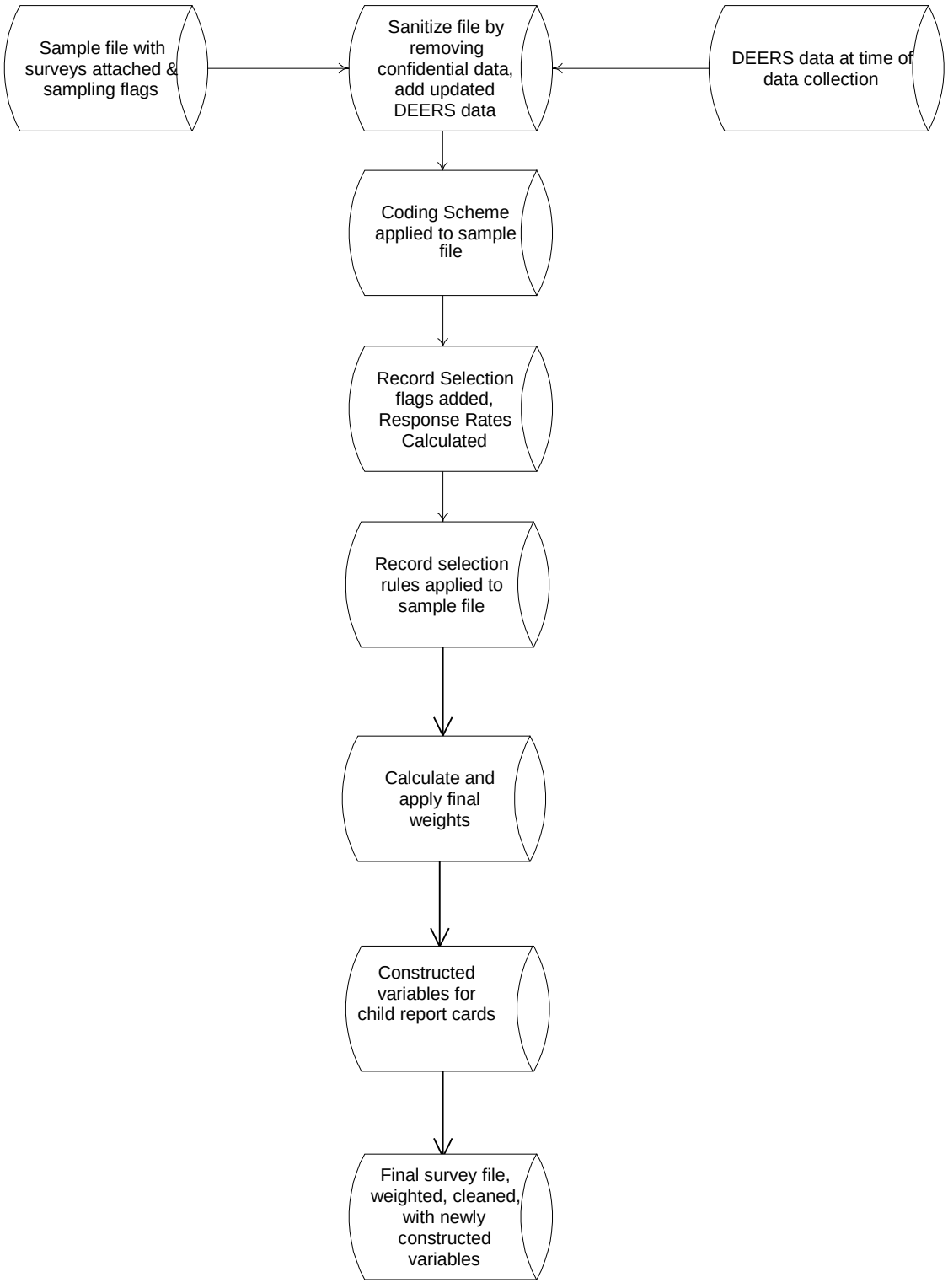
DATA PROCESSING ARCHITECTURE



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APPENDIX D

CODING SCHEME AND CODING TABLES

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BASIC SAS AND ASCII/EBCDIC MISSING DATA AND NOT APPLICABLE CODES

SAS Numeric	ASCII/EBCDIC Numeric	Description
.	-9	No response
.O	-7	Out of range error
.N	-6	Not applicable or valid skip
.D	-5	Scalable response of “don’t know” or “not sure”
.I	-4	Incomplete grid error
.C	-1	Question should have been skipped.

Missing values ‘.’ and incomplete grids ‘.I’ are encoded prior to implementation of the Coding Scheme Notes (see below).

Coding Table for Note 1:
C10002A – C10002L

N1	C10002A-C10002H, C10002J- C10002L are:	C10002I is:	C10002A-C10002H , C10002J-C10002L are coded as:	C10002I is coded as:	*
1	At least one is "marked"	1: "Marked"	Stand as original value	2: Not "Marked"	F
2	At least one is "marked" or "all are blank"	2: Not "Marked" , missing	Stand as original value	Stands as original value	
3	"All are blank"	1: "Marked"	Stand 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 1:
Responses to C10002A-C10002H, C10002J-C10002L are all unmarked.

Definition of "marked" in Coding Table for Note 1:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 2:
C10006, C10007

N2	C10006 is:	C10007 is :	C10006 is coded as:	C10007 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or missing response	1-4: How often	1: Yes	Stands as original value	B
3	2: No	Missing response	Stands as original value	.N, valid skip	F
4	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 3:
C10008, C10009

N3	C10008 is:	C10009 is :	C10008 is coded as:	C10009 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No, missing response	2-4: How often	1: Yes	Stands as original value	B
3	2: No	1: Never, missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	Missing response	1: Never, missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 4:
C10010, C10011

N4	C10010 is:	C10011 is:	C10010 is coded as:	C10011 is coded as:	*
1	0: None	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
2	>=1	Any value	Stands as original value	Stands as original value	
3	Missing response	Any value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 5:
C10012, C10013 - C10017

N5	C10012 is:	C10013 – C10017 are:	C10012 is coded as:	C10013 - C10017 are coded as:	*
1	1: None	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
2	>=2	Any value	Stands as original value	Stand as original value	
3	Missing response	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 6:
C10014, C10015

N6	C10014 is:	C10015 is:	C10014 is coded as:	C10015 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	Stands as original value	
3	2: No, -5: Don't know, missing response	1: Yes	1: Yes	Stands as original value	B
4	2: No	2: No, -5: Don't know, missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	-5: Don't know, missing response	2: No, -5: Don't know, missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 7:
C10015, C10016

N7	C10015 is:	C10016 is:	C10015 is coded as:	C10016 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	Any value	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: No, -5: Don't know, missing response	Any value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 8:
C10018, C10019, C10020A-C10020E

N8	C10018 is:	C10019 is:	C10020A-C10020E are:	C10018 is coded as:	C10019 is coded as:	C10020A-C10020E are coded as:	*
1	1: Yes	1-3: How often, missing response	Any value	Stands as original value	Stands as original value	Stand as original value	
2	1: Yes	4: Always	Any value	Stands as original value	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	F
3	2: No, missing response	1-3: How often	Any value	1: Yes	Stands as original value	Stand as original value	B
4	2: No, missing response	4: Always	Any value	1: Yes	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	B F
5	2: No	Missing response	Any value	Stands as original value	.N, valid skip	.N, valid skip if unmarked, .C, question should be skipped if marked	F
6	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 9:
C10021, C10022-C10031

N9	C10021 is:	C10022-C10025, C10027-C10030 are:	C10026, C10031 are:	C10021 is coded as:	C10022-C10031 are coded as:	*
1	1: Yes	Any value	Any value	Stands as original value	Stand as original value	
2	2: No or missing response	At least one is "marked"	Any value	1: Yes	Stand as original value	B
3	2: No	"All are blank"	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	Missing response	"All are blank"	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "All are blank" in Coding Table for Note 9:
All of the following are true: C10022 is either 0: None or missing and C10023-C10025, C10027-C10030 are all missing.

Definition of "marked" in Coding Table for Note 9:
Any pattern of marks for C10022-C10025, C10027-C10030 outside the definition "all are blank".

Coding Table for Note 10:
C10022, C10023-C10031

N10	C10022 is:	C10023-C10031 are:	C10022 is coded as:	C10023-C10031 are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	0: None	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
3	1-6, or missing response	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 11:
C10026, C10027

N11	C10026 is:	C10027 is:	C10026 is coded as:	C10027 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 or missing response	Any value	Stands as original value	Stands as original value	
3	2: No	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 12:
C10031, C10032

N12	C10031 is:	C10032 is:	C10031 is coded as:	C10032 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	Any value	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: No or missing response	Any value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 13:
C10033, C10034

N13	C10033 is:	C10034 is :	C10033 is coded as:	C10034 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or missing response	1: Yes or 2: No	1: Yes	Stands as original value	B
3	2: No	Missing response	Stands as original value	.N, valid skip	F
4	Missing response	Missing response	Stands as original value	Stands as original value	

*Indication of backward coding (B) or forward coding (F).

Coding Table for Note 14:
C10035, C10036-C10037

N14	C10035 is:	C10036-C10037 are:	C10035 is coded as:	C10036-C10037 are coded as:	*
1	1: Yes	Any value	Stands as original value	., missing if –6; stand as original value otherwise	F
2	2: No or missing response	At least one is “marked”	1: Yes	Stand as original value	B
3	2: No	All “unmarked”	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	Missing response	All “unmarked”	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of “unmarked” in Coding Table for Note 14:
The responses to C10036-C1037 are either not applicable (-6) or missing.

Definition of “marked” in Coding Table for Note 14:
Any pattern of marks outside the definitions “all are blank” and “blank or NA”.

Coding Table for Note 15:
C10038, C10039, C10040A-C10040H, C10041-C10043

N15	C10038 is:	C10039, C10040A-C10040H, C10041-C10043 are:	C10038 is coded as:	C10039, C10040A-C10040H, C10041-C10043 are coded as:	*
1	1: Yes	Any value	Stands as original value	Stand as original value	F
2	2: No, missing	At least one is "marked"	1: Yes	Stand as original value	B
3	2: No	All "unmarked"	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	Missing response	All "unmarked"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "unmarked" in Coding Table for Note 15:
All of the following are true: C10039 and C10042 are missing, C10040A-C10040H are all unmarked, C10041 is either missing or none (0), and C10043 is either missing or not applicable (-6).

Definition of "marked" in Coding Table for Note 15:
Any pattern of marks outside the definitions "all are blank" and "blank or NA".

Coding Table for Note 16:
C10039, C10040A-C10040H

N16	C10039 is:	C10040A-C10040H are:	C10039 is coded as:	C10040A-C10040H are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	1-3: How often	Any value	Stands as original value	Stand as original value	
3	4: Always	Any value	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	F
4	Missing response	At least one is "marked"	Stands as original value	Stand as original value	B
5	Missing response	"All are blank"	Stands as original value	., missing	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 16:
Responses to C10040A-C10040H are all unmarked.

Definition of "marked" in Coding Table for Note 16:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 17:
C10041, C10042-C10043

N17	C10041 is:	C10042-C10043 are:	C10041 is coded as:	C10042-C10043 are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	1-5: Specialists or missing response	Any value	Stands as original value	Stand as original value	
3	0: None	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F

*** Indication of backward coding (B) or forward coding (F).**

Coding Table for Note 18:
C10046, C10047A-C10047B, C10047D-C10047O

N18	C10046 is:	C10047A-C10047B, C10047D-C10047O are:	C10046 is coded as:	C10047A-C10047B, C10047D-C10047O are coded as:	*
1	1: Yes	At least one is "marked"	2: No	Stand as original value	B
2	1: Yes	"All are blank"	Stands as original value	.N, valid skip	F
3	2: No	Any value	Stands as original value	Stand as original value	
4	Missing response	At least one is "marked"	2: No	Stand as original value	B
5	Missing response	"All are blank"	Stands as original value	., missing	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 18:
Responses to C10047A-C10047B, C10047D-C10047O are all unmarked.

Definition of "marked" in Coding Table for Note 18:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 19:
C10050, C10051

N19	C10050 is:	C10051 is:	C10050 is coded as:	C10051 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or missing response	1-4: How often	1: Yes	Stands as original value	B
3	2: No	Missing response	Stands as original value	.N, valid skip	F
4	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F)

Coding Table for Note 20:
C10052, C10053

N20	C10052 is:	C10053 is:	C10052 is coded as:	C10053 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or missing response	1-4: How often	1: Yes	Stands as original value	B
3	2: No	Missing response	Stands as original value	.N, valid skip	F
4	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F)

Coding Table for Note 21:
C10054, C10055-C10056

N21	C10054 is:	C10055-C10056 are:	C10054 is coded as:	C10055-C10056 are coded as:	*
1	1: Yes	Any value	Stands as original value	Stand as original value	
2	2: No, missing response	At least one is "marked"	1: Yes	Stand as original value	B
3	2: No	"All are blank"	Stands as original value	.N, valid skip	F
4	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 21:
Responses to C10055-C10056 are all missing.

Definition of "marked" in Coding Table for Note 21:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 22:
C10057, C10058

N22	C10057 is:	C10058 is :	C10057 is coded as:	C10058 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No or missing response	1-4: How often	1: Yes	Stands as original value	B
3	2: No	Missing response	Stands as original value	.N, valid skip	F
4	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 23:
C10060, C10061-C10064

N23	C10060 is:	C10061-C10064 are:	C10060 is coded as:	C10061-C10064 are coded as:	*
1	1: Yes	Any value	Stands as original value	Stand as original value	
2	2: No or missing response	At least one is "marked"	1: Yes	Stand as original value	B
3	2: No	"All are blank"	Stands as original value	.N, valid skip	F
4	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 23:
Responses to C10061-C10064 are all missing.

Definition of "marked" in Coding Table for Note 23:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 24:
C10067, C10068, C10069

N24	C10067 is:	C10068 is:	C10069 is:	C10067 is coded as:	C10068 is coded as:	C10069 is coded as:	*
1	1: Yes	1: Yes	Any value	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes or missing response	2: No	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: Yes	Missing response	Marked	Stands as original value	1: Yes	Stands as original value	B
4	1: Yes	Missing response	Missing response	Stands as original value	Stands as original value	Stands as original value	
5	2: No	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	1: Yes or missing response	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 25:
C10070, C10071, C10072

N25	C10070 is:	C10071 is:	C10072 is:	C10070 is coded as:	C10071 is coded as:	C10072 is coded as:	*
1	1: Yes	1: Yes	Any value	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes or missing response	2: No	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: Yes	Missing response	Marked	Stands as original value	1: Yes	Stands as original value	B
4	1: Yes	Missing response	Missing response	Stands as original value	Stands as original value	Stands as original value	
5	2: No	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	1: Yes or missing response	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 26:
C10073, C10074, C10075

N26	C10073 is:	C10074 is:	C10075 is:	C10073 is coded as:	C10074 is coded as:	C10075 is coded as:	*
1	1: Yes	1: Yes	Any value	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes or missing response	2: No	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: Yes	Missing response	Marked	Stands as original value	1: Yes	Stands as original value	B
4	1: Yes	Missing response	Missing response	Stands as original value	Stands as original value	Stands as original value	
5	2: No	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	1: Yes or missing response	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 27:
C10076, C10077, C10078

N27	C10076 is:	C10077 is:	C10078 is:	C10076 is coded as:	C10077 is coded as:	C10078 is coded as:	*
1	1: Yes	1: Yes	Any value	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes or missing response	2: No	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: Yes	Missing response	Marked	Stands as original value	1: Yes	Stands as original value	B
4	1: Yes	Missing response	Missing response	Stands as original value	Stands as original value	Stands as original value	
5	2: No	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	1: Yes, missing response	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 28:
C10079, C10080

N28	C10079 is:	C10080 is:	C10079 is coded as:	C10080 is coded as:	*
1	1: Yes	Any value	Stands as original value	Stands as original value	
2	2: No	Missing response	Stands as original value	.N, valid skip	F
3	2: No or missing response	Marked	1: Yes	Stands as original value	B
4	Missing response	Missing response	Stands as original value	Stands as original value	

*Indication of backward coding (B) or forward coding (F).

Coding Table for Note 29:
C10081, C10082, C10083A-C10083G, C10084, C10085A-C10085D

N29	C10081 is:	C10082, C10083A-C10083G are:	C10085A-C10085C are:	C10084, C10085D are:	C10081 is coded as:	C10082, C10083A-C10083G, C10084, C10085A-C10085D are coded as:	*
1	1: Yes	Any value	Any value	Any value	Stands as original value	Stand as original value	
2	2: No or missing response	"Enrolled"	Any value	Any value	1: Yes	Stand as original value	B
3	2: No or missing response	"Not enrolled" or "all are blank"	Any "marked"	Any value	1: Yes	Stand as original value	B
4	2: No	"Not enrolled" or "all are blank"	All "unmarked"	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	"Not enrolled" or "all are blank"	All "unmarked"	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Column 3 of Coding Table for Note 29:
Responses to C10082, C10083A-C10083G are all missing.

Definition of "enrolled" in Column 3 of Coding Table for Note 29:
Response to C10082 is marked 1: Yes and the responses to C10083A-C10083G are all missing.

Definition of "not enrolled" in Column 3 of Coding Table for Note 29:
Any pattern of marks outside the definitions "all are blank" and "enrolled".

Definition of "unmarked" in Column 4 of Coding Table for Note 29:
Responses to C10085A-C10085C are all missing.

Definition of "marked" in Column 4 of Coding Table for Note 29:
Any pattern of marks outside the definition "unmarked".

Coding Table for Note 30:
C10082, C10083A-C10083G, C10084

N30	C10082 is:	C10083A-C10083G are:	C10084 is:	C10082 is coded as:	C10083A-C10083G are coded as:	C10084 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	Stand as original value	Stands as original value	
2	1: Yes or missing response	At least one is "marked"	Any value	2: No	Stand as original value	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	1: Yes	"All are blank"	Any value	Stands as original value	.N, valid skip	Stands as original value	F
4	2: No	Any value	Any value	Stands as original value	Stand as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	"All are blank"	Any value	Stands as original value	., missing	Stands as original value	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 30:
Responses to C10083A-C10083G are all unmarked.

Definition of "marked" in Coding Table for Note 30:
Any pattern of marks outside the definition "all are blank".

Coding Table for Note 31:
C10085A-C10085D

N31	C10085A-C10085C are:	C10085D is:	C10085A-C10085C are coded as:	C10085D is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stand as original value	Stands as original value	
2	At least one is "marked"	1: Marked or missing	Stand as original value	2: Unmarked	F
3	At least one is "marked"	2: Unmarked	Stand as original value	Stands as original value	
4	"All are blank"	1: Marked	Stand as original value	Stands as original value	
5	"All are blank"	2: Unmarked or missing	Stand as original value	1: Marked	F

*Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 31:
Responses to C10085A-C10085C are all missing or 2: unmarked.

Definition of "marked" in Coding Table for Note 31:
Any pattern of marks outside the definition "all are blank".

Note 32 (Part a)
C10098, SEX, XSEXA, C10099-C10100

N32A	C10098 is :	SEX is:	C10099-C10100 are:	XSEXA is coded as:
1	Missing response	F	Any "marked"	2: Female
2	Missing response	F	All "unmarked"	2: Female
3	Missing response	M	Any "marked"	1: Male
4	Missing response	M	All "unmarked"	1: Male
5	Missing response	Missing	Any "marked"	2: Female
6	Missing response	Missing	All "unmarked"	., missing
7	1: Male	Any value	All "unmarked"	1: Male
8	1: Male	F	Any "marked"	2: Female
9	1: Male	M or missing	Any "marked"	1: Male
10	2: Female	Any value	Any "marked"	2: Female
11	2: Female	M	All "unmarked"	1: Male
12	2: Female	F or missing	All "unmarked"	2: Female

SEX (SEXSMPL) is the gender from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

XSEXA is the recoded gender variable after taking into account the self-reported response (C10098), any responses to gender-specific questions, and the gender of the sample beneficiary from DEERS.

Definition of "unmarked" in Coding Table for Note 32A:
Responses to C10099-C10100 are all missing.

Definition of "marked" in Coding Table for Note 32A:
Any pattern of marks outside the definition "unmarked".

Note 32 (Part B):
XSEXA, C10099--C10100

N32B	XSEXA is:	C10099-C10100 are:	C10099-C10100 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	Any value	Stand as original value	
4	Missing	Any value	., missing	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 32b:
Responses to C10099-C10100 are all missing.

Definition of "marked" in Coding Table for Note 32b:
Any pattern of marks outside the definition "all are blank".

Coding Table for Note 33:
C10099, C10100

N33	C10099 is:	C10100 is :	C10099 is coded as:	C10100 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: Yes	Any value	Stands as original value	Stands as original value	
3	2: No, 3: Doctor refused, missing, -5: Don't know	1-4: 1 shot or more	1: Yes	Stands as original value	B
4	2: No, 3: Doctor refused, -5: Don't know	-5: Don't know, missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing	-5: Don't know, missing	Stands as original value	Stands as original value	

*Indication of backward coding (B) or forward coding (F).

Coding Table for Note 34:
C10101, C10102, C10103

N34	C10101 is:	C10102 is :	C10103 is :	C10101 is coded as:	C10102 is coded as:	C10103 is coded as:	*
1	1: Yes	1: Yes, missing	Any value	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes, missing	2: No, -5: Don't know	Any value	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: No, -5: Don't know, missing	1: Yes	Any value	1: Yes	Stands as original value	Stands as original value	B
4	2: No, -5: Don't know	2: No, -5: Don't know, missing	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	Missing response	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 35:
C10106, C10106A-C10106E

N35	C10106A is:	C10106B is:	C10106C is:	C10106D is:	C10106E is:	C10106 is coded as:	C10106A-C10106E are coded as:	*
1	Any value	1: Marked	Any value	Any value	Any value	2: Yes, Mexican, Mexican America, Chicano	Stand as original value	F
2	Any value	2: Unmarked	Any value	Any value	1: Marked	5: Yes, other Spanish, Hispanic, or Latino	Stand as original value	F
3	Any value	2: Unmarked	1: Marked	Any value	2: Unmarked	3: Puerto Rican	Stand as original value	F
4	Any value	2: Unmarked	2: Unmarked	1: Marked	2: Unmarked	4: Yes, Cuban	Stand as original value	F
5	1: Marked	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	1: No, not Spanish Hispanic, or Latino	Stand as original value	F
6	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	2: Unmarked	.: Missing	Stand as original value	F

* Indication of backward coding (B) or forward coding (F).

APPENDIX E

SAS CODE FOR FILE DEVELOPMENT

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E.1 WEIGHTING\MERGSYNC.SAS - COMBINE ITEM RESPONSE DATA FROM SYNOVATE WITH THE MPR SAMPLING AND DEERS VARIABLES.

```
************************************************************************
*
* PROGRAM:  MERGSYNC.SAS
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE:  COMBINE ITEM RESPONSE DATA FROM SYNOVATE WITH THE MPR SAMPLING AND
*           DEERS VARIABLES.  ALSO, CONSTRUCT XREGION AND CONUS.
* WRITTEN:  01/31/2001 BY KEITH RATHBUN
*
* MODIFIED: 1) 08/31/2001 BY KEITH RATHBUN, Adapted from MERGENRC.SAS to
*              accomodate the child survey for 2000.
*           2) 09/13/2002 BY KEITH RATHBUN, Small changes to accomodate the
*              the child survey for 2002.  Removed ENBGSMPL creation include
*              since it is now created at time of sampling.  Removed TSPSITE
*              since it is no longer available in the DEERS system.
*           3) 10/20/2004 BY KEITH RATHBUN: Recode unknown values of
*              MRTLSTAT into one group.
*
* INPUTS:   1) QnyyC.sas7dat - 2010 Child DOD Health Survey Data from SYNOVATE
*              where n = Quarter Number
*                   yy = Survey Administration Year
*           2) SAMPLC01.sas7bdat - MPR Sampling variables
*           3) SAMPLC02.sas7bdat - DEERS and MPR Sampling variables
*           4) FRAMEC.SD2 - More MPR Sampling variables
*
* OUTPUTS:  1) MERGSYNC.sas7bdat - 2010 Child DOD Health Survey Data
*              (Combined SYNOVATE, MPR, and DEERS variables)
*
************************************************************************;
LIBNAME  INr      "K:\Q3FY2010"; /*Restricted folder*/
LIBNAME  IN       "..\..\DATA\cfinal";
LIBNAME  OUT   v9 "..\..\DATA\cfinal";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER ERRORS=1;

************************************************************************
* Define fielding start date so AGE can be recalculated based on DOB.
************************************************************************;
%LET FIELDATE = 04142010; * mmddyyyy;
%LET FIELDLBL = April 14, 2010;
%LET NUMYRS   = 10; *Add 1 to number of years processed each year;

************************************************************************
* SORT the RETURNS and the original sample (BWT).
************************************************************************;
PROC SORT DATA=IN.dod10q3f_child OUT=SYNFILE; BY MPRID; RUN;
DATA SYNFILE;
   LENGTH MPRID $8;
   SET SYNFILE;
RUN;

PROC SORT DATA=IN.SAMPLC01 OUT=SAMPLC01; BY MPRID; RUN;


************************************************************************
* Attach the original sampling variables to the combined file.
************************************************************************;
DATA MERGSYNC;
   MERGE SAMPLC01(IN=IN1) SYNFILE(IN=IN2);
   BY MPRID;
   /*FLAG_FIN = COMPRESS(FLAG_FIN); *Trim off the blanks; MER - Removed 7/8/10 */
   ************************************************************************
   * DROP variables that are not needed.
   ************************************************************************;
   DROP SEL_PROB AGE_N FAMCODE;
   ************************************************************************
   * Assign indicator of CONUS based on TNEXSMPL.  CONUS stands for
   * Continental United States it but includes both Alaska and Hawaii.
   ************************************************************************;
   IF      TNEXSMPL IN (1,2,3)       THEN CONUS=1;  **conus;
   ELSE IF TNEXSMPL IN (4)           THEN CONUS=0;  **oconus;
```

```
   LENGTH CONUS   3. ;

   LABEL  CONUS    = 'CONUS - CONUS/OCONUS Indicator'
          BWT      = 'BWT - Basic Sampling Weight'
          FLAG_FIN = 'Final Disposition'
         ;
   IF IN2;
   IF IN2 AND NOT IN1 THEN
      PUT "ERROR: MPRID Not Found in both the Synovate and MPR files, MPRID = " MPRID;
RUN;

PROC SORT DATA=IN.FRAMEC OUT=FRAMEC
    (KEEP=MPRID SVCSMPL AGESMPL BGCSMPL
);
   BY MPRID;
RUN;

DATA MERGSYNC;
   MERGE MERGSYNC(IN=IN1) FRAMEC(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

*************************************************************************
* Attach the DEERS variables to the combined file.
*************************************************************************;
DATA OUT.MERGSYNC;
   MERGE MERGSYNC   (IN=IN1 )
         INr.SAMPLC02(IN=IN2
               KEEP=MPRID ENBGSMPL
                    DAGEQY  /*LEGDDSCD jma 2007*/ MBRRELCD
                    MEDTYPE PNTYPCD  /*E1-E&NUMYRS ****jma 2008*/

                    ENRID ACV PNBRTHDT MRTLSTAT PNLCATCD PAYPLNCD
                    RACEETHN  DCATCH   DMEDELG  DBENCAT  DSPONSVC
                    PATCAT ENLSMPL
                    );
   BY MPRID;
   DROP PAYPLNCD /*PNTYPCD jma 2007*/ PNBRTHDT;

   *************************************************************************
   * MPCSMPL follows the recode for the 1999 data.  If the individuals can
   * be classified as an officer or a warrant officer, they are.  Otherwise, the
   * individuals are classified as enlisted.
   *************************************************************************;
   IF PAYPLNCD = 'MO' then
      MPCSMPL = 2;
   ELSE IF PAYPLNCD = 'MW' then
      MPCSMPL = 3;
   ELSE
      MPCSMPL = 1;
   LABEL MPCSMPL  = "MPCSMPL - Military Personnel Category";
   *************************************************************************
   * Relabel ENBGSMPL variable for consistency with prior releases.
   *************************************************************************;
   LABEL ENBGSMPL = "Enrollment by beneficiary category";
   POSTSTR = STRATUM;
   STRATUM = SAMPSTR;
   DROP SAMPSTR;
   LABEL POSTSTR = "Post Stratification Cell";
   LABEL STRATUM = "Sampling STRATUM";
   *************************************************************************
   * Calculate FIELDAGE based on PNBRTHDT using fielding period
   * starting date.
   *************************************************************************;
   FIELDATE = INPUT("&FIELDATE",mmddyy8.);
   DOB = SUBSTR(PNBRTHDT,5,2) || SUBSTR(PNBRTHDT,7,2) || SUBSTR(PNBRTHDT,1,4);
   BRTHDATE = INPUT(DOB,mmddyy8.);
   FIELDAGE = PUT(INT((FIELDATE - BRTHDATE)/365.25),Z3.);
   LABEL FIELDAGE = "Age as of &FIELDLBL";

   LENGTH ONTIME $3;
   ONTIME = "YES";
   LABEL ONTIME = "Responded Within 8 weeks of Mail-Out";
```

```
   ********************************************************************
   * Recode unknown values of MRTLSTAT into one 'Unknown' group (Z).
   ********************************************************************;
   IF MRTLSTAT NOT IN ("A","D","I","L","M","N","S","W","Z"," ") THEN MRTLSTAT = "Z";

   DROP FIELDATE DOB BRTHDATE;

   IF IN2;
RUN;

TITLE1 "Annual Child DOD Health Survey - Combine Synovate, MPR and DEERS variables (6077-300)";
TITLE2 "Program Name: MERGSYNC.SAS By Keith Rathbun";
TITLE3 "Program Inputs: dod10q3child.sas7bdat, FRAMEC/SAMPLC01/C02.sas7bdat -- Program Output:
MERGSYNC.sas7bdat";

PROC CONTENTS; RUN;


PROC FREQ DATA=OUT.MERGSYNC(DROP=MPRID MIQCNTL);
TABLES FLAG_FIN ONTIME /*TRICKDUP */
       WEB DAGEQY*FIELDAGE TNEXSMPL*CONUS _ALL_ /MISSING LIST;
RUN;
```

E.2 CODINGSCHEME\CSCHM10C.SAS - IMPLEMENT CODING SCHEME AND CODING TABLES.

```
*****************************************************************
*
*  PROGRAM:  CSCHM10C.SAS
*  PURPOSE:  APPLY CODING SCHEME TO DATA.
*  WRITTEN:  09/04/01 Rankin
* MODIFIED:  10/23/2001 C.Rankin recoded select variables
*                       to 1=marked, 2=missing
*         :  09/23/2003 J.Agufa- Updated program for 2003 survey
*         :  09/15/2004 J.Agufa- Updated program for 2004 survey
*         :  12/05/2005 J.Agufa- Updated program for 2005 survey
*         :  7/13/2006 J.Agufa- Updated program for 2006 survey
*         : 10/30/2007 J.Agufa- Updated program for 2007 survey
*
* PREVIOUS PROGRAM: MERGSYNC.SAS
*
*    INPUT: MERGSYNC.sas7bdat
*   OUTPUT: CSCHM10C.sas7bdat
*
*****************************************************************;

OPTIONS /*OBS=100*/ PS=79 LS=132 PAGENO=1 SOURCE SOURCE2;

LIBNAME LIBRARY      '..\..\DATA\CFINAL\FMTLIB';
LIBNAME IN           '..\..\DATA\CFINAL';
LIBNAME OUT          '..\..\DATA\CFINAL';


%LET INDATA=MERGSYNC;
%LET OUTDATA=CSCHM10C;


/* Vairable names in survey -- become recoded varibles              */

%Let varlist1 =
C10001  C10002A C10002B C10002C C10002D C10002E C10002F C10002G C10002H C10002I
C10002J C10002K C10002L C10003  C10004  C10005  C10006  C10007  C10008  C10009
C10010  C10011  C10012  C10013  C10014  C10015  C10016  C10017  C10018  C10019
C10020A C10020B C10020C C10020D C10020E C10021  C10022  C10023  C10024  C10025
C10026  C10027  C10028  C10029  C10030  C10031  C10032  C10033  C10034  C10035
C10036  C10037  C10038  C10039  C10040A C10040B C10040C C10040D C10040E C10040F
C10040G C10040H C10041  C10042  C10043  C10044  C10045  C10046  C10047A C10047B
C10047D C10047E C10047F C10047G C10047H C10047I C10047J C10047K C10047L C10047M
C10047N C10047O C10048  C10049  C10050  C10051  C10052  C10053  C10054  C10055
C10056  C10057  C10058  C10059  C10060  C10061  C10062  C10063  C10064  C10065
C10066  C10067  C10068  C10069  C10070  C10071  C10072  C10073  C10074  C10075
C10076  C10077  C10078  C10079  C10080  C10081  C10082  C10083A C10083B C10083C
C10083D C10083E C10083F C10083G C10084  C10085A C10085B C10085C C10085D C10086A
C10086B C10086C C10086D C10086E C10086F C10086G C10086H C10086I C10087F C10087I
C10088  C10089  C10090  C10091  C10092  C10093  C10094  C10095  C10096  C10097
C10098  C10099  C10100  C10101  C10102  C10103  C10104  C10105  C10106A C10106B
C10106C C10106D C10106E C10107A C10107B C10107C C10107D C10107E C10108  C10109
C10110  C10111  C10112  C10113
;

/*  _O variables are the original values from the survey response */

%Let varlist2 =
C10001_O C10002AO C10002BO C10002CO C10002DO C10002EO C10002FO C10002GO C10002HO C10002IO
C10002JO C10002KO C10002LO C10003_O C10004_O C10005_O C10006_O C10007_O C10008_O C10009_O
C10010_O C10011_O C10012_O C10013_O C10014_O C10015_O C10016_O C10017_O C10018_O C10019_O
C10020AO C10020BO C10020CO C10020DO C10020EO C10021_O C10022_O C10023_O C10024_O C10025_O
C10026_O C10027_O C10028_O C10029_O C10030_O C10031_O C10032_O C10033_O C10034_O C10035_O
C10036_O C10037_O C10038_O C10039_O C10040AO C10040BO C10040CO C10040DO C10040EO C10040FO
C10040GO C10040HO C10041_O C10042_O C10043_O C10044_O C10045_O C10046_O C10047AO C10047BO
C10047DO C10047EO C10047FO C10047GO C10047HO C10047IO C10047JO C10047KO C10047LO C10047MO
C10047NO C10047OO C10048_O C10049_O C10050_O C10051_O C10052_O C10053_O C10054_O C10055_O
C10056_O C10057_O C10058_O C10059_O C10060_O C10061_O C10062_O C10063_O C10064_O C10065_O
C10066_O C10067_O C10068_O C10069_O C10070_O C10071_O C10072_O C10073_O C10074_O C10075_O
C10076_O C10077_O C10078_O C10079_O C10080_O C10081_O C10082_O C10083AO C10083BO C10083CO
C10083DO C10083EO C10083FO C10083GO C10084_O C10085AO C10085BO C10085CO C10085DO C10086AO
C10086BO C10086CO C10086DO C10086EO C10086FO C10086GO C10086HO C10086IO C10087FO C10087IO
C10088_O C10089_O C10090_O C10091_O C10092_O C10093_O C10094_O C10095_O C10096_O C10097_O
```

```
C10098_O C10099_O C10100_O C10101_O C10102_O C10103_O C10104_O C10105_O C10106AO C10106BO
C10106CO C10106DO C10106EO C10107AO C10107BO C10107CO C10107DO C10107EO C10108_O C10109_O
C10110_O C10111_O C10112_O C10113_O
;


TITLE 'DoD 2010 Child Survey';
TITLE2 'Apply Coding Scheme';

DATA &OUTDATA;
  SET IN.&INDATA(RENAME=(C10088=C10088CH C10097=C10097CH));

  LENGTH SEX $1;

  IF SEXSMPL=1 THEN SEX='M';
  ELSE IF SEXSMPL=2 THEN SEX='F';


  /** JMA 2008 */
  **** update variables with both filled items and check boxes
  **** Per Eric Schone;


  IF (C10087F*1) LT C10087FN AND C10087FN NE 0 THEN C10087F=C10087FN;
  IF (C10087I*1) LT C10087IN                   THEN C10087I=C10087IN;

  IF C10087F EQ 0        THEN C10087F=-7;
  IF C10087F GE 8        THEN C10087F=-7;

  C10088= COMPRESS(C10088CH,' ')*1;

  DROP C10088CH;

  IF C10088 < C10088N THEN C10088=C10088N;
  IF C10088=0         THEN C10088 =-7;
  IF C10088=999       THEN C10088 =-7;



  C10097= COMPRESS(C10097CH,' ')*1;

  DROP C10097CH;

  IF C10097N > C10097   THEN C10097 =C10097N;
  IF C10097 GT 18       THEN C10097 = -7;


RUN;

DATA OUT.&OUTDATA;

  %INCLUDE "CSCHM10C.FMT"; /* label and format statements */

  SET &OUTDATA;



  ARRAY RECODE &VARLIST1;
  ARRAY ORIG &VARLIST2;

  DO I = 1 to DIM(ORIG);
     ORIG(I) = RECODE(I);
     IF ORIG(I) < 0 THEN DO;
              IF ORIG(I)= -9 THEN RECODE(I)=.;
          ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
          ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
          ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
          ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
          ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
          ELSE RECODE(I)=RECODE(I);
     END;
  END;
  DROP I;
```

```
  /* recode selected responses to be 1=marked, 2=unmarked */

  ARRAY   MARKED(*)
C10002A C10002B C10002C C10002D C10002E C10002F C10002G C10002H
C10002I C10002J C10002K C10002L C10020A C10020B C10020C C10020D C10020E
C10040A C10040B C10040C C10040D C10040E C10040F C10040G C10040H
C10047A C10047B C10047D C10047E C10047F C10047G C10047H C10047I C10047J
C10047K C10047L C10047M C10047N C10047O
C10083A C10083B C10083C C10083D C10083E C10083F C10083G
C10085A C10085B C10085C C10085D
C10086A C10086B C10086C C10086D C10086E C10086F C10086G C10086H C10086I
C10106A C10106B C10106C C10106D C10106E C10107A C10107B C10107C C10107D C10107E
         ;

  ARRAY INFORMAT(*)
C10002AO C10002BO C10002CO C10002DO C10002EO C10002FO C10002GO C10002HO
C10002IO C10002JO C10002KO C10002LO C10020AO C10020BO C10020CO C10020DO C10020EO
C10040AO C10040BO C10040CO C10040DO C10040EO C10040FO C10040GO C10040HO
C10047AO C10047BO C10047DO C10047EO C10047FO C10047GO C10047HO C10047IO C10047JO
C10047KO C10047LO C10047MO C10047NO C10047OO
C10083AO C10083BO C10083CO C10083DO C10083EO C10083FO C10083GO
C10085AO C10085BO C10085CO C10085DO
C10086AO C10086BO C10086CO C10086DO C10086EO C10086FO C10086GO C10086HO C10086IO
C10106AO C10106BO C10106CO C10106DO C10106EO C10107AO C10107BO C10107CO C10107DO C10107EO
            ;

  DO J=1 TO DIM(INFORMAT);
     IF INFORMAT(J) NOT IN (.,-9) THEN MARKED(J)=1;
     ELSE MARKED(J)=2;
  END;
  DROP J;



  /*  skip coding scheme for all surveys not returned  **/

  IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;


/* NOTE 1: C10002A--C10002L: Health care plans*/

  ARRAY NOTE1 C10002A--C10002H C10002J--C10002L;
  N1MARK=0;

  DO OVER NOTE1;
     IF NOTE1 EQ 1 THEN N1MARK+1;
  END;

  IF C10002I=1 AND (N1MARK >0) THEN DO;
     N1=1;
     C10002I=2;
  END;
  ELSE IF C10002I IN (2,.) THEN N1=2;
  ELSE IF C10002I=1 AND N1MARK=0 THEN N1=3;
  DROP N1MARK;


  /** Note 2 -- Needed care right away:  C10006, C10007 **/

  IF C10006 = 1 THEN N2=1;
  ELSE IF C10006 IN (2,.) AND (C10007 GE 1) THEN DO;
     N2=2;
     C10006=1;
  END;
  ELSE IF C10006=2 AND C10007 IN (.) THEN DO;
     N2=3;
     C10007=.N;
  END;
  ELSE IF C10006=.  AND C10007=. THEN N2=4;



  /** Note 3 -- Needed care right away:  C10008, C10009 **/
```

```
  IF C10008 = 1 THEN N3=1;
  ELSE IF C10008 IN (2,.) AND (C10009 GE 2) THEN DO;
     N3=2;
     C10008=1;
  END;
  ELSE IF C10008=2 AND C10009 IN (1,.) THEN DO;
     N3=3;
     IF C10009 =.  THEN C10009=.N;
     ELSE C10009=.C;
  END;
  ELSE IF C10008=.  AND C10009 IN (1,.) THEN N3=4;



  /** Note 4 - doctor's office or clinic:  C10010, C10011 **/

  IF C10010 EQ 0 THEN DO;
     N4=1;
     IF C10011=. THEN C10011=.N;
     ELSE C10011=.C;
  END;
  ELSE IF C10010 GE 1 THEN N4=2;
  ELSE IF C10010=.  THEN N4=3;



  /** Note 5 - emergency room visit:  C10012 -- C10017 **/

  ARRAY NOTE5  C10013-C10017;

  IF C10012=1 THEN DO;
     N5=1;
     DO OVER NOTE5;
        IF NOTE5 =.  THEN NOTE5=.N;
        ELSE NOTE5=.C;
     END;
  END;
  ELSE IF C10012 GE 2 THEN N5=2;
  ELSE IF C10012=.  THEN N5=3;



  /** Note 6 - Before going to emergency room:  C10014 -- C10015 **/


  IF C10014 IN (.N, .C) AND C10015 IN (.N, .C) THEN N6=1;
  ELSE IF C10014=1 THEN N6=2;
  ELSE IF C10014 IN (2, .D, .) AND C10015=1 THEN DO;
     N6=3;
     C10014=1;
  END;
  ELSE IF C10014 EQ 2  AND C10015 IN (2, .D, .) THEN DO;
     N6=4;
     IF C10015 =.  THEN C10015=.N;
     ELSE C10015=.C;
  END;
  ELSE IF C10014 IN (., .D) AND C10015 IN (2, .D, .) THEN N6=5;



  /** Note 7 - Doctor/Health Professional advise on going to emergency room:  C10015 -- C10016
**/


  IF C10015 IN (.N, .C) THEN N7=1;
  ELSE IF C10015=1 THEN DO;
     N7=2;
     IF C10016 =.  THEN C10016=.N;
     ELSE C10016=.C;
  END;
  ELSE IF C10015 IN (2, .D, .)  THEN N7=3;
```

```
/** Note 8 -- C10018, C10019, C10020A-C10020E: Child's visit to doctor's office or clinic after
hours **/

  ARRAY NOTE8  C10020A--C10020E;

  IF C10018 IN (1) THEN DO;
     IF C10019 IN (1,2,3,.) THEN N8=1;
     ELSE IF C10019 = 4 THEN DO;
        N8=2;
        DO OVER NOTE8;
           IF NOTE8 IN (.,2) THEN NOTE8=.N;
           ELSE NOTE8=.C;
        END;
     END;
  END;
  ELSE IF C10018 IN (2, .) AND C10019 IN (1,2,3) THEN DO;
     N8=3;
     C10018=1;
  END;
  ELSE IF C10018 IN (2, .) AND C10019 IN (4) THEN DO;
     N8=4;
     C10018=1;
     DO OVER NOTE8;
        IF NOTE8 IN (.,2) THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF C10018 IN (2) AND C10019 IN (.) THEN DO;
     N8=5;
     C10019=.N;
     DO OVER NOTE8;
        IF NOTE8 IN (.,2) THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF C10018=.  AND C10019=. THEN N8=6;



/** Note 9 -- C10021, C10022-C10031: personal doctor **/

  ARRAY NOTE9  C10023-C10025 C10027-C10030;

  N9MARK=0;

  DO OVER NOTE9;
     IF NOTE9 NOT IN  (.) THEN N9MARK+1;
  END;

  IF C10022 NOT IN (.,0) THEN N9MARK+1;

  IF C10021 = 1  THEN N9=1;
  ELSE IF C10021 in (2,.) AND N9MARK>0 THEN DO;
     N9=2;
     C10021=1;
  END;
  ELSE IF C10021 = 2 AND N9MARK=0 THEN DO;
     N9=3;
     IF C10022=. THEN C10022=.N;
     ELSE C10022=.C;
     DO OVER NOTE9;
        IF NOTE9=. THEN NOTE9=.N;
        ELSE NOTE9=.C;
     END;
     IF C10026=. THEN C10026=.N;
     ELSE C10026=.C;
     IF C10031=. THEN C10031=.N;
     ELSE C10031=.C;
  END;
  ELSE IF C10021 = . AND N9MARK=0 THEN N9=4;

  DROP N9MARK;
```

```
/** Note 10 -- C10022, C10023-C10031: personal doctor visit **/

  ARRAY NOTE10  C10023-C10031;

  IF C10022 IN (.N, .C) THEN N10=1;
  ELSE IF C10022=0 THEN DO;
     N10=2;
     DO OVER NOTE10;
        IF NOTE10=. THEN NOTE10=.N;
        ELSE NOTE10=.C;
     END;
  END;
  ELSE IF C10022 IN (1,2,3,4,5,6,.)  THEN N10=3;



  /** Note 11 -- Child able to talk to doctors :  C10026, C10027 **/

  IF C10026 IN (.N, .C) AND C10027 IN (.N, .C) THEN  N11=1;
  ELSE IF C10026 IN (1,.) THEN N11=2;
  ELSE IF C10026=2 THEN DO;
     N11=3;
     IF C10027=. THEN C10027=.N;
     ELSE C10027=.C;
  END;



/** Note 12 -- C10031, C10032:  problem getting new personal doctor or nurse **/

  IF C10031 IN (.N,.C) THEN N12=1;
  ELSE IF C10031=1 THEN DO;
     N12=2;
     IF C10032=. THEN C10032=.N;
     ELSE C10032=.C;
  END;
  ELSE IF C10031 IN (2,.) THEN N12=3;


/** Note13  -- C10033, C10034: More than 1 kind of health provider **/

  IF C10033=1 THEN N13=1;
  ELSE IF C10033 IN (2,.) AND C10034 IN (1,2) THEN DO;
     C10033=1;
     N13=2;
  END;
  ELSE IF C10033=2 AND C10034=. THEN DO;
     C10034=.N;
     N13=3;
  END;
  ELSE IF C10033=. AND C10034=. THEN N13=4;



/** Note 14 -- C10035, C10036, C10037: Personal doctor or nurse **/

  ARRAY NOTE14 C10036 C10037;

  N14MARK=0;

  DO OVER NOTE14;
     IF NOTE14 NOT IN (.N,.) THEN N14MARK+1;
  END;

  IF C10035=1  THEN DO;
     N14=1;
     DO OVER NOTE14;
        IF NOTE14=.N THEN NOTE14=.;
     END;
  END;
  ELSE IF C10035 IN (2,.) AND N14MARK>0 THEN DO;
     C10035=1;
     N14=2;
```

```
  END;
  ELSE IF C10035=2 AND N14MARK=0 THEN DO;
     N14=3;
     DO OVER NOTE14;
        IF NOTE14=. THEN NOTE14=.N;
        ELSE NOTE14=.C;
     END;
  END;
  ELSE IF C10035=. AND N14MARK=0  THEN N14=4;

  DROP N14MARK;


/** Note 15 -- C10038, C10039 C10040A-C10040H, C10041-C10043:  needed to see a specialist in
last 12 months **/

  ARRAY NOTE15  C10039 C10042 C10043;
  ARRAY NOTE15A C10040A--C10040H;

  N15MARK=0;

  DO OVER NOTE15;
     IF NOTE15 NOT IN  (., .N) THEN N15MARK+1;
  END;

  DO OVER NOTE15A;
     IF NOTE15A NOT IN (.,2) THEN DO;
        N15MARK+1;
     END;
  END;

  IF C10041 NOT IN (.,0) THEN N15MARK+1;

  IF C10038 IN (1)  THEN DO;
     N15=1;
  END;
  ELSE IF C10038 in (2,.) AND N15MARK>0 THEN DO;
     N15=2;
     C10038=1;
  END;
  ELSE IF C10038 in (2) AND N15MARK=0 THEN DO;
     N15=3;
     DO OVER NOTE15;
        IF NOTE15=. THEN NOTE15=.N;
        ELSE NOTE15=.C;
     END;
     DO OVER NOTE15A;
        IF NOTE15A IN (.,2) THEN NOTE15A=.N;
        ELSE NOTE15A=.C;
     END;
     IF C10041=. THEN C10041=.N;
     ELSE C10041=.C;
  END;
  ELSE IF C10038=.  AND N15MARK=0 THEN N15=4;

  DROP N15MARK;



/** Note 16 -- C10039, C10040A-C10040H: Not easy to get an appointment for child with specialist
**/

  ARRAY NOTE16  C10040A--C10040H;

  N16NMISS=0;

  DO OVER NOTE16;
     IF NOTE16 NOT IN (.,2) THEN N16NMISS+1;
  END;

  IF C10039 IN (.N, .C) THEN N16=1;
  ELSE IF C10039 IN (1, 2, 3) THEN N16=2;
  ELSE IF C10039 IN (4) THEN DO;
     N16=3;
```

```
    DO OVER NOTE16;
       IF NOTE16 IN (.,2) THEN NOTE16=.N;
       ELSE NOTE16=.C;
    END;
 END;
 ELSE IF C10039=.  AND N16NMISS > 0 THEN DO;
     N16=4;
 END;
 ELSE IF C10039=. AND N16NMISS = 0 THEN DO;
    N16=5;
    DO OVER NOTE16;
       IF NOTE16 NE . THEN NOTE16=.;
    END;
END;

 DROP N16NMISS;


/** Note 17 -- C10041-C10043: saw a specialist in last 12 months **/

  IF C10041 IN (.N,.C) AND C10042 IN (.N,.C) AND C10043 IN (.N,.C) THEN N17=1;
  ELSE IF C10041 IN (1,2,3,4,5,.) THEN N17=2;
  ELSE IF C10041 = 0 THEN DO;
     IF C10042=. THEN C10042=.N;
     ELSE C10042=.C;
     IF C10043=. THEN C10043=.N;
     ELSE C10043=.C;
     N17=3;
  END;


/** Note 18 -- C10046, C10047A-C10047O: Child see a mental health specialist **/

  ARRAY NOTE18  C10047A--C10047O;

  N18NMISS=0;

  DO OVER NOTE18;
     IF NOTE18 NOT IN (.,2) THEN N18NMISS+1;
  END;

  IF C10046 IN (1) AND N18NMISS > 0 THEN DO;
     N18=1;
     C10046=2;
  END;
  ELSE IF C10046 IN (1) AND N18NMISS = 0 THEN DO;
     N18=2;
     DO OVER NOTE18;
        NOTE18=.N;
     END;
  END;
  ELSE IF C10046 IN (2) THEN N18=3;
  ELSE IF C10046=.  AND N18NMISS > 0 THEN DO;
      N18=4;
      C10046=2;
  END;
  ELSE IF C10046=. AND N18NMISS = 0 THEN DO;
     N18=5;
     DO OVER NOTE18;
        IF NOTE18 NE . THEN NOTE18=.;
     END;
 END;

 DROP N18NMISS;



  /** Note 19 - Try to get care, tests, treatment for child: C10050, C10051       **/

  IF C10050=1 THEN N19=1;
  ELSE IF C10050 IN (2,.) AND C10051 IN (1,2,3,4) THEN DO;
     C10050=1;
     N19=2;
  END;
```

```
  ELSE IF C10050=2 AND C10051 IN (.) THEN DO;
     N19=3;
     C10051=.N;
  END;
  ELSE IF C10050=.  AND C10051= . THEN N19=4;



  /** Note 20 - written materials: C10052, C10053       **/

  IF C10052=1 THEN N20=1;
  ELSE IF C10052 IN (2,.) AND C10053 IN (1,2,3,4) THEN DO;
     C10052=1;
     N20=2;
  END;
  ELSE IF C10052=2 AND C10053 IN (.) THEN DO;
     N20=3;
     C10053=.N;
  END;
  ELSE IF C10052=.  AND C10053= . THEN N20=4;



  /** Note 21 - Get information or help from customer service at child's health plan:  C10054,
C10055, C10056    **/

  ARRAY NOTE21  C10055-C10056;

  N21MARK=0;

  DO OVER NOTE21;
     IF NOTE21 NE . THEN N21MARK+1;
  END;

  IF C10054 = 1 THEN N21=1;
  ELSE IF C10054 IN (2,.) AND (N21MARK>0) THEN DO;
     N21=2;
     C10054=1;
  END;
  ELSE IF C10054=2  AND (N21MARK=0) THEN DO;
     N21=3;
     DO OVER NOTE21;
        NOTE21=.N;
     END;
  END;
  ELSE IF C10054 IN (.) AND N21MARK=0 THEN N21=4;

  DROP N21MARK;



  /** Note 22 - forms to fill out:  C10057, C10058     **/

  IF C10057=1 THEN N22=1;
  ELSE IF C10057 IN (2,.) AND C10058 IN (1,2,3,4) THEN DO;
     C10057=1;
     N22=2;
  END;
  ELSE IF C10057=2 AND C10058 IN (.) THEN DO;
     N22=3;
     C10058=.N;
  END;
  ELSE IF C10057=.  AND C10058= . THEN N22=4;



/* NOTE 23 C10060, C10061-C10064: Get a prescription*/

  ARRAY NOTE23  C10061-C10064;

  N23MARK=0;

  DO OVER NOTE23;
     IF NOTE23 NE . THEN N23MARK+1;
```

```
  END;

  IF C10060 = 1 THEN N23=1;
  ELSE IF C10060 IN (2,.) AND (N23MARK>0) THEN DO;
     N23=2;
     C10060=1;
  END;
  ELSE IF C10060=2  AND (N23MARK=0) THEN DO;
     N23=3;
     DO OVER NOTE23;
        NOTE23=.N;
     END;
  END;
  ELSE IF C10060 IN (.) AND N23MARK=0 THEN N23=4;

  DROP N23MARK;


/* NOTE 24 C10067, C10068-C10069: Medicine prescribed by doctor*/

  IF C10067=1 AND C10068=1 THEN N24=1;
  ELSE IF C10067 IN (1,.) AND C10068=2 THEN DO;
     N24=2;
     IF C10069=. THEN C10069=.N;
     ELSE C10069=.C;
  END;
  ELSE IF C10067=1 AND C10068=. AND C10069 NOT IN (.) THEN DO;
     N24=3;
     C10068=1;
  END;
  ELSE IF C10067=1 AND C10068=. AND C10069=. THEN N24=4;
  ELSE IF C10067=2 THEN DO;
     N24=5;
     IF C10068=. THEN C10068=.N;
     ELSE C10068=.C;
     IF C10069=. THEN C10069=.N;
     ELSE C10069=.C;
  END;
  ELSE IF C10067=. AND C10068 IN (1,.) THEN N24=6;



/* NOTE 25 C10070, C10071-C10072: Medical, health, education service*/

  IF C10070=1 AND C10071=1 THEN N25=1;
  ELSE IF C10070 IN (1,.) AND C10071=2 THEN DO;
     N25=2;
     IF C10072=. THEN C10072=.N;
     ELSE C10072=.C;
  END;
  ELSE IF C10070=1 AND C10071=. AND C10072 NOT IN (.) THEN DO;
     N25=3;
     C10071=1;
  END;
  ELSE IF C10070=1 AND C10071=. AND C10072=. THEN N25=4;
  ELSE IF C10070=2 THEN DO;
     N25=5;
     IF C10071=. THEN C10071=.N;
     ELSE C10071=.C;
     IF C10072=. THEN C10072=.N;
     ELSE C10072=.C;
  END;
  ELSE IF C10070=. AND C10071 IN (1,.) THEN N25=6;



/* NOTE 26 C10073, C10074-C10075: Child limited or prevented*/

  IF C10073=1 AND C10074=1 THEN N26=1;
  ELSE IF C10073 IN (1,.) AND C10074=2 THEN DO;
     N26=2;
     IF C10075=. THEN C10075=.N;
     ELSE C10075=.C;
  END;
```

```
  ELSE IF C10073=1 AND C10074=. AND C10075 NOT IN (.) THEN DO;
     N26=3;
     C10074=1;
  END;
  ELSE IF C10073=1 AND C10074=. AND C10075=. THEN N26=4;
  ELSE IF C10073=2 THEN DO;
     N26=5;
     IF C10074=. THEN C10074=.N;
     ELSE C10074=.C;
     IF C10075=. THEN C10075=.N;
     ELSE C10075=.C;
  END;
  ELSE IF C10073=. AND C10074 IN (1,.) THEN N26=6;



/* NOTE 27 C10076, C10077-C10078: Special Therapy*/

  IF C10076=1 AND C10077=1 THEN N27=1;
  ELSE IF C10076 IN (1,.) AND C10077=2 THEN DO;
     N27=2;
     IF C10078=. THEN C10078=.N;
     ELSE C10078=.C;
  END;
  ELSE IF C10076=1 AND C10077=. AND C10078 NOT IN (.) THEN DO;
     N27=3;
     C10077=1;
  END;
  ELSE IF C10076=1 AND C10077=. AND C10078=. THEN N27=4;
  ELSE IF C10076=2 THEN DO;
     N27=5;
     IF C10077=. THEN C10077=.N;
     ELSE C10077=.C;
     IF C10078=. THEN C10078=.N;
     ELSE C10078=.C;
  END;
  ELSE IF C10076=. AND C10077 IN (1,.) THEN N27=6;



  /** Note 28:  C10079, C10080:  Need treatment or counseling **/

  IF C10079=1 THEN N28=1;
  ELSE IF C10079=2 AND C10080=. THEN DO;
     N28=2;
     C10080=.N;
  END;
  ELSE IF C10079 IN (2,.) AND C10080 IN (1,2) THEN DO;
     N28=3;
     C10079=1;
  END;
  ELSE IF C10079=.  AND C10080=. THEN N28=4;



  /** Note 29:  C10081, C10082, C10083A-C10083G, C10084, C10085A-C10085D:  Physical emotional
development that
                                may require care
   **/

  ARRAY NOTE29A  C10083A--C10083G;
  ARRAY NOTE29B  C10085A--C10085C;
  ARRAY NOTE29C  C10082 C10084 C10085D;

  N29aNMISS=0;
  N29bNMISS=0;

  DO OVER NOTE29A;
     IF NOTE29A NOT IN (2,.) THEN N29aNMISS+1;
  END;

  DO OVER NOTE29B;
     IF NOTE29B NOT IN (2,.) THEN N29bNMISS+1;
  END;
```

```
  IF C10081 = 1 THEN N29=1;
  ELSE IF C10081 IN (2,.) AND C10082 = 1 AND N29aNMISS = 0 THEN DO; /* Enrolled in EFMP */
     N29=2;
     C10081 = 1;
  END;
  ELSE IF C10081 IN (2,.) AND N29bNMISS > 0 THEN DO; /* Not enrolled in EFMP but using PFPWD,
ECHO, ICMP-PEC, or CCTP */
     N29=3;
     C10081 = 1;
  END;
  ELSE IF C10081 = 2 THEN DO; /* Not enrolled in EFMP and not using PFPWD, ECHO, ICMP-PEC, or
CCTP */
     N29=4;
     DO OVER NOTE29A;
        IF NOTE29A IN (2,.) THEN NOTE29A=.N;
        ELSE NOTE29A=.C;
     END;
     DO OVER NOTE29B;
        IF NOTE29B IN (2,.) THEN NOTE29B=.N;
        ELSE NOTE29B=.C;
     END;
     DO OVER NOTE29C;
        IF NOTE29C = . THEN NOTE29C=.N;
        ELSE NOTE29C=.C;
     END;
  END;
  ELSE IF C10081 = . THEN N29=5; /* Not enrolled in EFMP and not using PFPWD, ECHO, ICMP-PEC, or
CCTP */

  DROP N29aNMISS N29bNMISS;



  /** Note 30:  C10082, C10083A-C10083G, C10084:  EFMP enrollment
   **/
  ARRAY NOTE30  C10083A--C10083G;

  N30NMISS=0;

  DO OVER NOTE30;
     IF NOTE30 NOT IN (.,2) THEN N30NMISS+1;
  END;

  IF C10082 IN (.N, .C) THEN N30=1;
  ELSE IF C10082 IN (1,.) AND N30NMISS > 0 THEN DO;
     N30=2;
     C10082=2;
     IF C10084=. THEN C10084=.N;
     ELSE C10084=.C;
  END;
  ELSE IF C10082 IN (1) AND N30NMISS = 0 THEN DO;
     N30=3;
     DO OVER NOTE30;
        NOTE30=.N;
     END;
  END;
  ELSE IF C10082 IN (2) THEN DO;
     N30=4;
     IF C10084=. THEN C10084=.N;
     ELSE C10084=.C;
  END;
  ELSE IF C10082=. AND N30NMISS = 0 THEN DO;
     N30=5;
     DO OVER NOTE30;
        IF NOTE30 NE . THEN NOTE30=.;
     END;
 END;

 DROP N30NMISS;


  /** Note 31:  C10085A-D:  Services child reaceives **/
```

```
  IF C10085A IN (.N, .C) THEN N31=1;
  ELSE IF C10085A=1 OR C10085B=1 OR C10085C=1 THEN DO;
     IF C10085D IN (1,.) THEN DO;
        N31=2;
        C10085D=2;
     END;
     ELSE IF C10085D=2 THEN N31=3;
  END;
  ELSE IF C10085A IN (.,2) AND C10085B IN (.,2) AND C10085C IN (.,2) THEN DO;
     IF C10085D=1 THEN N31=4;
     ELSE IF C10085D IN (2,.) THEN DO;
        N31=5;
        C10085D=1;
     END;
  END;


/*** Note 32: C10098, C10099-C10100 sex of child and vaccination shots***/


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


  ARRAY fmaleval C10099 C10100
                 ;

  cntfmale=0;
  DO OVER fmaleval;           /* HPV*/
     IF fmaleval not in (.) THEN cntfmale=cntfmale+1;
  END;

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

  IF C10098=. THEN DO;
     IF (SEX='F' AND FMALE) THEN DO;
        N32A=1;
        XSEXA=2;
     END;
     ELSE IF (SEX='F' AND FMALE=0) THEN DO;
        N32A=2;
        XSEXA=2;
     END;
     ELSE IF (SEX='M' AND FMALE) THEN DO;
        N32A=3;
        XSEXA=1;
     END;
     ELSE IF (SEX='M' AND FMALE=0) THEN DO;
        N32A=4;
        XSEXA=1;
     END;
     ELSE IF ((SEX IN (' ') AND FMALE)) THEN DO;
        N32A=5;
        XSEXA=2;
     END;
     ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
        N32A=6;
        XSEXA=.;
     END;
  END;
  ELSE IF (C10098=1) THEN DO;
     IF FMALE=0 THEN DO;
        N32A=7;
        XSEXA=1;
     END;
     ELSE IF FMALE THEN DO;
        IF SEX='F' THEN DO;
           N32A=8;
           XSEXA=2;
        END;
        ELSE DO;
           N32A=9;
```

```
          XSEXA=1;
        END;
     END;
  END;
  ELSE IF (C10098=2) THEN DO;
    IF FMALE THEN DO;
       N32A=10;
       XSEXA=2;
     END;
     ELSE IF FMALE=0 THEN DO;
        IF SEX='M' THEN DO;
          N32A=11;
          XSEXA=1;
        END;
        ELSE DO;
           N32A=12;
           XSEXA=2;
        END;
     END;
  END;


/* Note 32B - gender vs HPV */

   ARRAY NOTE32B C10099 C10100
                 ;
   IF XSEXA=1 THEN DO;   /* male */
     IF FMALE=0 THEN DO;
        N32B=1;
        DO OVER NOTE32B;
           NOTE32B=.N;
        END;
     END;   /* valid skip */
     ELSE IF FMALE=1 THEN DO;
        N32B=2;
        DO OVER NOTE32B;
           IF NOTE32B=. THEN NOTE32B = .N;
           ELSE NOTE32B=.C;
        END;
     END;   /* inconsistent response */
  END;
  ELSE IF XSEXA=2 THEN  N32B=3; /* female */
  ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
     N32B=4;
     DO OVER NOTE32B;
        NOTE32B=.;
     END;
  END;

  DROP FMALE CNTFMALE SEX;


/*** Note 33: C10099, C10100 HPV***/

IF C10099 IN (.N,.C) AND C10100 IN (.N,.C) THEN N33=1;
ELSE IF C10099 IN (1) THEN N33=2;
ELSE IF C10099 IN (2,3,.,.D) AND C10100 IN (1,2,3,4) THEN DO;
    N33=3;
    C10099=1;
END;
ELSE IF C10099 IN (2,3,.D) AND C10100 IN (.D,.) THEN DO;
    N33=4;
    IF C10100=.D THEN C10100=.C;
    ELSE C10100=.N;
END;
ELSE IF C10099 IN (.) AND C10100 IN (.D,.) THEN N33=5;


/*** Note 34: C10101, C10102-C10103 tetanus shots***/

IF C10101 IN (1) AND C10102 IN (1,.) THEN N34=1;
ELSE IF C10101 IN (1,.) AND C10102 IN (2,.D)  THEN DO;
    N34=2;
    IF C10103 IN (.) THEN C10103 = .N;
```

```
    ELSE C10103 = .C;
END;
ELSE IF C10101 IN (2,.D,.) AND C10102 IN (1) THEN DO;
    N34=3;
    C10101=1;
END;
ELSE IF C10101 IN (2,.D) AND C10102 IN (2,.D,.) THEN DO;
    N34=4;
    IF C10102 IN (.) THEN C10102 = .N;
    ELSE C10102 = .C;
    IF C10103 IN (.) THEN C10103 = .N;
    ELSE C10103 = .C;
END;
ELSE IF C10101 IN (.) AND C10102 IN (.) THEN N34=5;


/** Note 35 -- C10106, C10106A-C10106E: Hispanic or Latino origin or descent **/

  /* JMA
  ****Multiple responses were given to this question so C10106 is being created
  ****from the multiple responses.;
  */


  IF C10106B=1 THEN DO;
     N35=1;
     C10106=2;
  END;
  ELSE IF C10106E=1 THEN DO;
     N35=2;
     C10106=5;
  END;
  ELSE IF C10106C=1 THEN DO;
     N35=3;
     C10106=3;
  END;
  ELSE IF C10106D=1 THEN DO;
     N35=4;
     C10106=4;
  END;
  ELSE IF C10106A=1 THEN DO;
     N35=5;
     C10106=1;
  END;
  ELSE IF C10106A IN (2,.) AND C10106B IN (2,.) AND C10106C IN (2,.) AND
          C10106D IN (2,.) AND C10106E IN (2,.) THEN DO;
     N35=6;
     C10106=.;

     ***DEC 20, 2007-Change unmarked to . for cases where there is no response to C10106;

     C10106B=.;
     C10106E=.;
     C10106C=.;
     C10106D=.;
     C10106A=.;
  END;


NOSURVEY:

  /* missing values */

  ARRAY MISS MISS_9 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
  MISS_TOT=0;
  DO OVER MISS;
     MISS=0;
  END;
  ARRAY MISSARAY &VARLIST2;


  DO OVER MISSARAY;
     IF (MISSARAY EQ -9 ) THEN MISS_9=MISS_9 + 1;
     ELSE IF (MISSARAY EQ -7) THEN MISS_7=MISS_7 + 1;
```

```
     ELSE IF (MISSARAY EQ -6) THEN MISS_6=MISS_6 + 1;
     ELSE IF (MISSARAY EQ -5) THEN MISS_5=MISS_5 + 1;
     ELSE IF (MISSARAY EQ -4) THEN MISS_4=MISS_4 + 1;
     ELSE IF (MISSARAY EQ -1) THEN MISS_1=MISS_1 + 1;
  END;

  DO OVER MISS;
     MISS_TOT=MISS_TOT + MISS;
  END;

  OUTPUT;

RUN;


PROC CONTENTS DATA=OUT.&OUTDATA;
RUN;

PROC MEANS DATA=OUT.&OUTDATA N NMISS MIN MAX SUM MEAN;
   WHERE FLAG_FIN=1;
   VAR MISS_TOT MISS_1 MISS_4-MISS_7 MISS_9;
   TITLE3 'Frequency Checks - Missing Value Totals';
RUN;


PROC FREQ DATA=OUT.&OUTDATA;
   WHERE FLAG_FIN=1;
   TABLES &VARLIST1.


C10001   *  C10001_O
C10002A  *  C10002AO
C10002B  *  C10002BO
C10002C  *  C10002CO
C10002D  *  C10002DO
C10002E  *  C10002EO
C10002F  *  C10002FO
C10002G  *  C10002GO
C10002H  *  C10002HO
C10002I  *  C10002IO
C10002J  *  C10002JO
C10002K  *  C10002KO
C10002L  *  C10002LO
C10003   *  C10003_O
C10004   *  C10004_O
C10005   *  C10005_O
C10006   *  C10006_O
C10007   *  C10007_O
C10008   *  C10008_O
C10009   *  C10009_O
C10010   *  C10010_O
C10011   *  C10011_O
C10012   *  C10012_O
C10013   *  C10013_O
C10014   *  C10014_O
C10015   *  C10015_O
C10016   *  C10016_O
C10017   *  C10017_O
C10018   *  C10018_O
C10019   *  C10019_O
C10020A  *  C10020AO
C10020B  *  C10020BO
C10020C  *  C10020CO
C10020D  *  C10020DO
C10020E  *  C10020EO
C10021   *  C10021_O
C10022   *  C10022_O
C10023   *  C10023_O
C10024   *  C10024_O
C10025   *  C10025_O
C10026   *  C10026_O
C10027   *  C10027_O
C10028   *  C10028_O
C10029   *  C10029_O
```

C10030 * C10030_O
C10031 * C10031_O
C10032 * C10032_O
C10033 * C10033_O
C10034 * C10034_O
C10035 * C10035_O
C10036 * C10036_O
C10037 * C10037_O
C10038 * C10038_O
C10039 * C10039_O
C10040A * C10040AO
C10040B * C10040BO
C10040C * C10040CO
C10040D * C10040DO
C10040E * C10040EO
C10040F * C10040FO
C10040G * C10040GO
C10040H * C10040HO
C10041 * C10041_O
C10042 * C10042_O
C10043 * C10043_O
C10044 * C10044_O
C10045 * C10045_O
C10046 * C10046_O
C10047A * C10047AO
C10047B * C10047BO
C10047D * C10047DO
C10047E * C10047EO
C10047F * C10047FO
C10047G * C10047GO
C10047H * C10047HO
C10047I * C10047IO
C10047J * C10047JO
C10047K * C10047KO
C10047L * C10047LO
C10047M * C10047MO
C10047N * C10047NO
C10047O * C10047OO
C10048 * C10048_O
C10049 * C10049_O
C10050 * C10050_O
C10051 * C10051_O
C10052 * C10052_O
C10053 * C10053_O
C10054 * C10054_O
C10055 * C10055_O
C10056 * C10056_O
C10057 * C10057_O
C10058 * C10058_O
C10059 * C10059_O
C10060 * C10060_O
C10061 * C10061_O
C10062 * C10062_O
C10063 * C10063_O
C10064 * C10064_O
C10065 * C10065_O
C10066 * C10066_O
C10067 * C10067_O
C10068 * C10068_O
C10069 * C10069_O
C10070 * C10070_O
C10071 * C10071_O
C10072 * C10072_O
C10073 * C10073_O
C10074 * C10074_O
C10075 * C10075_O
C10076 * C10076_O
C10077 * C10077_O
C10078 * C10078_O
C10079 * C10079_O
C10080 * C10080_O
C10081 * C10081_O
C10082 * C10082_O
C10083A * C10083AO

```
C10083B  *  C10083BO
C10083C  *  C10083CO
C10083D  *  C10083DO
C10083E  *  C10083EO
C10083F  *  C10083FO
C10083G  *  C10083GO
C10084   *  C10084_O
C10085A  *  C10085AO
C10085B  *  C10085BO
C10085C  *  C10085CO
C10085D  *  C10085DO
C10086A  *  C10086AO
C10086B  *  C10086BO
C10086C  *  C10086CO
C10086D  *  C10086DO
C10086E  *  C10086EO
C10086F  *  C10086FO
C10086G  *  C10086GO
C10086H  *  C10086HO
C10086I  *  C10086IO
C10087F  *  C10087FO
C10087I  *  C10087IO
C10088   *  C10088_O
C10089   *  C10089_O
C10090   *  C10090_O
C10091   *  C10091_O
C10092   *  C10092_O
C10093   *  C10093_O
C10094   *  C10094_O
C10095   *  C10095_O
C10096   *  C10096_O
C10097   *  C10097_O
C10098   *  C10098_O
C10099   *  C10099_O
C10100   *  C10100_O
C10101   *  C10101_O
C10102   *  C10102_O
C10103   *  C10103_O
C10104   *  C10104_O
C10105   *  C10105_O
C10106A  *  C10106AO
C10106B  *  C10106BO
C10106C  *  C10106CO
C10106D  *  C10106DO
C10106E  *  C10106EO
C10107A  *  C10107AO
C10107B  *  C10107BO
C10107C  *  C10107CO
C10107D  *  C10107DO
C10107E  *  C10107EO
C10108   *  C10108_O
C10109   *  C10109_O
C10110   *  C10110_O
C10111   *  C10111_O
C10112   *  C10112_O
C10113   *  C10113_O
/MISSING LIST;
   TITLE3 'Frequency Checks - Formatted Response Variables';
RUN;

PROC FREQ DATA=OUT.&OUTDATA;
   WHERE FLAG_FIN=1;
   TABLES
               C10003  C10004  C10005  C10006  C10012  C10008
               C10031  C10010  C10038  C10052  C10054  C10058
               C10059  C10066  C10098  C10106  C10108  C10109
               C10110  C10112
               C10107A C10107B C10107C C10107D C10107E


          N1--N35/list MISSING;
   TITLE3 'Frequency Checks - Critical questions and Coding Scheme Notes';
RUN;
ENDSAS;
```

```
%MACRO GETFREQS (TABLES, NOTE);

 PROC FREQ DATA=OUT.&OUTDATA;
    WHERE FLAG_FIN=1;
    TABLES &TABLES/MISSING LIST;
    FORMAT _ALL_ ;
    TITLE3 "CODING SCHEME FOR NOTE &NOTE";
 RUN;

%MEND GETFREQS;

PROC FREQ DATA=IN.&INDATA;
   TABLES FLAG_FIN;
RUN;

PROC FREQ DATA=OUT.&OUTDATA;
   TABLES FLAG_FIN;
RUN;

%GETFREQS(N2*C10006_O*C10006*C10007_O*C10007,2);
/* Add more as desired */
```

E.3 CODINGSCHEME\CSCHM10C.FMT - INCLUDE FILE FOR CODING SCHEME.

```
LENGTH MPRID  $8
C10001  C10002A C10002B C10002C C10002D C10002E C10002F C10002G C10002H C10002I
C10002J C10002K C10002L C10003  C10004  C10005  C10006  C10007  C10008  C10009
C10010  C10011  C10012  C10013  C10014  C10015  C10016  C10017  C10018  C10019
C10020A C10020B C10020C C10020D C10020E C10021  C10022  C10023  C10024  C10025
C10026  C10027  C10028  C10029  C10030  C10031  C10032  C10033  C10034  C10035
C10036  C10037  C10038  C10039  C10040A C10040B C10040C C10040D C10040E C10040F
C10040G C10040H C10041  C10042  C10043  C10044  C10045  C10046  C10047A C10047B
C10047D C10047E C10047F C10047G C10047H C10047I C10047J C10047K C10047L C10047M
C10047N C10047O C10048  C10049  C10050  C10051  C10052  C10053  C10054  C10055
C10056  C10057  C10058  C10059  C10060  C10061  C10062  C10063  C10064  C10065
C10066  C10067  C10068  C10069  C10070  C10071  C10072  C10073  C10074  C10075
C10076  C10077  C10078  C10079  C10080  C10081  C10082  C10083A C10083B C10083C
C10083D C10083E C10083F C10083G C10084  C10085A C10085B C10085C C10085D C10086A
C10086B C10086C C10086D C10086E C10086F C10086G C10086H C10086I C10087F C10087I
C10088  C10089  C10090  C10091  C10092  C10093  C10094  C10095  C10096  C10097
C10098  C10099  C10100  C10101  C10102  C10103  C10104  C10105  C10106A C10106B
C10106C C10106D C10106E C10107A C10107B C10107C C10107D C10107E C10108  C10109
C10110  C10111  C10112  C10113
  4 ;


/*  Formats for original answers to survey questions,
     after variables have been recoded */

     Format      C10001_O  C10001   CYN1_.
                           C10002A  CMARK.
                           C10002B  CMARK.
                           C10002C  CMARK.
                           C10002D  CMARK.
                           C10002E  CMARK.
                           C10002F  CMARK.
                           C10002G  CMARK.
                           C10002H  CMARK.
                           C10002I  CMARK.
                           C10002J  CMARK.
                           C10002K  CMARK.
                           C10002L  CMARK.
                 C10003_O  C10003   CPLAN1_.
                 C10004_O  C10004   CENROLL.
                 C10005_O  C10005   CTYPE.
                 C10006_O  C10006   CYN1_.
                 C10007_O  C10007   COFTN10_.
                 C10008_O  C10008   CYN1_.
                 C10009_O  C10009   COFTN10_.
                 C10010_O  C10010   CTIMES7_.
                 C10011_O  C10011   CRATE3a_.
                 C10012_O  C10012   CTIMES.
                 C10013_O  C10013   INJURY.
                 C10014_O  C10014   CYN7_.
                 C10015_O  C10015   CYN7_.
                 C10016_O  C10016   CHOICE.
                 C10017_O  C10017   CYN7_.
                 C10018_O  C10018   CYN1_.
                 C10019_O  C10019   COFTN10_.
                           C10020A  CMARK.
                           C10020B  CMARK.
                           C10020C  CMARK.
                           C10020D  CMARK.
                           C10020E  CMARK.
                 C10021_O  C10021   CYN1_.
                 C10022_O  C10022   CTIMES7_.
                 C10023_O  C10023   COFTN10_.
                 C10024_O  C10024   COFTN10_.
                 C10025_O  C10025   COFTN10_.
                 C10026_O  C10026   CYN1_.
                 C10027_O  C10027   COFTN10_.
                 C10028_O  C10028   COFTN10_.
                 C10029_O  C10029   CYN1_.
                 C10030_O  C10030   CRATE1a_.
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    C10031_O  C10031   CYN1_.
    C10032_O  C10032   CPROB1_.
    C10033_O  C10033   CYN1_.
    C10034_O  C10034   CYN1_.
    C10035_O  C10035   CYN1_.
    C10036_O  C10036   CYN1_.
C10037_O  C10037   CYN1_.
    C10038_O  C10038   CYN1_.
    C10039_O  C10039   COFTN10_.
              C10040A  CMARK.
              C10040B  CMARK.
              C10040C  CMARK.
              C10040D  CMARK.
              C10040E  CMARK.
              C10040F  CMARK.
              C10040G  CMARK.
              C10040H  CMARK.
    C10041_O  C10041   CTIMES6_.
    C10042_O  C10042   CRATE2_.
    C10043_O  C10043   CYN5_.
    C10044_O  C10044   CHEALTH.
    C10045_O  C10045   CYN1_.
    C10046_O  C10046   CYN1_.
              C10047A  CMARK.
              C10047B  CMARK.
              C10047D  CMARK.
              C10047E  CMARK.
              C10047F  CMARK.
              C10047G  CMARK.
              C10047H  CMARK.
              C10047I  CMARK.
              C10047J  CMARK.
              C10047K  CMARK.
              C10047L  CMARK.
              C10047M  CMARK.
              C10047N  CMARK.
              C10047O  CMARK.
    C10048_O  C10048   COFTN10_.
    C10049_O  C10049   CTIMES7_.
    C10050_O  C10050   CYN1_.
    C10051_O  C10051   COFTN10_.
    C10052_O  C10052   CYN1_.
    C10053_O  C10053   COFTN10_.
    C10054_O  C10054   CYN1_.
    C10055_O  C10055   COFTN10_.
    C10056_O  C10056   COFTN10_.
    C10057_O  C10057   CYN1_.
    C10058_O  C10058   COFTN10_.
    C10059_O  C10059   CRATE4_.
    C10060_O  C10060   CYN1_.
    C10061_O  C10061   COFTN10_.
    C10062_O  C10062   CYN1_.
    C10063_O  C10063   CYN1_.
    C10064_O  C10064   CYN1_.
    C10065_O  C10065   CYN1_.
    C10066_O  C10066   CHEALTH.
    C10067_O  C10067   CYN1_.
    C10068_O  C10068   CYN1_.
    C10069_O  C10069   CYN1_.
    C10070_O  C10070   CYN1_.
    C10071_O  C10071   CYN1_.
    C10072_O  C10072   CYN1_.
    C10073_O  C10073   CYN1_.
    C10074_O  C10074   CYN1_.
    C10075_O  C10075   CYN1_.
    C10076_O  C10076   CYN1_.
    C10077_O  C10077   CYN1_.
    C10078_O  C10078   CYN1_.
    C10079_O  C10079   CYN1_.
    C10080_O  C10080   CYN1_.
    C10081_O  C10081   CYN1_.
    C10082_O  C10082   CYN1_.
              C10083A  CMARK.
              C10083B  CMARK.
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                    C10083C  CMARK.
                    C10083D  CMARK.
                    C10083E  CMARK.
                    C10083F  CMARK.
                    C10083G  CMARK.
               C10084_O  C10084   CYN1_.
                    C10085A  CMARK.
                    C10085B  CMARK.
                    C10085C  CMARK.
                    C10085D  CMARK.
                    C10086A  CMARK.
                    C10086B  CMARK.
                    C10086C  CMARK.
                    C10086D  CMARK.
                    C10086E  CMARK.
                    C10086F  CMARK.
                    C10086G  CMARK.
                    C10086H  CMARK.
                    C10086I  CMARK.
               C10087FO  C10087F  Cfeet.
               C10087IO  C10087I  Cinch.
               C10088_O  C10088   Cwgt.
               C10089_O  C10089   CYN1_.
               C10090_O  C10090   CYN1_.
               C10091_O  C10091   Fruit.
               C10092_O  C10092   Ctimes2_.
               C10093_O  C10093   CDAYS1_.
               C10094_O  C10094   CDAYS1_.
               C10095_O  C10095   CDAYS2_.
               C10096_O  C10096   CDAYS3_.
               C10097_O  C10097   CAGE2_.
               C10098_O  C10098   CSEX.
               C10099_O  C10099   HPV1_.
               C10100_O  C10100   HPV2_.
               C10101_O  C10101   CYN7_.
               C10102_O  C10102   CYN7_.
               C10103_O  C10103   CYN7_.
               C10104_O  C10104   CYN7_.
               C10105_O  C10105   FACILITY.
                         C10106   CHISP.
                         C10106A  CMARK.
                         C10106B  CMARK.
                         C10106C  CMARK.
                         C10106D  CMARK.
                         C10106E  CMARK.
                         C10107A  CMARK.
                         C10107B  CMARK.
                         C10107C  CMARK.
                         C10107D  CMARK.
                         C10107E  CMARK.
               C10108_O  C10108   CAGE1_.
               C10109_O  C10109   CSEX.
               C10110_O  C10110   CRELEDU.
               C10111_O  C10111   CRELPOL.
               C10112_O  C10112   CRELATE.
               C10113_O  C10113   CYN1_.
          ;

LABEL C10001_O='Are you adult responsible for child'
      C10001  ='Are you adult responsible for child'
      C10002AO='Child covered by TRICARE Prime'
      C10002A ='Child covered by TRICARE Prime'
      C10002BO='Child covered by TRICARE Extra/Standard'
      C10002B ='Child covered by TRICARE Extra/Standard'
      C10002CO='Child covered by Civilian HMO'
      C10002C ='Child covered by Civilian HMO'
      C10002DO='Child covered by Other Civilian Ins.'
      C10002D ='Child covered by Other Civilian Ins.'
      C10002EO='Child covered by Medicaid'
      C10002E ='Child covered by Medicaid'
      C10002FO='Child covered by USFHP'
      C10002F ='Child covered by USFHP'
      C10002GO='Child covered by Federal Employee Health Ben.'
      C10002G ='Child covered by Federal Employee Health Ben.'
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C10002JO='Gvrnmnt hlth ins from a Non-US country'
C10002J ='Gvrnmnt hlth ins from a Non-US country'
C10002KO='TRICARE Reserve Select'
C10002K ='TRICARE Reserve Select'
C10002LO='Child covered by oth gvrnmnt program'
C10002L ='Child covered by oth gvrnmnt program'
C10002HO='Not Sure Child used health pln last 12 mos'
C10002H ='Not Sure Child used health pln last 12 mos'
C10002IO='Child not cvrd by health pln last 12 mos'
C10002I ='Child not cvrd by health pln last 12 mos'
C10003_O='Which hlth plan did you use most '
C10003  ='Which hlth plan did you use most '
C10004_O='Past 12 mos,# mos in a row cvrd w/Pln'
C10004  ='Past 12 mos,# mos in a row cvrd w/Pln'
C10005_O='Type of facility child used most often'
C10005  ='Type of facility child used most often'
C10006_O='Have illness/injury need care right away'
C10006  ='Have illness/injury need care right away'
C10007_O='Get needed care as soon as wanted'
C10007  ='Get needed care as soon as wanted'
C10008_O='Make appt for regular/routine hlthcre'
C10008  ='Make appt for regular/routine hlthcre'
C10009_O='How oftn get appt for care soon as wnted'
C10009  ='How oftn get appt for care soon as wnted'
C10010_O='Times to Dr office/Clinic (excluding ER)'
C10010  ='Times to Dr office/Clinic (excluding ER)'
C10011_O='Rating of childs healthcare'
C10011  ='Rating of childs healthcare'
C10012_O='Times to ER'
C10012  ='Times to ER'
C10013_O='ER to treat accident/injury/oth hlth problem'
C10013  ='ER to treat accident/injury/oth hlth problem'
C10014_O='Before ER, contact Dr./oth hlth professional'
C10014  ='Before ER, contact Dr./oth hlth professional'
C10015_O='Dr./oth hlth professional sent child to ER'
C10015  ='Dr./oth hlth professional sent child to ER'
C10016_O='Why take child to ER,instead of Dr.'
C10016  ='Why take child to ER,instead of Dr.'
C10017_O='Overnight stay as result of ER'
C10017  ='Overnight stay as result of ER'
C10018_O='Visit Dr./clinic for care after hours'
C10018  ='Visit Dr./clinic for care after hours'
C10019_O='How oftn easy to get after hours care'
C10019  ='How oftn easy to get after hours care'
C10020AO='No after hrs care: After hrs location unknown'
C10020A ='No after hrs care: After hrs location unknown'
C10020BO='No after hrs care: List of Dr offices unknown'
C10020B ='No after hrs care: List of Dr offices unknown'
C10020CO='No after hrs care: Dr office too far'
C10020C ='No after hrs care: Dr office too far'
C10020DO='No after hrs care: Dr office hrs inconvenient'
C10020D ='No after hrs care: Dr office hrs inconvenient'
C10020EO='No after hrs care: Other reason'
C10020E ='No after hrs care: Other reason'
C10021_O='Does child have personal Dr'
C10021  ='Does child have personal Dr'
C10022_O='Past 12 mos,# visits personal Dr'
C10022  ='Past 12 mos,# visits personal Dr'
C10023_O='How oftn did Dr. explain things to you'
C10023  ='How oftn did Dr. explain things to you'
C10024_O='How oftn Dr. listen carefully'
C10024  ='How oftn Dr. listen carefully'
C10025_O='How oftn Dr. respect what had to say'
C10025  ='How oftn Dr. respect what had to say'
C10026_O='Child able to talk to Dr'
C10026  ='Child able to talk to Dr'
C10027_O='Dr explain in way for child to undrstnd'
C10027  ='Dr explain in way for child to undrstnd'
C10028_O='How oftn Dr. spend enough time w/child'
C10028  ='How oftn Dr. spend enough time w/child'
C10029_O='Talk about feeling/growing/behaving'
C10029  ='Talk about feeling/growing/behaving'
C10030_O='Rating of childs personal Dr'
C10030  ='Rating of childs personal Dr'
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      C10031_O='Have same personal Dr before'
      C10031  ='Have same personal Dr before'
      C10032_O='How much prblem to get personal Dr'
      C10032  ='How much prblem to get personal Dr'
      C10033_O='Use more thn one kind prvder/hlth srvice'
      C10033  ='Use more thn one kind prvder/hlth srvice'
      C10034_O='Anyone help coordinate childs care'
      C10034  ='Anyone help coordinate childs care'
      C10035_O='Chld has medical/behavr/oth health cndtn'
      C10035  ='Chld has medical/behavr/oth health cndtn'
      C10036_O='Dr undrstnds med/beh/oth affct chld life'
      C10036  ='Dr undrstnds med/beh/oth affct chld life'
      C10037_O='Dr undrstnds med/beh/oth affct fmly life'
      C10037  ='Dr undrstnds med/beh/oth affct fmly life'
      C10038_O='Tried to get appointment for child with spclst'
      C10038  ='Tried to get appointment for child with spclst'
      C10039_O='How easy to get appt to see spclst'
      C10039  ='How easy to get appt to see spclst'
      C10040AO='Rsn spclst appt hard to get: No need'
      C10040A ='Rsn spclst appt hard to get: No need'
      C10040BO='Rsn spclst appt hard to get: Plan approval delay'
      C10040B ='Rsn spclst appt hard to get: Plan approval delay'
      C10040CO='Rsn spclst appt hard to get: Spclst list unavailable'
      C10040C ='Rsn spclst appt hard to get: Spclst list unavailable'
      C10040DO='Rsn spclst appt hard to get: Spclst too far'
      C10040D ='Rsn spclst appt hard to get: Spclst too far'
      C10040EO='Rsn spclst appt hard to get: Not enough choice of Spclst'
      C10040E ='Rsn spclst appt hard to get: Not enough choice of Spclst'
      C10040FO='Rsn spclst appt hard to get: Wanted Spclst not in Hlth pln'
      C10040F ='Rsn spclst appt hard to get: Wanted Spclst not in Hlth pln'
      C10040GO='Rsn spclst appt hard to get: Unable to get convenient appt'
      C10040G ='Rsn spclst appt hard to get: Unable to get convenient appt'
      C10040HO='Rsn spclst appt hard to get: Other'
      C10040H ='Rsn spclst appt hard to get: Other'
      C10041_O='In last 12 mos, # spclst child seen'
      C10041  ='In last 12 mos, # spclst child seen'
      C10042_O='Rating of specialist seen most often'
      C10042  ='Rating of specialist seen most often'
      C10043_O='Specialist same as personal Dr'
      C10043  ='Specialist same as personal Dr'
      C10044_O='Rating of childs mental hlth'
      C10044  ='Rating of childs mental hlth'
      C10045_O='You/Dr thought child needed mental hlth spcl'
      C10045  ='You/Dr thought child needed mental hlth spcl'
      C10046_O='Child saw mental hlth spcl(MHSp)'
      C10046  ='Child saw mental hlth spcl(MHSp)'
      C10047AO='Rsn child not see MHSp: No need'
      C10047A ='Rsn child not see MHSp: No need'
      C10047BO='Rsn child not see MHSp: Child dr able to help'
      C10047B ='Rsn child not see MHSp: Child dr able to help'
      C10047DO='Rsn child not see MHSp: Not enough choice of Spcl'
      C10047D ='Rsn child not see MHSp: Not enough choice of Spcl'
      C10047EO='Rsn child not see MHSp: Spcls too far'
      C10047E ='Rsn child not see MHSp: Spcls too far'
      C10047FO='Rsn child not see MHSp: Wanted Spcl not in Hlth pln'
      C10047F ='Rsn child not see MHSp: Wanted Spcl not in Hlth pln'
      C10047GO='Rsn child not see MHSp: Unable to get convenient appt'
      C10047G ='Rsn child not see MHSp: Unable to get convenient appt'
      C10047HO='Rsn child not see MHSp: Dr not taking new patients'
      C10047H ='Rsn child not see MHSp: Dr not taking new patients'
      C10047IO='Rsn child not see MHSp: Other'
      C10047I ='Rsn child not see MHSp: Other'
      C10047JO='Rsn child not see MHSp: Unsure how to find Spcl in plan'
      C10047J ='Rsn child not see MHSp: Unsure how to find Spcl in plan'
      C10047KO='Rsn child not see MHSp: Unable to find mental hlth spcl'
      C10047K ='Rsn child not see MHSp: Unable to find mental hlth spcl'
      C10047LO='Rsn child not see MHSp: Plan would not approve services'
      C10047L ='Rsn child not see MHSp: Plan would not approve services'
      C10047MO='Rsn child not see MHSp: Unable to find spclst who undrstd mltry dplymnt'
      C10047M ='Rsn child not see MHSp: Unable to find spclst who undrstd mltry dplymnt'
      C10047NO='Rsn child not see MHSp: Unable to find spclst who would treat condition'
      C10047N ='Rsn child not see MHSp: Unable to find spclst who would treat condition'
      C10047OO='Rsn child not see MHSp: Unable to find spclst in fclty accsbl for prsns wth
dsblty'
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      C10047O ='Rsn child not see MHSp: Unable to find spclst in fclty accsbl for prsns wth
dsblty'
      C10048_O='How often child get needed care from MHSp'
      C10048  ='How often child get needed care from MHSp'
      C10049_O='In last 12 mos, how often use srvcs of Case Mngr/Coord to obtain care from
spclst'
      C10049  ='In last 12 mos, how often use srvcs of Case Mngr/Coord to obtain care from
spclst'
      C10050_O='Tried to get care, test, or treatment'
      C10050  ='Tried to get care, test, or treatment'
      C10051_O='How easy to get care, test, or treatment'
      C10051  ='How easy to get care, test, or treatment'
      C10052_O='Look for info/written material or Internet'
      C10052  ='Look for info/written material or Internet'
      C10053_O='How often written material or web provide needed info'
      C10053  ='How often written material or web provide needed info'
      C10054_O='Call customer service to get info'
      C10054  ='Call customer service to get info'
      C10055_O='Customer service give needed info'
      C10055  ='Customer service give needed info'
      C10056_O='Customer service treat with courtesy/respect'
      C10056  ='Customer service treat with courtesy/respect'
      C10057_O='Plan give forms to fill'
      C10057  ='Plan give forms to fill'
      C10058_O='How often, forms easy to fill'
      C10058  ='How often, forms easy to fill'
      C10059_O='Rating of exprience with child hlth plan'
      C10059  ='Rating of exprience with child hlth plan'
      C10060_O='Get prescription/refill'
      C10060  ='Get prescription/refill'
      C10061_O='How often, easy to get prescription/refill'
      C10061  ='How often, easy to get prescription/refill'
      C10062_O='Help get prescription/refill'
      C10062  ='Help get prescription/refill'
      C10063_O='Did anyone prvd patnt eductn on side effcts of prscrp meds'
      C10063  ='Did anyone prvd patnt eductn on side effcts of prscrp meds'
      C10064_O='Did anyone prvd info on lab tests/follow-up rltd to prscrp meds'
      C10064  ='Did anyone prvd info on lab tests/follow-up rltd to prscrp meds'
      C10065_O='Did anyone infrm chld about not sharing prscrp med'
      C10065  ='Did anyone infrm chld about not sharing prscrp med'
      C10066_O='Rate child overall health'
      C10066  ='Rate child overall health'
      C10067_O='Child use medicine prescribed by Dr'
      C10067  ='Child use medicine prescribed by Dr'
      C10068_O='Medicine b/c medical,behavioral,other'
      C10068  ='Medicine b/c medical,behavioral,other'
      C10069_O='Medicine b/c cndtn expected last>=12 mos'
      C10069  ='Medicine b/c cndtn expected last>=12 mos'
      C10070_O='Mre medical,mntl,education svcs thn usual'
      C10070  ='Mre medical,mntl,education svcs thn usual'
      C10071_O='Use svcs b/c medical, behavioral, oth'
      C10071  ='Use svcs b/c medical, behavioral, oth'
      C10072_O='Svcs b/c condition expected last>=12 mos'
      C10072  ='Svcs b/c condition expected last>=12 mos'
      C10073_O='Limited/prevented in ability'
      C10073  ='Limited/prevented in ability'
      C10074_O='Limited b/c medical, behavioral, other'
      C10074  ='Limited b/c medical, behavioral, other'
      C10075_O='Limited b/c condition expected last>=1yr'
      C10075  ='Limited b/c condition expected last>=1yr'
      C10076_O='Get special therapy'
      C10076  ='Get special therapy'
      C10077_O='Therapy b/c medical, behavioral, other'
      C10077  ='Therapy b/c medical, behavioral, other'
      C10078_O='Therapy b/c condition expected last>=1yr'
      C10078  ='Therapy b/c condition expected last>=1yr'
      C10079_O='Problem for which gets trtmnt/counseling'
      C10079  ='Problem for which gets trtmnt/counseling'
      C10080_O='Trtmnt/counseling b/c conditn last>=1yr'
      C10080  ='Trtmnt/counseling b/c conditn last>=1yr'
      C10081_O="Child's disorder requires care frm spclst"
      C10081  ="Child's disorder requires care frm spclst"
      C10082_O='Family enrolled in EFMP'
      C10082  ='Family enrolled in EFMP'
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C10083AO='Rsn child not enrolled EFMP:Not eligible'
C10083A ='Rsn child not enrolled EFMP:Not eligible'
C10083BO='Rsn child not enrolled EFMP:Programs unknown'
C10083B ='Rsn child not enrolled EFMP:Programs unknown'
C10083CO='Rsn child not enrolled EFMP:Not want duty limits'
C10083C ='Rsn child not enrolled EFMP:Not want duty limits'
C10083DO='Rsn child not enrolled EFMP:Services not needed'
C10083D ='Rsn child not enrolled EFMP:Services not needed'
C10083EO='Rsn child not enrolled EFMP:Sponsors branch does not offer'
C10083E ='Rsn child not enrolled EFMP:Sponsors branch does not offer'
C10083FO='Rsn child not enrolled EFMP:Not live w/sponsor,not required'
C10083F ='Rsn child not enrolled EFMP:Not live w/sponsor,not required'
C10083GO='Rsn child not enrolled EFMP:Other'
C10083G ='Rsn child not enrolled EFMP:Other'
C10084_O='Return to update status at EFMP'
C10084  ='Return to update status at EFMP'
C10085AO='Child receives services under PFPWD/ECHO'
C10085A ='Child receives services under PFPWD/ECHO'
C10085BO='Child receives services under ICMP-PEC'
C10085B ='Child receives services under ICMP-PEC'
C10085CO='Child receives services under CCTP'
C10085C ='Child receives services under CCTP'
C10085DO='Child doesnt receive PFPWD/ECHO/ICMP-PEC/CCTP'
C10085D ='Child doesnt receive PFPWD/ECHO/ICMP-PEC/CCTP'
C10086AO='Dr/nurse: child has anxiety problems'
C10086A ='Dr/nurse: child has anxiety problems'
C10086BO='Dr/nurse: child has attention problems'
C10086B ='Dr/nurse: child has attention problems'
C10086CO='Dr/nurse: child has conduct problems'
C10086C ='Dr/nurse: child has conduct problems'
C10086DO='Dr/nurse: child has depression problems'
C10086D ='Dr/nurse: child has depression problems'
C10086EO='Dr/nurse: child has dvlpmnt dly/mntl rtrdatn'
C10086E ='Dr/nurse: child has dvlpmnt dly/mntl rtrdatn'
C10086FO='Dr/nurse: child has learning prblms/dsblty'
C10086F ='Dr/nurse: child has learning prblms/dsblty'
C10086GO='Dr/nurse: child has sleep disturbance'
C10086G ='Dr/nurse: child has sleep disturbance'
C10086HO='Dr/nurse: child has other problems'
C10086H ='Dr/nurse: child has other problems'
C10086IO='Dr/nurse: child has self-injurious behavior'
C10086I ='Dr/nurse: child has self-injurious behavior'
C10087FO="Child's height without shoes on-feet"
C10087F ="Child's height without shoes on-feet"
C10087IO="Child's height without shoes on-inch"
C10087I ="Child's height without shoes on-inch"
C10088_O="Child's weight without shoes on"
C10088  ="Child's weight without shoes on"
C10089_O="In last 12 mos, child's doctor discuss child's wt"
C10089  ="In last 12 mos, child's doctor discuss child's wt"
C10090_O="Did you want child's doctor to discuss child's wt"
C10090  ="Did you want child's doctor to discuss child's wt"
C10091_O='How many fruit & vegetable servings'
C10091  ='How many fruit & vegetable servings'
C10092_O='Past 7 days,# child eat fast food'
C10092  ='Past 7 days,# child eat fast food'
C10093_O='Past 7 days,# child partic in hard physcl actvty at least 20 mins'
C10093  ='Past 7 days,# child partic in hard physcl actvty at least 20 mins'
C10094_O='Past 7 days,# child partic in easier physcl actvty at least 30 mins'
C10094  ='Past 7 days,# child partic in easier physcl actvty at least 30 mins'
C10095_O='Past 7 days,how many hrs did child watch TV'
C10095  ='Past 7 days,how many hrs did child watch TV'
C10096_O='Past 7 days,how many hrs did child play video games'
C10096  ='Past 7 days,how many hrs did child play video games'
C10097_O='How old is your child'
C10097  ='How old is your child'
C10098_O='Is child male or female'
C10098  ='Is child male or female'
C10099_O='Child recvd HPV vaccination'
C10099  ='Child recvd HPV vaccination'
C10100_O='How many HPV shots'
C10100  ='How many HPV shots'
C10101_O='Past 10 years,child recvd Tetanus shot'
C10101  ='Past 10 years,child recvd Tetanus shot'
```

```
C10102_O='Tetanus shot given in 2005 or later'
C10102  ='Tetanus shot given in 2005 or later'
C10103_O='Tetanus shot includes whooping cough vaccine'
C10103  ='Tetanus shot includes whooping cough vaccine'
C10104_O='Child had flu vaccination'
C10104  ='Child had flu vaccination'
C10105_O='Care from military/civilian/both'
C10105  ='Care from military/civilian/both'
C10106  ='Is Child Hispanic/Latino descent'
C10106AO='Child Hispanic/Latino: No'
C10106A ='Child Hispanic/Latino: No'
C10106BO='Child Hspnc: Mexican/Mexican American/Chicano'
C10106B ='Child Hspnc: Mexican/Mexican American/Chicano'
C10106CO='Child Hspnc: Puerto Rican'
C10106C ='Child Hspnc: Puerto Rican'
C10106DO='Child Hspnc: Cuban'
C10106D ='Child Hspnc: Cuban'
C10106EO='Child Hspnc: Other Spanish/Hispanic/Latino'
C10106E ='Child Hspnc: Other Spanish/Hispanic/Latino'
C10107AO='Child race:White'
C10107A ='Child race:White'
C10107BO='Child race:Black or African American'
C10107B ='Child race:Black or African American'
C10107CO='Child race:Am. Indian/Alaskan'
C10107C ='Child race:Am. Indian/Alaskan'
C10107DO='Child race:Asian'
C10107D ='Child race:Asian'
C10107EO='Child race:Native Hawaiian/Pacific Islnd'
C10107E ='Child race:Native Hawaiian/Pacific Islnd'
C10108_O='Your age now'
C10108  ='Your age now'
C10109_O='Are you male or female'
C10109  ='Are you male or female'
C10110_O='Highest grade/level you completed'
C10110  ='Highest grade/level you completed'
C10111_O='How related to policyholder'
C10111  ='How related to policyholder'
C10112_O='How related to child'
C10112  ='How related to child'
C10113_O='In last 12 mos, was service member in hhld deployed'
C10113  ='In last 12 mos, was servcie member in hhld deployed'


N1  ="Coding Scheme Note 1"
N2  ="Coding Scheme Note 2"
N3  ="Coding Scheme Note 3"
N4  ="Coding Scheme Note 4"
N5  ="Coding Scheme Note 5"
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"
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"
N19 ="Coding Scheme Note 19"
N20 ="Coding Scheme Note 20"
N21 ="Coding Scheme Note 21"
N22 ="Coding Scheme Note 22"
N23 ="Coding Scheme Note 23"
N24 ="Coding Scheme Note 24"
N25 ="Coding Scheme Note 25"
N26 ="Coding Scheme Note 26"
N27 ="Coding Scheme Note 27"
N28 ="Coding Scheme Note 28"
N29 ="Coding Scheme Note 29"
N30 ="Coding Scheme Note 30"
N31 ="Coding Scheme Note 31"
```

```
        N32A="Coding Scheme Note 32A"
        N32B="Coding Scheme Note 32B"
        N33 ="Coding Scheme Note 33"
        N34 ="Coding Scheme Note 34"
        N35 ="Coding Scheme Note 35"

        MISS_1="Count of: Violates Skip Pattern"
        MISS_4="Count of: Incomplete grid error"
        MISS_5="Count of: Dont know or not sure"
        MISS_6="Count of: Not applicable - valid skip"
        MISS_7="Count of: Out-of-range error"
        MISS_9="Count of: No response - invalid skip"
        MISS_TOT= "Total number of missing responses"

;
```

E.4 WEIGHTING\SELECTC.SAS - CREATE RECORD SELECTION FLAG FOR RECORD SELECTION.

```
************************************************************************
*
* PROGRAM:  SELECTC.SAS
* TASK:     2008 CHILD DOD HEALTH CARE SURVEY ANALYSIS (6077-220)
* PURPOSE:  ASSIGN FINAL STATUS FOR RECORD SELECTION PURPOSES.
* WRITTEN:  12/14/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 08/31/2001 BY KEITH RATHBUN, Adapted from the Adult 2000
*              quarterly version to accomodate the Child Q3 2000 survey.
*           2) 09/16/2002 BY KEITH RATHBUN, Updated for Child Q3
*              2002 Survey.  Added FLAG_FIN = 23,24 for FNSTATUS = 20.
*           3) 09/18/2003 BY KEITH RATHBUN, Updated for Child Q3
*              2003 Survey.
*           4) 09/17/2004 BY KEITH RATHBUN, Updated for Child Q3
*              2004 Survey.
*           5) 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 CDead.sas7bdat file.
*
* INPUTS:   1) CSCHM10C.sas7bdat - 2010 FY Q3 Child DOD Health Survey Data
*
* OUTPUTS:  1) SELECTC.sas7bdat - 2010 FY Q3 Child DOD Health Survey Data w/FNSTATUS
*
************************************************************************
*;
LIBNAME IN       "..\..\DATA\CFINAL";
LIBNAME OUT      "..\..\DATA\CFINAL";
LIBNAME LIBRARY  "..\..\DATA\CFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

PROC SORT DATA=IN.CSCHM10C OUT=TEMPC1; BY MPRID; RUN;

DATA TEMPC2 OUT.DUPSC;
   SET TEMPC1;
   BY MPRID;
   ************************************************************************
   * Count key variables (Total=21), 50% rule = GT 10
   ************************************************************************;
   ARRAY KEYVAR
                C10003  C10004  C10005  C10006  C10008  C10010
                C10012  C10031  C10038  C10052  C10054  C10058
                C10059  C10066  C10098  C10106  C10108  C10109
                C10110  C10112
                 ;
   KEYCOUNT = 0;
   DO I = 1 TO DIM(KEYVAR); DROP I;
      IF KEYVAR(I) NOT IN (.,.A,.O,.I,.B) THEN KEYCOUNT = KEYCOUNT + 1;
   END;
   ************************************************************************
   * Count question 88 (Child's Race) - multiple response item.
   ************************************************************************;
   IF C10107A NOT IN (.,.A,.O,.I,.B) OR
      C10107B NOT IN (.,.A,.O,.I,.B) OR
      C10107C NOT IN (.,.A,.O,.I,.B) OR
      C10107D NOT IN (.,.A,.O,.I,.B) OR
      C10107E NOT IN (.,.A,.O,.I,.B) THEN KEYCOUNT + 1;

   ************************************************************************
   * Set flag for duplicates
   ************************************************************************;
   LENGTH DUPFLAG $3;
   DUPFLAG = 'NO';
   IF NOT (FIRST.MPRID AND LAST.MPRID) THEN DUPFLAG = 'YES';

   ************************************************************************
   * Determine final status (FNSTATUS)
   ************************************************************************;
   FNSTATUS = 0;
   IF FLAG_FIN = 1 THEN DO;
      ************************************************************
      **** APPLY THE COMPLETE QUESTIONNAIRE RULE (50% OF KEY   ****
```

```
      **** VARIABLES).                                          ****
      ************************************************************;
      IF KEYCOUNT GT 10 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;

   IF DUPFLAG = 'YES' THEN OUTPUT OUT.DUPSC;
   ELSE OUTPUT TEMPC2;
RUN;

*************************************************************************
* Select the "most complete" questionaire from duplicates and
* SET it back into the non-duplicates file. For now assume the lowest
* FNSTATUS Value is the "most complete".
*************************************************************************
;
PROC SORT DATA=OUT.DUPSC;
   BY MPRID FNSTATUS;
RUN;

DATA DEDUPED;
   SET OUT.DUPSC;
   BY MPRID FNSTATUS;
   IF FIRST.MPRID; *KEEP only the first - most complete questionaire;
RUN;

DATA OUT.SELECTC;
   SET TEMPC2 DEDUPED;

   LABEL FNSTATUS = "Final Status"
         DUPFLAG  = "Multiple Response Indicator"
         STRATUM  = "Sampling STRATUM"
         KEYCOUNT = "# Key Questions Answered (Out of 23)"
        ;
RUN;

TITLE1 "2010 Child DOD Health Care Survey Analysis ";
TITLE2 "Program Name: SELECTC.SAS By Keith Rathbun";
TITLE3 "Program Output: SELECTC.sas7bdat";

PROC CONTENTS DATA=OUT.SELECTC; RUN;

PROC FREQ DATA=OUT.SELECTC;
TABLES FNSTATUS KEYCOUNT FLAG_FIN
       FNSTATUS*KEYCOUNT*FLAG_FIN
   /MISSING LIST;
RUN;
```

E.5 CONSTRUCT\CREATBMI.SAS - CREATE BMI VALUES.

```
*************************************************************************
*
* PROGRAM:  CREATBMI.SAS
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE:  CALCULATES CHILD BMI VALUES.
* WRITTEN:  11/14/2004 BY REBECCA NYMAN
*
* MODIFIED: 1) 12/06/2004 BY JACQUELINE AGUFA-MALOBA, Updated to run on DOD
*              computer.
*           2) 12/27/05 BY LUCY LU. UPDATED FOR Q3 2005 CHILD CONSTRUCT PROGRAM
*           3) 9/27/06 BY JACQUELINE AGUFA-MALOBA. UPDATED FOR Q3 2006 CHILD CONSTRUCT PROGRAM
*
* INPUTS:   1) SELECTC.sas7bdat - 2010 Child DOD Health Survey Data w/FNSTATUS
*           2) SAMPLC02.sas7bdat - Child (Q) Sample file
*
* OUTPUTS:  1) CREATBMI.sas7bdat - 2010 Child BMI values
*
*************************************************************************
*;
LIBNAME IN      "..\..\DATA\CFINAL";
LIBNAME OUT     "..\..\DATA\CFINAL";
LIBNAME LIBRARY "..\..\DATA\CFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER MPRINT SOURCE2;


Proc Format;
  Value Sex
    1 = 'Male'
    2 = 'Female';

  Value over
    4 = 'overweight'
    3 = 'at-risk'
    2 = 'normal'
    1 = 'underweight';

  value exclude
    1 = 'plausible' /* MER 7/9/10 - Added additional exclude values to format */
    2 = 'not plausible due to height/weight values'
    3 = 'not plausible due to bmi'
    4 = 'not plausible due to weight for age'
    5 = 'not plausible due to height for age';
run;

data bmiInput;
  set IN.SELECTC;

  /*The following variables must be named as such in order for the
    gc-calculate program to run*********************************/

  agemos = C10097*12;

/* MER 7/9/10 - Switched from gender variable on questionnaire */
/* to XSEXA (gender variable created in coding scheme)         */
  if XSEXA = 1 then sex = 1;
  else if XSEXA = 2 then sex = 2;


  IF C10087F IN (.O) THEN C10087F = .;
  IF C10087I IN (.O) THEN C10087I = .;
  IF C10088  IN (.O) THEN C10088  = .;

  height = ((C10087F*12)+ C10087I)* 2.54; /*Height in cenimeters*/

  recumbnt = 0;

  weight = C10088 * .4536; /*Weight in Kilograms*/

  headcir = .;

run;
```

```
/*This is the CDC's program titled "gc-setup.sas", which can be downloaded on their web site.
It must be run with "gc-calculate.sas", which can also be downloaded at
http://www.cdc.gov/nccdphp/dnpa/growthcharts/sas.htm*/

*%let datalib="..\..\DATA\CFINAL";  **** Subdirectory for your existing dataset;
%let datain=bmiInput;              **** The name of your existing SAS dataset;
%let dataout=cdctest;              **** The name of the dataset you wish to put
                                        the results into;
%let saspgm='gc-calculate.sas';
                                    **** Subdirectory for the downloaded program
                                        gc-calculate.sas;
*Libname mydata &datalib;

data _INDATA; set &datain;
%include &saspgm;

data &dataout; set _INDATA;

DATA OUT.CREATBMI (KEEP=MPRID BMIPCT OVER EXCLUDE);
SET cdctest;

/*notes if z scores are plausible values*/
exclude = 1; /*Any exlude GE 2 are implausible values*/
if C10087F IN (.O,.) or C10087I IN (.O,.) or C10088 IN (.O,.) then exclude = 2; /*height/wieght
values*/
else if bmiz lt -4 or bmiz gt 5 then exclude = 3; /*bmi*/
else if waz lt -5 or waz gt 3 then exclude = 4; /*weight for age*/
else if haz lt - 5 or haz gt 3 then exclude = 5; /*height for age*/

/*categorizes BMI*/


IF exclude EQ 1 THEN DO;
  if BMIPCT ge 95 then over = 4;
  else if 85 le BMIPCT lt 95 then over = 3;
  else if 5 lt BMIPCT lt 85 then over = 2;
  else if 0 le BMIPCT le 5 then over = 1;
END;

 PROC FREQ;
   TABLES EXCLUDE*OVER*BMIPCT
          / MISSPRINT LIST;
TITLE 'CHECK MISSING OVER (XBMICAT)';
format exclude exclude. OVER over. ;
run;
```

E.6 CONSTRUCT\GC-CALCULATE.SAS - INCLUDE FILE FOR CREATBMI.SAS. CALCULATE BMI VALUES.

```
**** THIS SAS PROGRAM IS FOR THE CALCULATION OF
     PERCENTILES AND Z-SCORES BASED ON THE CDC
     GROWTH REFERENCE YEAR 2000 ****;

IF AGEMOS GE 0 AND AGEMOS LT 0.5 THEN _AGECAT=0;
  ELSE _AGECAT=INT(AGEMOS+0.5)-0.5;

IF RECUMBNT=1 THEN DO;
  LENGTH=HEIGHT;
  STATURE=.;
END;
 ELSE IF RECUMBNT=0 THEN DO;
  STATURE=HEIGHT;
  LENGTH=.;
 END;
 ELSE IF RECUMBNT=. THEN DO;
  IF AGEMOS NE . THEN DO;
   IF AGEMOS LT 24 THEN DO;
     LENGTH=HEIGHT;
     STATURE=.;
   END;
    ELSE IF AGEMOS GE 24 THEN DO;
     STATURE=HEIGHT;
     LENGTH=.;
    END;
  END;
  ELSE DO;
   IF HEIGHT LT 85 THEN DO;
     LENGTH=HEIGHT;
     STATURE=.;
   END;
    ELSE IF HEIGHT GE 85 THEN DO;
     STATURE=HEIGHT;
     LENGTH=.;
    END;
  END;
 END;

IF WEIGHT=. OR STATURE IN (.,0) THEN BMI=.;
  ELSE BMI=WEIGHT/(STATURE/100)**2;
_ID=_N_;


DATA _INDATA1; SET _INDATA;
PROC SORT DATA=_INDATA1; BY SEX _AGECAT _ID;

DATA _INDATA2; SET _INDATA;
IF LENGTH=. THEN _HTCAT=.;
  ELSE IF LENGTH GE 45 AND LENGTH LT 45.5 THEN _HTCAT=45;
  ELSE _HTCAT=INT(LENGTH+0.5)-0.5;
PROC SORT DATA=_INDATA2; BY SEX _HTCAT _ID;

DATA _INDATA3; SET _INDATA;
IF STATURE=. THEN _HTCAT=.;
  ELSE IF STATURE GE 77 AND STATURE LT 77.5 THEN _HTCAT=77;
  ELSE _HTCAT=INT(STATURE+0.5)-0.5;
PROC SORT DATA=_INDATA3; BY SEX _HTCAT _ID;


DATA LGFAGE;  **DATA FILE FOR LENGTH-FOR-AGE;
INFILE CARDS PAD;
INPUT SEX _AGEMOS1 _LLG1 _MLG1 _SLG1 _AGEMOS2 _LLG2 _MLG2 _SLG2;
CARDS;
1       0.0       1.267004226       49.988884080       0.053112191       0.5       0.511237696
52.695975300      0.048692684
1       0.5       0.511237696       52.695975300       0.048692684       1.5       -0.452244460
56.628428550      0.044116830
1       1.5       -0.452244460       56.628428550       0.044116830       2.5       -0.990594599
59.608953430      0.041795583
1       2.5       -0.990594599       59.608953430       0.041795583       3.5       -1.285837689
62.077000270      0.040454126
```

```
1       3.5       -1.285837689       62.077000270       0.040454126       4.5       -1.430312380
64.216864100      0.039633879
1       4.5       -1.430312380       64.216864100       0.039633879       5.5       -1.476575470
66.125314900      0.039123813
1       5.5       -1.476575470       66.125314900       0.039123813       6.5       -1.456837849
67.860179900      0.038811994
1       6.5       -1.456837849       67.860179900       0.038811994       7.5       -1.391898768
69.459084580      0.038633209
1       7.5       -1.391898768       69.459084580       0.038633209       8.5       -1.295714590
70.948039120      0.038546833
1       8.5       -1.295714590       70.948039120       0.038546833       9.5       -1.177919048
72.345861110      0.038526262
1       9.5       -1.177919048       72.345861110       0.038526262       10.5      -1.045326049
73.666654100      0.038553387
1       10.5      -1.045326049       73.666654100       0.038553387       11.5      -0.902800887
74.921297170      0.038615501
1       11.5      -0.902800887       74.921297170       0.038615501       12.5      -0.753908107
76.118375360      0.038703461
1       12.5      -0.753908107       76.118375360       0.038703461       13.5      -0.601263523
77.264799110      0.038810557
1       13.5      -0.601263523       77.264799110       0.038810557       14.5      -0.446805039
78.366223090      0.038931784
1       14.5      -0.446805039       78.366223090       0.038931784       15.5      -0.291974772
79.427340500      0.039063356
1       15.5      -0.291974772       79.427340500       0.039063356       16.5      -0.137847670
80.452094920      0.039202382
1       16.5       -0.137847670      80.452094920       0.039202382       17.5       0.014776155
81.443836030      0.039346629
1       17.5       0.014776155       81.443836030       0.039346629       18.5       0.165304169
82.405436430      0.039494365
1       18.5       0.165304169       82.405436430       0.039494365       19.5       0.313301809
83.339380630      0.039644238
1       19.5       0.313301809       83.339380630       0.039644238       20.5       0.458455471
84.247833940      0.039795189
1       20.5       0.458455471       84.247833940       0.039795189       21.5       0.600544631
85.132696580      0.039946388
1       21.5       0.600544631       85.132696580       0.039946388       22.5       0.739438953
85.995648800      0.040097181
1       22.5       0.739438953       85.995648800       0.040097181       23.5       0.875000447
86.838175100      0.040247060
1       23.5       0.875000447       86.838175100       0.040247060       24.5       1.007208070
87.661609340      0.040395626
1       24.5       1.007208070       87.661609340       0.040395626       25.5       0.837251351
88.452472820      0.040577525
1       25.5       0.837251351       88.452472820       0.040577525       26.5       0.681492975
89.223264340      0.040723122
1       26.5       0.681492975       89.223264340       0.040723122       27.5       0.538779654
89.975492280      0.040833194
1       27.5       0.538779654       89.975492280       0.040833194       28.5       0.407697153
90.710408530      0.040909059
1       28.5       0.407697153       90.710408530       0.040909059       29.5       0.286762453
91.429077620      0.040952433
1       29.5       0.286762453       91.429077620       0.040952433       30.5       0.174489485
92.132423790      0.040965330
1       30.5       0.174489485       92.132423790       0.040965330       31.5       0.069444521
92.821271670      0.040949976
1       31.5       0.069444521       92.821271670       0.040949976       32.5       -0.029720564
93.496379460      0.040908737
1       32.5       -0.029720564      93.496379460       0.040908737       33.5       -0.124251789
94.158465460      0.040844062
1       33.5       -0.124251789      94.158465460       0.040844062       34.5       -0.215288396
94.808229230      0.040758431
1       34.5       -0.215288396      94.808229230       0.040758431       35.5       -0.303854340
95.446369810      0.040654312
1       35.5       -0.303854340      95.446369810       0.040654312       36.5       -0.390918369
96.073591060      0.040534120
2       0.0        -1.295960857      49.286396120       0.050085560       0.5        -0.809249882
51.683580570      0.046818545
2       0.5        -0.809249882      51.683580570       0.046818545       1.5        -0.050782985
55.286128130      0.043443900
2       1.5        -0.050782985      55.286128130       0.043443900       2.5        0.476851407
58.093819060      0.041716103
2       2.5        0.476851407       58.093819060       0.041716103       3.5        0.843299612
60.459807630      0.040705173
```

```
2       3.5       0.843299612       60.459807630       0.040705173       4.5       1.097562257
62.536696560      0.040079765
2       4.5       1.097562257       62.536696560       0.040079765       5.5       1.272509641
64.406327620      0.039686845
2       5.5       1.272509641       64.406327620       0.039686845       6.5       1.390428859
66.118415530      0.039444555
2       6.5       1.390428859       66.118415530       0.039444555       7.5       1.466733925
67.705744190      0.039304738
2       7.5       1.466733925       67.705744190       0.039304738       8.5       1.512301976
69.191236140      0.039237110
2       8.5       1.512301976       69.191236140       0.039237110       9.5       1.534950767
70.591639240      0.039221665
2       9.5       1.534950767       70.591639240       0.039221665       10.5      1.540390875
71.919616730      0.039244672
2       10.5      1.540390875       71.919616730       0.039244672       11.5      1.532852892
73.185010400      0.039296420
2       11.5      1.532852892       73.185010400       0.039296420       12.5      1.515509470
74.395643790      0.039369875
2       12.5      1.515509470       74.395643790       0.039369875       13.5      1.490765028
75.557854400      0.039459832
2       13.5      1.490765028       75.557854400       0.039459832       14.5      1.460458255
76.676858710      0.039562382
2       14.5      1.460458255       76.676858710       0.039562382       15.5      1.426006009
77.757009860      0.039674542
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INFILE CARDS PAD;
INPUT SEX _AGEMOS1 _LHT1 _MHT1 _SHT1 _AGEMOS2 _LHT2 _MHT2 _SHT2;
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DATA WTFAGE;  **DATA FILE FOR WEIGHT-FOR-AGE;
INFILE CARDS PAD;
INPUT SEX _AGEMOS1 _LWT1 _MWT1 _SWT1 _AGEMOS2 _LWT2 _MWT2 _SWT2;
CARDS;
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1       0.5       1.547523128       4.003106424       0.146025021       1.5       1.068795548
4.879525083       0.136478767
1       1.5       1.068795548       4.879525083       0.136478767       2.5       0.695973505
5.672888765       0.129677511
1       2.5       0.695973505       5.672888765       0.129677511       3.5       0.419815090
6.391391982       0.124717085
1       3.5       0.419815090       6.391391982       0.124717085       4.5       0.219866801
7.041836432       0.121040119
1       4.5       0.219866801       7.041836432       0.121040119       5.5       0.077505598
7.630425182       0.118271200
1       5.5       0.077505598       7.630425182       0.118271200       6.5       -0.021907610
8.162951035       0.116153695
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1       9.5       -0.160095400       9.476500305       0.112186240       10.5       -0.174296850
9.835307701       0.111354536
1       10.5       -0.174296850       9.835307701       0.111354536       11.5       -0.179718900
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1       11.5       -0.179718900       10.161535670       0.110676413       12.5       -0.179254000
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1       12.5       -0.179254000       10.458853990       0.110118635       13.5       -0.175184470
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1       14.5       -0.169322680       10.979924820       0.109273653       15.5       -0.163113900
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1       16.5       -0.157709990       11.422067700       0.108694678       17.5       -0.154022790
11.619776980       0.108483324
1       17.5       -0.154022790       11.619776980       0.108483324       18.5       -0.152762140
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1       18.5       -0.152762140       11.804779020       0.108317416       19.5       -0.154466580
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1       19.5       -0.154466580       11.978966300       0.108193944       20.5       -0.159522020
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1       20.5       -0.159522020       12.144043340       0.108110954       21.5       -0.168179260
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2      202.5      -2.199583649      20.835780510      0.147912564      203.5      -2.207681525
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2      203.5      -2.207681525      20.871054490      0.147815078      204.5      -2.215737645
20.905758390      0.147723315
2      204.5      -2.215737645      20.905758390      0.147723315      205.5      -2.223739902
20.939884770      0.147637768
2      205.5      -2.223739902      20.939884770      0.147637768      206.5      -2.231667995
20.973428580      0.147559083
2      206.5      -2.231667995      20.973428580      0.147559083      207.5      -2.239511942
21.006381710      0.147487716
2      207.5      -2.239511942      21.006381710      0.147487716      208.5      -2.247257081
21.038737400      0.147424210
2      208.5      -2.247257081      21.038737400      0.147424210      209.5      -2.254885145
21.070489960      0.147369174
2      209.5      -2.254885145      21.070489960      0.147369174      210.5      -2.262382090
21.101632410      0.147323144
2      210.5      -2.262382090      21.101632410      0.147323144      211.5      -2.269731517
21.132158450      0.147286698
2      211.5      -2.269731517      21.132158450      0.147286698      212.5      -2.276917229
21.162061710      0.147260415
2      212.5      -2.276917229      21.162061710      0.147260415      213.5      -2.283925442
21.191335100      0.147244828
2      213.5      -2.283925442      21.191335100      0.147244828      214.5      -2.290731442
21.219974720      0.147240683
2      214.5      -2.290731442      21.219974720      0.147240683      215.5      -2.297324270
21.247972620      0.147248467
2      215.5      -2.297324270      21.247972620      0.147248467      216.5      -2.303687802
21.275322390      0.147268770
2      216.5      -2.303687802      21.275322390      0.147268770      217.5      -2.309799971
21.302019330      0.147302299
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2       217.5       -2.309799971       21.302019330       0.147302299       218.5       -2.315651874
21.328054890       0.147349514
2       218.5       -2.315651874       21.328054890       0.147349514       219.5       -2.321217310
21.353425630       0.147411215
2       219.5       -2.321217310       21.353425630       0.147411215       220.5       -2.326481911
21.378124620       0.147487979
2       220.5       -2.326481911       21.378124620       0.147487979       221.5       -2.331428139
21.402145890       0.147580453
2       221.5       -2.331428139       21.402145890       0.147580453       222.5       -2.336038473
21.425483510       0.147689289
2       222.5       -2.336038473       21.425483510       0.147689289       223.5       -2.340295450
21.448131560       0.147815150
2       223.5       -2.340295450       21.448131560       0.147815150       224.5       -2.344181703
21.470084120       0.147958706
2       224.5       -2.344181703       21.470084120       0.147958706       225.5       -2.347680000
21.491335290       0.148120633
2       225.5       -2.347680000       21.491335290       0.148120633       226.5       -2.350773286
21.511879180       0.148301619
2       226.5       -2.350773286       21.511879180       0.148301619       227.5       -2.353444725
21.531709890       0.148502355
2       227.5       -2.353444725       21.531709890       0.148502355       228.5       -2.355677743
21.550821550       0.148723546
2       228.5       -2.355677743       21.550821550       0.148723546       229.5       -2.357456070
21.569208240       0.148965902
2       229.5       -2.357456070       21.569208240       0.148965902       230.5       -2.358763788
21.586864060       0.149230142
2       230.5       -2.358763788       21.586864060       0.149230142       231.5       -2.359585369
21.603783090       0.149516994
2       231.5       -2.359585369       21.603783090       0.149516994       232.5       -2.359905726
21.619959390       0.149827195
2       232.5       -2.359905726       21.619959390       0.149827195       233.5       -2.359710258
21.635387000       0.150161492
2       233.5       -2.359710258       21.635387000       0.150161492       234.5       -2.358980464
21.650061260       0.150520734
2       234.5       -2.358980464       21.650061260       0.150520734       235.5       -2.357714508
21.663972700       0.150905439
2       235.5       -2.357714508       21.663972700       0.150905439       236.5       -2.355892424
21.677117360       0.151316531
2       236.5       -2.355892424       21.677117360       0.151316531       237.5       -2.353501353
21.689489350       0.151754808
2       237.5       -2.353501353       21.689489350       0.151754808       238.5       -2.350528726
21.701082880       0.152221086
2       238.5       -2.350528726       21.701082880       0.152221086       239.5       -2.346962247
21.711892250       0.152716206
2       239.5       -2.346962247       21.711892250       0.152716206       240       -2.344958430
21.716999340       0.152974718
;

DATA HCFAGE;  **DATA FILE FOR HEAD CIRCUMFERENCE-FOR-AGE;
INFILE CARDS PAD;
INPUT SEX _AGEMOS1 _LHC1 _MHC1 _SHC1 _AGEMOS2 _LHC2 _MHC2 _SHC2;
CARDS;
1       0.0       4.427825037       35.813668350       0.052172542       0.5       4.310927464
37.193610540       0.047259148
1       0.5       4.310927464       37.193610540       0.047259148       1.5       3.869576802
39.207429290       0.040947903
1       1.5       3.869576802       39.207429290       0.040947903       2.5       3.305593039
40.652331950       0.037027722
1       2.5       3.305593039       40.652331950       0.037027722       3.5       2.720590297
41.765169590       0.034364245
1       3.5       2.720590297       41.765169590       0.034364245       4.5       2.168048240
42.661161480       0.032462175
1       4.5       2.168048240       42.661161480       0.032462175       5.5       1.675465689
43.404887310       0.031064702
1       5.5       1.675465689       43.404887310       0.031064702       6.5       1.255160322
44.036099230       0.030022670
1       6.5       1.255160322       44.036099230       0.030022670       7.5       0.910541140
44.580969120       0.029242173
1       7.5       0.910541140       44.580969120       0.029242173       8.5       0.639510474
45.057612150       0.028660454
1       8.5       0.639510474       45.057612150       0.028660454       9.5       0.436978864
45.479075600       0.028233600
1       9.5       0.436978864       45.479075600       0.028233600       10.5       0.296275856
45.855057060       0.027929764
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1       10.5       0.296275856       45.855057060       0.027929764       11.5       0.210107251
46.192954270       0.027725179
1       11.5       0.210107251       46.192954270       0.027725179       12.5       0.171147024
46.498534380       0.027601686
1       12.5       0.171147024       46.498534380       0.027601686       13.5       0.172393886
46.776376840       0.027545148
1       13.5       0.172393886       46.776376840       0.027545148       14.5       0.207371541
47.030175990       0.027544382
1       14.5       0.207371541       47.030175990       0.027544382       15.5       0.270226126
47.262953300       0.027590417
1       15.5       0.270226126       47.262953300       0.027590417       16.5       0.355757274
47.477209890       0.027675980
1       16.5       0.355757274       47.477209890       0.027675980       17.5       0.459407627
47.675038330       0.027795115
1       17.5       0.459407627       47.675038330       0.027795115       18.5       0.577227615
47.858206060       0.027942900
1       18.5       0.577227615       47.858206060       0.027942900       19.5       0.705826778
48.028218670       0.028115241
1       19.5       0.705826778       48.028218670       0.028115241       20.5       0.842319055
48.186368640       0.028308707
1       20.5       0.842319055       48.186368640       0.028308707       21.5       0.984266833
48.333773200       0.028520407
1       21.5       0.984266833       48.333773200       0.028520407       22.5       1.129626698
48.471404320       0.028747896
1       22.5       1.129626698       48.471404320       0.028747896       23.5       1.276691223
48.600112230       0.028989089
1       23.5       1.276691223       48.600112230       0.028989089       24.5       1.424084853
48.720646210       0.029242207
1       24.5       1.424084853       48.720646210       0.029242207       25.5       1.570621291
48.833666290       0.029505723
1       25.5       1.570621291       48.833666290       0.029505723       26.5       1.715393998
48.939760890       0.029778323
1       26.5       1.715393998       48.939760890       0.029778323       27.5       1.857652984
49.039453830       0.030058871
1       27.5       1.857652984       49.039453830       0.030058871       28.5       1.996810563
49.133214320       0.030346384
1       28.5       1.996810563       49.133214320       0.030346384       29.5       2.132411346
49.221464090       0.030640006
1       29.5       2.132411346       49.221464090       0.030640006       30.5       2.264111009
49.304583480       0.030938992
1       30.5       2.264111009       49.304583480       0.030938992       31.5       2.391658052
49.382916580       0.031242693
1       31.5       2.391658052       49.382916580       0.031242693       32.5       2.514878222
49.456775690       0.031550537
1       32.5       2.514878222       49.456775690       0.031550537       33.5       2.633661226
49.526445000       0.031862026
1       33.5       2.633661226       49.526445000       0.031862026       34.5       2.747949445
49.592183850       0.032176720
1       34.5       2.747949445       49.592183850       0.032176720       35.5       2.857728375
49.654229520       0.032494231
1       35.5       2.857728375       49.654229520       0.032494231       36.5       2.967507305
49.716275190       0.032811742
2       0.0       -1.298749689       34.711561700       0.046905108       0.5       -1.440271514
36.034538760       0.042999604
2       0.5       -1.440271514       36.034538760       0.042999604       1.5       -1.581016348
37.976719870       0.038067862
2       1.5       -1.581016348       37.976719870       0.038067862       2.5       -1.593136386
39.380126300       0.035079612
2       2.5       -1.593136386       39.380126300       0.035079612       3.5       -1.521492427
40.467737330       0.033096443
2       3.5       -1.521492427       40.467737330       0.033096443       4.5       -1.394565915
41.348410080       0.031709630
2       4.5       -1.394565915       41.348410080       0.031709630       5.5       -1.231713389
42.083350700       0.030709039
2       5.5       -1.231713389       42.083350700       0.030709039       6.5       -1.046582628
42.710336030       0.029974303
2       6.5       -1.046582628       42.710336030       0.029974303       7.5       -0.848932692
43.254288820       0.029430992
2       7.5       -0.848932692       43.254288820       0.029430992       8.5       -0.645779124
43.732496460       0.029030379
2       8.5       -0.645779124       43.732496460       0.029030379       9.5       -0.442165412
44.157428370       0.028739112
2       9.5       -0.442165412       44.157428370       0.028739112       10.5       -0.241632060
44.538367940       0.028533537
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2       10.5       -0.241632060       44.538367940       0.028533537       11.5       -0.046673786
44.882405620       0.028396382
2       11.5       -0.046673786       44.882405620       0.028396382       12.5       0.141031094
45.195076510       0.028314722
2       12.5       0.141031094       45.195076510       0.028314722       13.5       0.320403169
45.480781470       0.028278682
2       13.5       0.320403169       45.480781470       0.028278682       14.5       0.490807133
45.743075270       0.028280585
2       14.5       0.490807133       45.743075270       0.028280585       15.5       0.651935050
45.984869010       0.028314363
2       15.5       0.651935050       45.984869010       0.028314363       16.5       0.803718086
46.208575580       0.028375159
2       16.5       0.803718086       46.208575580       0.028375159       17.5       0.946259679
46.416216350       0.028459033
2       17.5       0.946259679       46.416216350       0.028459033       18.5       1.079784984
46.609500840       0.028562759
2       18.5       1.079784984       46.609500840       0.028562759       19.5       1.204602687
46.789887220       0.028683666
2       19.5       1.204602687       46.789887220       0.028683666       20.5       1.321076285
46.958628810       0.028819525
2       20.5       1.321076285       46.958628810       0.028819525       21.5       1.429602576
47.116810390       0.028968459
2       21.5       1.429602576       47.116810390       0.028968459       22.5       1.530595677
47.265376820       0.029128879
2       22.5       1.530595677       47.265376820       0.029128879       23.5       1.624475262
47.405155850       0.029299426
2       23.5       1.624475262       47.405155850       0.029299426       24.5       1.711658030
47.536876490       0.029478937
2       24.5       1.711658030       47.536876490       0.029478937       25.5       1.792551616
47.661183960       0.029666406
2       25.5       1.792551616       47.661183960       0.029666406       26.5       1.867550375
47.778651860       0.029860960
2       26.5       1.867550375       47.778651860       0.029860960       27.5       1.937032580
47.889792300       0.030061839
2       27.5       1.937032580       47.889792300       0.030061839       28.5       2.001358669
47.995064220       0.030268375
2       28.5       2.001358669       47.995064220       0.030268375       29.5       2.060870301
48.094880480       0.030479985
2       29.5       2.060870301       48.094880480       0.030479985       30.5       2.115889982
48.189613650       0.030696150
2       30.5       2.115889982       48.189613650       0.030696150       31.5       2.166721130
48.279601100       0.030916413
2       31.5       2.166721130       48.279601100       0.030916413       32.5       2.213648440
48.365149170       0.031140368
2       32.5       2.213648440       48.365149170       0.031140368       33.5       2.256943216
48.446537030       0.031367651
2       33.5       2.256943216       48.446537030       0.031367651       34.5       2.296844024
48.524018940       0.031597939
2       34.5       2.296844024       48.524018940       0.031597939       35.5       2.333589434
48.597828280       0.031830942
2       35.5       2.333589434       48.597828280       0.031830942       36.5       2.370334844
48.671637620       0.032063945
;

DATA WTFLG;  **DATA FILE FOR WEIGHT-FOR-LENGTH;
INFILE CARDS PAD;
INPUT SEX _LG1 _LWLG1 _MWLG1 _SWLG1 _LG2 _LWLG2 _MWLG2 _SWLG2;
CARDS;
1       45.0       1.449036890       2.289757735       0.149236691       45.5       1.317941650
2.386172190       0.144790131
1       45.5       1.317941650       2.386172190       0.144790131       46.5       1.041730589
2.587097922       0.136547200
1       46.5       1.041730589       2.587097922       0.136547200       47.5       0.756615683
2.797952593       0.129156077
1       47.5       0.756615683       2.797952593       0.129156077       48.5       0.472617587
3.017679791       0.122589498
1       48.5       0.472617587       3.017679791       0.122589498       49.5       0.197455933
3.245225583       0.116802688
1       49.5       0.197455933       3.245225583       0.116802688       50.5       -0.063272822
3.479567767       0.111734963
1       50.5       -0.063272822       3.479567767       0.111734963       51.5       -0.305663778
3.719739648       0.107316407
1       51.5       -0.305663778       3.719739648       0.107316407       52.5       -0.527210764
3.964838222       0.103474530
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1       52.5       -0.527210764       3.964838222       0.103474530       53.5       -0.726356263
4.214033476       0.100139369
1       53.5       -0.726356263       4.214033476       0.100139369       54.5       -0.902380499
4.466562625       0.097246097
1       54.5       -0.902380499       4.466562625       0.097246097       55.5       -1.055126826
4.721730669       0.094736440
1       55.5       -1.055126826       4.721730669       0.094736440       56.5       -1.184933443
4.978903744       0.092558749
1       56.5       -1.184933443       4.978903744       0.092558749       57.5       -1.292531809
5.237504753       0.090667650
1       57.5       -1.292531809       5.237504753       0.090667650       58.5       -1.378973111
5.497008915       0.089023438
1       58.5       -1.378973111       5.497008915       0.089023438       59.5       -1.445563111
5.756939907       0.087591418
1       59.5       -1.445563111       5.756939907       0.087591418       60.5       -1.493801210
6.016866693       0.086341291
1       60.5       -1.493801210       6.016866693       0.086341291       61.5       -1.525332827
6.276400575       0.085246598
1       61.5       -1.525332827       6.276400575       0.085246598       62.5       -1.541839648
6.535195541       0.084284401
1       62.5       -1.541839648       6.535195541       0.084284401       63.5       -1.545098045
6.792942366       0.083434649
1       63.5       -1.545098045       6.792942366       0.083434649       64.5       -1.536863318
7.049370425       0.082680040
1       64.5       -1.536863318       7.049370425       0.082680040       65.5       -1.518786093
7.304248994       0.082005843
1       65.5       -1.518786093       7.304248994       0.082005843       66.5       -1.492490290
7.557381995       0.081399411
1       66.5       -1.492490290       7.557381995       0.081399411       67.5       -1.459487925
7.808610136       0.080850107
1       67.5       -1.459487925       7.808610136       0.080850107       68.5       -1.421167427
8.057810266       0.080349080
1       68.5       -1.421167427       8.057810266       0.080349080       69.5       -1.378835366
8.304892397       0.079888977
1       69.5       -1.378835366       8.304892397       0.079888977       70.5       -1.333634661
8.549802669       0.079463915
1       70.5       -1.333634661       8.549802669       0.079463915       71.5       -1.286605147
8.792519752       0.079069193
1       71.5       -1.286605147       8.792519752       0.079069193       72.5       -1.238665517
9.033054944       0.078701180
1       72.5       -1.238665517       9.033054944       0.078701180       73.5       -1.190667160
9.271448675       0.078357096
1       73.5       -1.190667160       9.271448675       0.078357096       74.5       -1.143316882
9.507773605       0.078035021
1       74.5       -1.143316882       9.507773605       0.078035021       75.5       -1.097263403
9.742129356       0.077733651
1       75.5       -1.097263403       9.742129356       0.077733651       76.5       -1.053083813
9.974642178       0.077452242
1       76.5       -1.053083813       9.974642178       0.077452242       77.5       -1.011294273
10.205463310       0.077190512
1       77.5       -1.011294273       10.205463310       0.077190512       78.5       -0.972360231
10.434767230       0.076948562
1       78.5       -0.972360231       10.434767230       0.076948562       79.5       -0.936705887
10.662749930       0.076726804
1       79.5       -0.936705887       10.662749930       0.076726804       80.5       -0.904722736
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2       93.5      -1.732305592      13.796467930      0.080010179       94.5      -1.869440665
14.036231650      0.080591346
2       94.5      -1.869440665      14.036231650      0.080591346       95.5      -2.004558693
14.279982320      0.081236502
2       95.5      -2.004558693      14.279982320      0.081236502       96.5      -2.134764169
14.528165800      0.081942620
2       96.5      -2.134764169      14.528165800      0.081942620       97.5      -2.257524917
14.781221960      0.082707038
2       97.5      -2.257524917      14.781221960      0.082707038       98.5      -2.370762249
15.039577460      0.083527227
2       98.5      -2.370762249      15.039577460      0.083527227       99.5      -2.472965302
15.303633030      0.084400264
2       99.5      -2.472965302      15.303633030      0.084400264      100.5      -2.563140425
15.573763400      0.085322654
2      100.5      -2.563140425      15.573763400      0.085322654      101.5      -2.640873937
15.850304300      0.086289668
2      101.5      -2.640873937      15.850304300      0.086289668      102.5      -2.706178899
16.133559300      0.087295416
2      102.5      -2.706178899      16.133559300      0.087295416      103.5      -2.759500412
16.423790370      0.088332358
```

```
2      103.5      -2.759500412      16.423790370      0.088332358      104.5      -2.801578893
16.721223080      0.089391426
2      104.5      -2.801578893      16.721223080      0.089391426      105.5      -2.833376069
17.026046170      0.090461996
2      105.5      -2.833376069      17.026046170      0.090461996      106.5      -2.855987198
17.338413690      0.091532010
2      106.5      -2.855987198      17.338413690      0.091532010      107.5      -2.870584724
17.658444860      0.092588053
2      107.5      -2.870584724      17.658444860      0.092588053      108.5      -2.878341197
17.986227850      0.093615622
2      108.5      -2.878341197      17.986227850      0.093615622      109.5      -2.880404823
18.321818290      0.094599184
2      109.5      -2.880404823      18.321818290      0.094599184      110.5      -2.877853767
18.665241940      0.095522442
2      110.5      -2.877853767      18.665241940      0.095522442      111.5      -2.871676584
19.016494570      0.096368448
2      111.5      -2.871676584      19.016494570      0.096368448      112.5      -2.862774660
19.375539570      0.097119646
2      112.5      -2.862774660      19.375539570      0.097119646      113.5      -2.851915004
19.742313480      0.097758211
2      113.5      -2.851915004      19.742313480      0.097758211      114.5      -2.839760032
20.116720140      0.098265916
2      114.5      -2.839760032      20.116720140      0.098265916      115.5      -2.826824189
20.498636300      0.098624434
2      115.5      -2.826824189      20.498636300      0.098624434      116.5      -2.813480089
20.887909140      0.098815290
2      116.5      -2.813480089      20.887909140      0.098815290      117.5      -2.799924586
21.284359650      0.098820000
2      117.5      -2.799924586      21.284359650      0.098820000      118.5      -2.786142221
21.687785400      0.098620143
2      118.5      -2.786142221      21.687785400      0.098620143      119.5      -2.771843402
22.097965710      0.098197431
2      119.5      -2.771843402      22.097965710      0.098197431      120.5      -2.756365595
22.514669770      0.097533789
2      120.5      -2.756365595      22.514669770      0.097533789      121.5      -2.738514883
22.937669710      0.096611430
;

DATA LGFAGE; SET LGFAGE;
 _AGECAT=_AGEMOS1;
 PROC SORT DATA=LGFAGE; BY SEX _AGECAT;

DATA HTFAGE; SET HTFAGE;
 _AGECAT=_AGEMOS1;
 PROC SORT DATA=HTFAGE; BY SEX _AGECAT;

DATA WTFAGE; SET WTFAGE;
 _AGECAT=_AGEMOS1;
 PROC SORT DATA=WTFAGE; BY SEX _AGECAT;

DATA BMIFAGE; SET BMIFAGE;
 _AGECAT=_AGEMOS1;
 PROC SORT DATA=BMIFAGE; BY SEX _AGECAT;

DATA HCFAGE; SET HCFAGE;
 _AGECAT=_AGEMOS1;
 PROC SORT DATA=HCFAGE; BY SEX _AGECAT;

DATA REFFAGE; MERGE LGFAGE HTFAGE WTFAGE BMIFAGE HCFAGE; BY SEX _AGECAT;

DATA REFFLG; SET WTFLG;
 _HTCAT=_LG1;
 PROC SORT DATA=REFFLG; BY SEX _HTCAT;

DATA REFFHT; SET WTFHT;
 _HTCAT=_HT1;
 PROC SORT DATA=REFFHT; BY SEX _HTCAT;


DATA FINFAGE
       ;
     MERGE _INDATA1 (IN=A) REFFAGE (IN=B); BY SEX _AGECAT;
 IF A;
```

```
IF (LENGTH LT 20 OR LENGTH GT 300) THEN DO;
  _LLG=.; _MLG=.; _SLG=.;
  LGZ=.; LGPCT=.;              *FOR MISSING VALUES;
END;
ELSE DO;
_LLG = ((AGEMOS-_AGEMOS1)*(_LLG2-_LLG1)/(_AGEMOS2-_AGEMOS1)+_LLG1);
_MLG = ((AGEMOS-_AGEMOS1)*(_MLG2-_MLG1)/(_AGEMOS2-_AGEMOS1)+_MLG1);
_SLG = ((AGEMOS-_AGEMOS1)*(_SLG2-_SLG1)/(_AGEMOS2-_AGEMOS1)+_SLG1);
  IF (_LLG GT -0.01 AND _LLG LT 0.01) THEN LGZ=LOG(LENGTH/_MLG)/_SLG;
    ELSE LGZ=((LENGTH/_MLG)**_LLG-1)/(_LLG*_SLG);
  LGPCT=PROBNORM(LGZ)*100;
END;

IF (STATURE LT 20 OR STATURE GT 300) THEN DO;
  _LHT=.; _MHT=.; _SHT=.;
  STZ=.; STPCT=.;              *FOR MISSING VALUES;
END;
ELSE DO;
_LHT = ((AGEMOS-_AGEMOS1)*(_LHT2-_LHT1)/(_AGEMOS2-_AGEMOS1)+_LHT1);
_MHT = ((AGEMOS-_AGEMOS1)*(_MHT2-_MHT1)/(_AGEMOS2-_AGEMOS1)+_MHT1);
_SHT = ((AGEMOS-_AGEMOS1)*(_SHT2-_SHT1)/(_AGEMOS2-_AGEMOS1)+_SHT1);
  IF (_LHT GT -0.01 AND _LHT LT 0.01) THEN STZ=LOG(STATURE/_MHT)/_SHT;
    ELSE STZ=((STATURE/_MHT)**_LHT-1)/(_LHT*_SHT);
  STPCT=PROBNORM(STZ)*100;
END;

IF (AGEMOS LT 0 OR AGEMOS GT 240) OR
   (WEIGHT LT 0.5 OR WEIGHT GT 400) THEN DO;
  _LWT=.; _MWT=.; _SWT=.;
  WAZ=.; WTPCT=.;              *FOR MISSING VALUES;
END;
ELSE DO;
_LWT = ((AGEMOS-_AGEMOS1)*(_LWT2-_LWT1)/(_AGEMOS2-_AGEMOS1)+_LWT1);
_MWT = ((AGEMOS-_AGEMOS1)*(_MWT2-_MWT1)/(_AGEMOS2-_AGEMOS1)+_MWT1);
_SWT = ((AGEMOS-_AGEMOS1)*(_SWT2-_SWT1)/(_AGEMOS2-_AGEMOS1)+_SWT1);
  IF (_LWT GT -0.01 AND _LWT LT 0.01) THEN WAZ=LOG(WEIGHT/_MWT)/_SWT;
    ELSE WAZ=((WEIGHT/_MWT)**_LWT-1)/(_LWT*_SWT);
  WTPCT=PROBNORM(WAZ)*100;
END;

IF (AGEMOS LT 24 OR AGEMOS GT 240) OR
   (BMI LT 2 OR BMI GT 80) THEN DO;
  _LBMI=.; _MBMI=.; _SBMI=.;
  BMIZ=.; BMIPCT=.;              *FOR MISSING VALUES;
END;
ELSE DO;
_LBMI = ((AGEMOS-_AGEMOS1)*(_LBMI2-_LBMI1)/(_AGEMOS2-_AGEMOS1)+_LBMI1);
_MBMI = ((AGEMOS-_AGEMOS1)*(_MBMI2-_MBMI1)/(_AGEMOS2-_AGEMOS1)+_MBMI1);
_SBMI = ((AGEMOS-_AGEMOS1)*(_SBMI2-_SBMI1)/(_AGEMOS2-_AGEMOS1)+_SBMI1);
  IF (_LBMI GT -0.01 AND _LBMI LT 0.01) THEN BMIZ=LOG(BMI/_MBMI)/_SBMI;
    ELSE BMIZ=((BMI/_MBMI)**_LBMI-1)/(_LBMI*_SBMI);
  BMIPCT=ROUND(PROBNORM(BMIZ)*100,1);

END;

IF (AGEMOS LT 0 OR AGEMOS GT 36) OR
   (HEADCIR LT 0.5 OR HEADCIR GT 100) THEN DO;
  _LHC=.; _MHC=.; _SHC=.;
  HCZ=.; HCPCT=.;              *FOR MISSING VALUES;
END;
ELSE DO;
_LHC = ((AGEMOS-_AGEMOS1)*(_LHC2-_LHC1)/(_AGEMOS2-_AGEMOS1)+_LHC1);
_MHC = ((AGEMOS-_AGEMOS1)*(_MHC2-_MHC1)/(_AGEMOS2-_AGEMOS1)+_MHC1);
_SHC = ((AGEMOS-_AGEMOS1)*(_SHC2-_SHC1)/(_AGEMOS2-_AGEMOS1)+_SHC1);
  IF (_LHC GT -0.01 AND _LHC LT 0.01) THEN HCZ=LOG(HEADCIR/_MHC)/_SHC;
    ELSE HCZ=((HEADCIR/_MHC)**_LHC-1)/(_LHC*_SHC);
  HCPCT=PROBNORM(HCZ)*100;
END;

DROP _LLG _MLG _SLG _LLG1 _LLG2 _MLG1 _MLG2 _SLG1 _SLG2
     _LHT _MHT _SHT _LWT _MWT _SWT _LBMI _MBMI _SBMI _LHC _MHC _SHC
     _LHT1 _LHT2 _MHT1 _MHT2 _SHT1 _SHT2
     _LWT1 _LWT2 _MWT1 _MWT2 _SWT1 _SWT2
     _LBMI1 _LBMI2 _MBMI1 _MBMI2 _SBMI1 _SBMI2
```

```
     _LHC1 _LHC2 _MHC1 _MHC2 _SHC1 _SHC2 _AGEMOS1 _AGEMOS2;

PROC SORT DATA=FINFAGE; BY SEX _AGECAT _ID;


DATA FINFLG; MERGE _INDATA2 (IN=A) REFFLG (IN=B); BY SEX _HTCAT;
 IF A;
IF (LENGTH LT 45 OR LENGTH GT 103.5) OR
   (WEIGHT LT 0.5 OR WEIGHT GT 400) THEN DO;
 _LWLT=.; _MWLT=.; _SWLT=.;
 WLZ=.; WLPCT=.;              *FOR MISSING VALUES;
END;
ELSE DO;
_LWLT = ((LENGTH-_LG1)*(_LWLG2-_LWLG1)/(_LG2-_LG1)+_LWLG1);
_MWLT = ((LENGTH-_LG1)*(_MWLG2-_MWLG1)/(_LG2-_LG1)+_MWLG1);
_SWLT = ((LENGTH-_LG1)*(_SWLG2-_SWLG1)/(_LG2-_LG1)+_SWLG1);
  IF (_LWLT GT -0.01 AND _LWLT LT 0.01) THEN WLZ=LOG(WEIGHT/_MWLT)/_SWLT;
    ELSE WLZ=((WEIGHT/_MWLT)**_LWLT-1)/(_LWLT*_SWLT);
  WLPCT=PROBNORM(WLZ)*100;
END;
DROP _LG1 _LG2 _HTCAT _LWLT _MWLT _SWLT _LWLG1 _LWLG2 _MWLG1 _MWLG2 _SWLG1 _SWLG2;
PROC SORT DATA=FINFLG; BY SEX _AGECAT _ID;


DATA FINFHT; MERGE _INDATA3 (IN=A) REFFHT (IN=B); BY SEX _HTCAT;
 IF A;
IF (STATURE LT 77 OR STATURE GT 121.5) OR
   (WEIGHT LT 0.5 OR WEIGHT GT 400) THEN DO;
 _LWHT=.; _MWHT=.; _SWHT=.;
 WSZ=.; WSPCT=.;              *FOR MISSING VALUES;
END;
ELSE DO;
_LWHT = ((STATURE-_HT1)*(_LWHT2-_LWHT1)/(_HT2-_HT1)+_LWHT1);
_MWHT = ((STATURE-_HT1)*(_MWHT2-_MWHT1)/(_HT2-_HT1)+_MWHT1);
_SWHT = ((STATURE-_HT1)*(_SWHT2-_SWHT1)/(_HT2-_HT1)+_SWHT1);
  IF (_LWHT GT -0.01 AND _LWHT LT 0.01) THEN WSZ=LOG(WEIGHT/_MWHT)/_SWHT;
    ELSE WSZ=((WEIGHT/_MWHT)**_LWHT-1)/(_LWHT*_SWHT);
  WSPCT=PROBNORM(WSZ)*100;
END;
DROP _HT1 _HT2 _HTCAT _LWHT _MWHT _SWHT _LWHT1 _LWHT2 _MWHT1 _MWHT2 _SWHT1 _SWHT2;
PROC SORT DATA=FINFHT; BY SEX _AGECAT _ID;

DATA _INDATA; MERGE FINFAGE FINFLG FINFHT; BY SEX _AGECAT _ID;
 IF RECUMBNT=1 THEN DO;
   HAZ=LGZ; HTPCT=LGPCT;
   WHZ=WLZ; WHPCT=WLPCT;
 END;
 ELSE IF RECUMBNT=0 THEN DO;
   HAZ=STZ; HTPCT=STPCT;
   WHZ=WSZ; WHPCT=WSPCT;
 END;
 ELSE DO;
  HAZ=.; HTPCT=.;
  WHZ=.; WHPCT=.;
 END;

DROP _AGECAT _ID LGZ LGPCT STZ STPCT WLZ WLPCT WSZ WSPCT LENGTH STATURE;

RUN;
```

E.7 CONSTRUCT\CONVARC.SAS - CONSTRUCT VARIABLES FOR ANALYSIS.

```
*********************************************************************************
* PROGRAM:   CONVARC.SAS
* WRITTEN:   5/23/2000 BY NATALIE JUSTH
* UPDATED:   8/21/2001 BY NATALIE JUSTH FOR 2000 SURVEY
* UPDATED:   10/4/2002 BY NATALIE JUSTH FOR 2002 SURVEY
* UPDATED:   8/29/2003 BY NATALIE JUSTH FOR 2003 SURVEY
* UPDATED:   10/20/2004 BY LUCY LU FOR 2004 SURVEY. ADD CODE TO CREATE
*            XBMI AND XBMICAT
* UPDATED:   12/06/2004 BY JACQUELINE  AGUFA FOR 2004 SURVEY. UPDATED CODE TO CREATE
*            XBMI AND XBMICAT
* UPDATE:    12/27/05 BY LUCY LU FOR 2005 CHILD SURVEY
* UPDATE:    08/02/06 BY LUCY LU FOR 2006 CHILD SURVEY
* UPDATE:    11/26/07 BY LUCY LU FOR 2007 CHILD SURVEY
*
* PURPOSE:   TO CREATE INDEPENDENT VARIABLES: XENRLLMT, XENR_PCM, XINS_COV,
*            XBNFGRP
*            1 INDEPENDENT VARIABLE ALREADY CREATED FROM DEERS-BFGROUPP
*            TO CREATE MORE DEPENDENT VARIABLES: KBGPRB1,
*            KBGPRB2, KMILWAT1, KCIVWAT1, KMILOFFC, KCIVOFFC, KMILOP,
*            KCIVOP, KCIVINS,
* INPUT:     ..\..\DATA\CFINAL\SELECTC.sas7bdat
* OUTPUT:    ..\..\DATA\CFINAL\CONVARC.sas7bdat

*********************************************************************************
*;

LIBNAME IN      '..\..\DATA\CFINAL';
LIBNAME LIBRARY '..\..\DATA\CFINAL\FMTLIB';
OPTIONS PS=79 LS=132 ERRORS=2;
TITLE1 '2010 Health Care Survey of DoD Beneficiaries Study - Child';
TITLE2 'CREATE CONSTRUCTED & OUTCOME MEASURE VARIABLES';


*********************************************************************************
* Calculate XBMI- Body Mass Index and XBMICAT- Body Mass Index Category.
* Define 5th, 85th, 95th percentile based on CDC 2000 Growth Chart for age 2-20.
* The Age in years is created at the half year point for the entire year to be
* consistent with the definition of month per CDC.
* 5th, 85th, 95th percentile data is downloaded at CDC website:
* http://www.cdc.gov/nchs/about/major/nhanes/growthcharts/datafiles.htm
* Lucy Lu 10/21/04
****Changed to use output from creatbmi.sas Jacqueline Agufa 12/06/04
*********************************************************************************;


DATA BMI(RENAME=(BMIPCT=XBMIPCT OVER=XBMICAT));
  SET IN.CREATBMI;

  FORMAT _ALL_;

RUN;

PROC SORT DATA=BMI; BY MPRID; RUN;
PROC SORT DATA=IN.SELECTC OUT=SELECTC; BY MPRID; RUN;


DATA IN.CONVARC (KEEP = XENRLLMT XENR_PCM XINS_COV /*REGSMPL*/ XTNEXREG
                        ENBGSMPL XBNFGRP XBMIPCT XBMICAT
                        /*KMILWAT1 KCIVWAT1*/
                        /* KMILOFFC KCIVOFFC KBGPRB1 KBGPRB2  jma 10/06/09 */
                        KMILOP KCIVOP
                        MPRID KCIVINS EXCLUDE)
       CONVARC;
    MERGE BMI(IN=A) SELECTC(IN=B);


    BY MPRID;

    IF B;


    LENGTH
```

```
          XBMIPCT   4.
          XBMICAT   3.
          XTNEXREG  3.
          ;

  LABEL
       XENRLLMT    =  "Enrollment in TRICARE Prime"
       XENR_PCM    =  "Enrollment by PCM type"
       XINS_COV    =  "Insurance Coverage"
       /*REGSMPL     =  "Health Care regions " */
       XBNFGRP     =  "Constructed Beneficiary Group"
       /*KMILWAT1    =  "Wait <=4 wks for well patient visit-Mil"
       KCIVWAT1    =  "Wait <=4 wks for well patient visit-Civ"*/
/*
       KMILOFFC    =  "Office wait of >15 min-Mil"
       KCIVOFFC    =  "Office wait of >15 min-Civ"
       KBGPRB1     =  "Big problem getting referrals to spclst"
       KBGPRB2     =  "Big problem getting necessary care"
*/
       KMILOP      =  "Outpatient visits to Military facility"
       KCIVOP      =  "Outpatient visits to Civilian facility"
       KCIVINS     =  "Beneficiary covered by civilian insurance"
       XBMIPCT     =  "Body Mass Index Child Percentile"
       XBMICAT     =  "Body Mass Index Category"
       XTNEXREG    =  "TNEX Region"
       ;


  FORMAT
        XENRLLMT       ENROLL.
        XENR_PCM       PCM.
        XINS_COV       INSURE.
       /* REGSMPL        CREG. */
        XBNFGRP        XBGC_S.
       /*KMILWAT1       HAYNN.
        KCIVWAT1       HAYNN.*/
/*
        KMILOFFC       HAYNN.
        KCIVOFFC       HAYNN.
        KBGPRB1        HAYNN.
        KBGPRB2        HAYNN.
*/
        KMILOP         CTIMES7_.
        KCIVOP         CTIMES7_.
        KCIVINS        HAYNN2_.
        XBMICAT        BMICAT.
        XTNEXREG       TNEX.
        ;


/* CREATE INDEPENDENT VARIABLES */


/* XENRLLMT--ENROLLMENT STATUS */
 IF ENBGSMPL IN ('01','02','03','05','06') THEN XENRLLMT = 1; /*   Enrolled  */
 ELSE IF ENBGSMPL IN ('04','07') THEN XENRLLMT = 2;           /*   Not Enrolled */

/* XENR_PCM--ENROLLMENT BY PCM TYPE */
   IF ENBGSMPL IN ('01','03','06') THEN XENR_PCM=1;            /* 1=Enrolled  - mil PCM */
      ELSE IF ENBGSMPL IN ('02','05') THEN XENR_PCM=2;       /* 2=Enrolled  - civ PCM */
      ELSE IF ENBGSMPL IN ('04','07') THEN XENR_PCM=3;       /* 3=Not Enrolled        */

/* XINS_COV--INSURANCE COVERAGE */
  IF C10003 = 1 THEN XINS_COV = 1;                           /* Prime */
  ELSE IF C10003 = 3  THEN XINS_COV = 2;                     /* Standard/Extra */
  ELSE IF C10003 IN (5,6,7,8,9,10,12) THEN XINS_COV = 3;       /* Other Insurance */   /* MER
7/9/10 - added SCHIP */
  ELSE IF C10003 = 11 THEN XINS_COV = 4;                     /* TRICARE Reserve Select */


/* CREATE XTNEXREG. JMA 1/17/06*/
/*  IF TNEXREG IN ('N') THEN XTNEXREG=1;
  ELSE IF TNEXREG IN ('S') THEN XTNEXREG=2;
```

```
  ELSE IF TNEXREG IN ('W') THEN XTNEXREG=3;
  ELSE IF TNEXREG IN ('O') THEN XTNEXREG=4;
*/
  IF DHSRGN IN ('01','02','05')                          THEN XTNEXREG=1;
  ELSE IF DHSRGN IN ('03','04','06')                     THEN XTNEXREG=2;
  ELSE IF DHSRGN IN ('07','08','09','10','11','12','AK') THEN XTNEXREG=3;
  ELSE IF DHSRGN IN ('13','14','15')                     THEN XTNEXREG=4;
  ELSE IF DHSRGN IN ('16')                               THEN XTNEXREG=.;


/* XBNFGRP-Beneficiary Group that excludes those 65 and over-Active Duty
          and Family Members of Active Duty */
   XBNFGRP=BGCSMPL;

/* KMILOP--OUTPATIENT VISITS TO MILITARY FACILITY
   KCIVOP--OUTPATIENT VISITS TO CIVILIAN FACILITY */
   IF C10005 = 1 THEN KMILOP=C10010;
      ELSE IF (C10005=. AND C10010=.) THEN KMILOP=.;
      ELSE KMILOP = 0 ;
   IF C10005 = 2 THEN KCIVOP=C10010;
      ELSE IF (C10005=. AND C10010=.) THEN KCIVOP=.;
      ELSE KCIVOP = 0 ;


/* KCIVINS--IS BENEFICIARY COVERED BY CIVILIAN INSURANCE */
   IF (C10002C=1 OR C10002D=1 OR C10002E=1 OR C10002G=1 OR C10002L=1) THEN KCIVINS=1;  /* YES
*/
    ELSE KCIVINS=2;                                          /* NO   */

RUN;


/* CHECK 2010 VARIABLES */
PROC FREQ DATA=CONVARC;
 TABLES XENRLLMT XENR_PCM XINS_COV XBNFGRP TNEXREG /*REGSMPL */
        DHSRGN XTNEXREG /*KBGPRB1 KBGPRB2 */
        /*KMILWAT1 KCIVWAT1*/
        /*KMILOFFC KCIVOFFC*/
        KMILOP KCIVOP
        KCIVINS
        FIELDAGE XBMIPCT XBMICAT
        / MISSING LIST;
 TITLE3 'ONE WAY FREQUENCIES 2010 CONSTRUCTED VARIABLES';
 RUN;


   PROC FREQ DATA=CONVARC;
    TABLES ENBGSMPL*XENRLLMT
           ENBGSMPL*XENR_PCM
           XENRLLMT*C10003*XINS_COV
           /*REGSMPL*/
           BGCSMPL*XBNFGRP
           C10005*C10010 *KMILOP
           C10005*C10010 *KCIVOP
           C10002C*C10002D*C10002E*C10002G*KCIVINS
           C10087F*C10087I*C10088*XBMICAT
           C10087F*C10087I*C10088*EXCLUDE

           / MISSING LIST;
     TITLE3 'CROSSTABS ON ALL NEW VARIABLES';
            RUN;

   PROC FREQ DATA=CONVARC;
      TABLES    EXCLUDE C10087F C10087I C10088

           / MISSING LIST;
      WHERE fnstatus=11;
      TITLE3 'respondents-CROSSTABS ON ALL NEW VARIABLES';
            RUN;

   PROC FREQ DATA=CONVARC;
      tables /*TNEXREG*XTNEXREG*/

             DHSRGN*XTNEXREG
```

```
           / MISSING LIST;
      format _all_;
   run;


 PROC FREQ DATA=CONVARC;
      tables  C10087F*C10087I*C10088*XBMICAT
           / MISSPRINT LIST;
     WHERE XBMICAT<0 ;
TITLE 'CHECK MISSING XBMICAT';
   run;

PROC CONTENTS DATA =IN.CONVARC;
RUN;
```

E.8 CONSTRUCT\MERGEC.SAS - MERGE CONSTRUCTED VARIABLES ONTO DATA FILE.

```
*******************************************************************************
* PROGRAM:   MERGEC.SAS
* WRITTEN:   5/23/00 BY NATALIE JUSTH
* UPDATED:   8/23/01 BY NATALIE JUSTH FOR 2000 SURVEY
* UPDATED:   10/4/02 BY NATALIE JUSTH FOR 2002 SURVEY
* UPDATED:   8/29/03 BY NATALIE JUSTH FOR 2003 SURVEY
* UPDATED:   10/22/04 BY LUCY LU FOR 2004 SURVEY
*            11/10/2004 BY LUCY LU, DROP VARIABLE STIELIG.
* UPDATED:   12/27/06 BY LUCY LU FOR Q3 2005 SURVEY
* UPDATE:    2/21/05 BY JACQUELINE AGUFA SET "EXCLUDED" CASES FROM CREATBMI TO
*             "Out of Range"
* UPDATED:   08/02/06 BY LUCY LU FOR Q3 2006 SURVEY
* UPDATED:   11/26/07 BY  FOR Q4 2007 SURVEY
*
* 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)  NRC variables
*                           6)  recoded questionnaire responses
*                           7)  coding scheme flags
*                           8)  constructed variables
*                           9)  weights  (NOT AVAILABLE FOR PRELIMINARY DATA)
* INPUT:     ..\..\DATA\CFINAL\SELECTC.sas7bdat
*            ..\..\DATA\CFINAL\CONVARC.sas7bdat
* OUTPUT:    ..\..\DATA\CFINAL\MERGEC.sas7bdat
*******************************************************************************
*;

LIBNAME   IN       '..\..\DATA\CFINAL';
LIBNAME   OUT      '..\..\DATA\CFINAL';
LIBNAME   LIBRARY  '..\..\DATA\CFINAL\FMTLIB';
OPTIONS PS=75 LS=111 ERRORS=2 COMPRESS=YES;

PROC SORT DATA=IN.SELECTC OUT=SELECTC;
BY MPRID;
RUN;


PROC SORT DATA=IN.CONVARC OUT=CONVARC;
BY MPRID;
RUN;


DATA MERGEC(DROP=

C10001_O
C10002AO
C10002BO
C10002CO
C10002DO
C10002EO
C10002FO
C10002GO
C10002HO
C10002IO
C10002JO
C10002KO
C10002LO
C10003_O
C10004_O
C10005_O
C10006_O
C10007_O
C10008_O
C10009_O
C10010_O
```

C10011_O
C10012_O
C10013_O
C10014_O
C10015_O
C10016_O
C10017_O
C10018_O
C10019_O
C10020AO
C10020BO
C10020CO
C10020DO
C10020EO
C10021_O
C10022_O
C10023_O
C10024_O
C10025_O
C10026_O
C10027_O
C10028_O
C10029_O
C10030_O
C10031_O
C10032_O
C10033_O
C10034_O
C10035_O
C10036_O
C10037_O
C10038_O
C10039_O
C10040AO
C10040BO
C10040CO
C10040DO
C10040EO
C10040FO
C10040GO
C10040HO
C10041_O
C10042_O
C10043_O
C10044_O
C10045_O
C10046_O
C10047AO
C10047BO
C10047DO
C10047EO
C10047FO
C10047GO
C10047HO
C10047IO
C10047JO
C10047KO
C10047LO
C10047MO
C10047NO
C10047OO
C10048_O
C10049_O
C10050_O
C10051_O
C10052_O
C10053_O
C10054_O
C10055_O
C10056_O
C10057_O
C10058_O
C10059_O
C10060_O

C10061_O
C10062_O
C10063_O
C10064_O
C10065_O
C10066_O
C10067_O
C10068_O
C10069_O
C10070_O
C10071_O
C10072_O
C10073_O
C10074_O
C10075_O
C10076_O
C10077_O
C10078_O
C10079_O
C10080_O
C10081_O
C10082_O
C10083AO
C10083BO
C10083CO
C10083DO
C10083EO
C10083FO
C10083GO
C10084_O
C10085AO
C10085BO
C10085CO
C10085DO
C10086AO
C10086BO
C10086CO
C10086DO
C10086EO
C10086FO
C10086GO
C10086HO
C10086IO
C10087FO
C10087FN
C10087IO
C10087IN
C10088_O
C10088N
C10089_O
C10090_O
C10091_O
C10092_O
C10093_O
C10094_O
C10095_O
C10096_O
C10097_O
C10097N
C10098_O
C10099_O
C10100_O
C10101_O
C10102_O
C10103_O
C10104_O
C10105_O
C10106AO
C10106BO
C10106CO
C10106DO
C10106EO
C10107AO
C10107BO

```
C10107CO
C10107DO
C10107EO
C10108_O
C10109_O
C10110_O
C10111_O
C10112_O
C10113_O

DHSRGN

EXCLUDE
/*E1-E9*/
);
   MERGE SELECTC(in=hcsdb RENAME=(FLAG_FIN=OLDFIN)) CONVARC ;
   BY MPRID;
   if hcsdb;

   FLAG_FIN=PUT(OLDFIN,4.);   *12/27/05 LLU;
   DROP OLDFIN;

   FORMAT
   AGESMPL         AGESMPL.
   BGCSMPL         XBGC_S.
   ENBGSMPL        $ENBGS.
   MRTLSTAT        $MSTATUS.
   RACEETHN        $RACECD.
   PCM             $PCM.
   PNLCATCD        $PNLCAT.
   MBRRELCD        $MBRREL.
   DBENCAT         $BENCAT.
   DMEDELG         $MEDELG.
   DSPONSVC        $SPONSVC.
   MEDTYPE         $MEDTYP.
/*   LEGDDSCD        $DDSFMT. */
   FLAG_FIN        $final.
   CONUS           CONUSMHS.
   PATCAT          $AGGBCAT.
   MISS_1          HAMISS.
   MISS_4          HAMISS.
   MISS_5          HAMISS.
   MISS_6          HAMISS.
   MISS_7          HAMISS.
   MISS_9          HAMISS.
   MISS_TOT        HAMISS.
/*   REGSMPL         CREGSMPL. */
   MPCSMPL         MPCSMPL.
   SVCSMPL         SVCSMPL.
   SEXSMPL         HASEX.
   XSEXA           HASEX.
   ENLSMPL         ENLSMP.
   FNSTATUS        FNSTATS.
   DHSRGN          $DHSRGN.
   WEB             WEB.
   XBMICAT         BMICAT.
   XTNEXREG        TNEX.
   TNEXREG         $TNEXREG.
   TNEXSMPL        TNEX.
   ENRID           $MISSCHR.
   ACV             $ACV2_.
   PNTYPCD  $PNTYPCD.
   XBMIPCT         MISS.
   ;

   LABEL
      ONTIME   = "On time indicator"
      WEB      = "Web/mail-out survey indicator"
      FLAG_FIN = "Final Disposition"
      PCM      = "Primary Manager Code (CIV or MIL)"
      XSEXA    = "Male or Female  - R"
      MIQCNTL  = "Synovate ID"  /* MER 7/9/10 - added MIQCNTL label */
/*      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" ****jma 2008 */
       ;

RUN;

 DATA OUT.MERGEC;


   LENGTH

       MPRID       $ 8         /* ID                */
       MPCSMPL       5         /* sampling variable */
       SVCSMPL       5         /* sampling variable */
       SEXSMPL       5         /* sampling variable */
       AGESMPL       8         /* sampling variable */
       BGCSMPL       8         /* sampling variable */
     /*  REGSMPL       3 */        /* sampling variable */
       ENBGSMPL    $ 2         /* sampling variable */
       STRATUM     $ 3         /* sampling variable */
       TNEXREG     $ 1         /* sampling variable */
       TNEXSMPL      8         /* sampling variable */
       BWT             8          /* sampling variable */  /* MER 7/9/10 - moved BWT to earlier
position */
      /* 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 */

       MRTLSTAT    $ 1         /* DEERS variable    */
       RACEETHN    $ 1         /* DEERS variable    */
       DAGEQY      $ 3         /* DEERS variable    */
       FIELDAGE    $ 3         /* DEERS variable    */
       PCM         $ 3         /* DEERS variable    */
       /*LEGDDSCD    $ 2*/         /* DEERS variable    */
       PNTYPCD     $ 1         /* DEERS variable    */
       PNLCATCD    $ 1         /* DEERS variable    */
       MBRRELCD    $ 1         /* DEERS variable    */
       DBENCAT     $ 3         /* DEERS variable    */
       DMEDELG     $ 1         /* DEERS variable    */
       DSPONSVC    $ 1         /* DEERS variable    */
       MEDTYPE     $ 1         /* DEERS variable    */
       PATCAT      $ 7         /* DEERS variable    */
       ENRID       $ 4         /* DEERS variable    */
       DCATCH      $ 4         /* DEERS variable    */
       /*DHSRGN      $ 2*/         /* DEERS variable    */
       ACV         $ 1         /* DEERS variable    */

       ENLSMPL       8         /* post-stratification variable    */

        C10001        4         /* questionnaire     */
        C10002A       4         /* questionnaire     */
        C10002B       4         /* questionnaire     */
        C10002C       4         /* questionnaire     */
        C10002D       4         /* questionnaire     */
        C10002E       4         /* questionnaire     */
        C10002F       4         /* questionnaire     */
        C10002G       4         /* questionnaire     */
        C10002H       4         /* questionnaire     */
        C10002I       4         /* questionnaire     */
        C10002J       4         /* questionnaire     */
        C10002K       4         /* questionnaire     */
        C10002L       4         /* questionnaire     */
        C10003        4         /* questionnaire     */
        C10004        4         /* questionnaire     */
        C10005        4         /* questionnaire     */
```

```
C10006       4         /* questionnaire     */
C10007       4         /* questionnaire     */
C10008       4         /* questionnaire     */
C10009       4         /* questionnaire     */
C10010       4         /* questionnaire     */
C10011       4         /* questionnaire     */
C10012       4         /* questionnaire     */
C10013       4         /* questionnaire     */
C10014       4         /* questionnaire     */
C10015       4         /* questionnaire     */
C10016       4         /* questionnaire     */
C10017       4         /* questionnaire     */
C10018       4         /* questionnaire     */
C10019       4         /* questionnaire     */
C10020A      4         /* questionnaire     */
C10020B      4         /* questionnaire     */
C10020C      4         /* questionnaire     */
C10020D      4         /* questionnaire     */
C10020E      4         /* questionnaire     */
C10021       4         /* questionnaire     */
C10022       4         /* questionnaire     */
C10023       4         /* questionnaire     */
C10024       4         /* questionnaire     */
C10025       4         /* questionnaire     */
C10026       4         /* questionnaire     */
C10027       4         /* questionnaire     */
C10028       4         /* questionnaire     */
C10029       4         /* questionnaire     */
C10030       4         /* questionnaire     */
C10031       4         /* questionnaire     */
C10032       4         /* questionnaire     */
C10033       4         /* questionnaire     */
C10034       4         /* questionnaire     */
C10035       4         /* questionnaire     */
C10036       4         /* questionnaire     */
C10037       4         /* questionnaire     */
C10038       4         /* questionnaire     */
C10039       4         /* questionnaire     */
C10040A      4         /* questionnaire     */
C10040B      4         /* questionnaire     */
C10040C      4         /* questionnaire     */
C10040D      4         /* questionnaire     */
C10040E      4         /* questionnaire     */
C10040F      4         /* questionnaire     */
C10040G      4         /* questionnaire     */
C10040H      4         /* questionnaire     */
C10041       4         /* questionnaire     */
C10042       4         /* questionnaire     */
C10043       4         /* questionnaire     */
C10044       4         /* questionnaire     */
C10045       4         /* questionnaire     */
C10046       4         /* questionnaire     */
C10047A      4         /* questionnaire     */
C10047B      4         /* questionnaire     */
C10047D      4         /* questionnaire     */
C10047E      4         /* questionnaire     */
C10047F      4         /* questionnaire     */
C10047G      4         /* questionnaire     */
C10047H      4         /* questionnaire     */
C10047I      4         /* questionnaire     */
C10047J      4         /* questionnaire     */
C10047K      4         /* questionnaire     */
C10047L      4         /* questionnaire     */
C10047M      4         /* questionnaire     */
C10047N      4         /* questionnaire     */
C10047O      4         /* questionnaire     */
C10048       4         /* questionnaire     */
C10049       4         /* questionnaire     */
C10050       4         /* questionnaire     */
C10051       4         /* questionnaire     */
C10052       4         /* questionnaire     */
C10053       4         /* questionnaire     */
C10054       4         /* questionnaire     */
C10055       4         /* questionnaire     */
```

```
C10056       4         /* questionnaire     */
C10057       4         /* questionnaire     */
C10058       4         /* questionnaire     */
C10059       4         /* questionnaire     */
C10060       4         /* questionnaire     */
C10061       4         /* questionnaire     */
C10062       4         /* questionnaire     */
C10063       4         /* questionnaire     */
C10064       4         /* questionnaire     */
C10065       4         /* questionnaire     */
C10066       4         /* questionnaire     */
C10067       4         /* questionnaire     */
C10068       4         /* questionnaire     */
C10069       4         /* questionnaire     */
C10070       4         /* questionnaire     */
C10071       4         /* questionnaire     */
C10072       4         /* questionnaire     */
C10073       4         /* questionnaire     */
C10074       4         /* questionnaire     */
C10075       4         /* questionnaire     */
C10076       4         /* questionnaire     */
C10077       4         /* questionnaire     */
C10078       4         /* questionnaire     */
C10079       4         /* questionnaire     */
C10080       4         /* questionnaire     */
C10081       4         /* questionnaire     */
C10082       4         /* questionnaire     */
C10083A      4         /* questionnaire     */
C10083B      4         /* questionnaire     */
C10083C      4         /* questionnaire     */
C10083D      4         /* questionnaire     */
C10083E      4         /* questionnaire     */
C10083F      4         /* questionnaire     */
C10083G      4         /* questionnaire     */
C10084       4         /* questionnaire     */
C10085A      4         /* questionnaire     */
C10085B      4         /* questionnaire     */
C10085C      4         /* questionnaire     */
C10085D      4         /* questionnaire     */
C10086A      4         /* questionnaire     */
C10086B      4         /* questionnaire     */
C10086C      4         /* questionnaire     */
C10086D      4         /* questionnaire     */
C10086E      4         /* questionnaire     */
C10086F      4         /* questionnaire     */
C10086G      4         /* questionnaire     */
C10086H      4         /* questionnaire     */
C10086I      4         /* questionnaire     */
C10087F      4         /* questionnaire     */
C10087I      4         /* questionnaire     */
C10088       4         /* questionnaire     */
C10089       4         /* questionnaire     */
C10090       4         /* questionnaire     */
C10091       4         /* questionnaire     */
C10092       4         /* questionnaire     */
C10093       4         /* questionnaire     */
C10094       4         /* questionnaire     */
C10095       4         /* questionnaire     */
C10096       4         /* questionnaire     */
C10097       4         /* questionnaire     */
C10098       4         /* questionnaire     */
C10099       4         /* questionnaire     */
C10100       4         /* questionnaire     */
C10101       4         /* questionnaire     */
C10102       4         /* questionnaire     */
C10103       4         /* questionnaire     */
C10104       4         /* questionnaire     */
C10105       4         /* questionnaire     */
C10106       4         /* questionnaire     */
C10106A      4         /* questionnaire     */
C10106B      4         /* questionnaire     */
C10106C      4         /* questionnaire     */
C10106D      4         /* questionnaire     */
C10106E      4         /* questionnaire     */
```

```
 C10107A       4         /* questionnaire     */
 C10107B       4         /* questionnaire     */
 C10107C       4         /* questionnaire     */
 C10107D       4         /* questionnaire     */
 C10107E       4         /* questionnaire     */
 C10108        4         /* questionnaire     */
 C10109        4         /* questionnaire     */
 C10110        4         /* questionnaire     */
 C10111        4         /* questionnaire     */
 C10112        4         /* questionnaire     */
 C10113        4         /* questionnaire     */

POSTSTR     $ 3         /* post-stratification variable    */
FNSTATUS      8         /* Survey fielding variable    */
ONTIME      $ 3         /* Survey fielding variable */
KEYCOUNT      8         /* Survey fielding variable    */
FLAG_FIN    $ 4         /* Survey fielding variable */
DUPFLAG     $ 3         /* Survey fielding variable */
WEB           8         /* Survey fielding variable */
MIQCNTL    $ 12         /* Survey fielding variable */


N1            4         /* CS flag variable     */
N2            4         /* CS flag variable     */
N3            4         /* CS flag variable     */
N4            4         /* CS flag variable     */
N5            4         /* CS flag variable     */
N6            4         /* CS flag variable     */
N7            4         /* CS flag variable     */
N8            4         /* CS flag variable     */
N9            4         /* CS flag variable     */
N10           4         /* CS flag variable     */
N11           4         /* CS flag variable     */
N12           4         /* CS flag variable     */
N13           4         /* CS flag variable     */
N14           4         /* CS flag variable     */
N15           4         /* CS flag variable     */
N16           4         /* CS flag variable     */
N17           4         /* CS flag variable     */
N18           4         /* CS flag variable     */
N19           4         /* CS flag variable     */
N20           4         /* CS flag variable     */
N21           4         /* CS flag variable     */
N22           4         /* CS flag variable     */
N23           4         /* CS flag variable     */
N24           4         /* CS flag variable     */
N25           4         /* CS flag variable     */
N26           4         /* CS flag variable     */
N27           4         /* CS flag variable     */
N28           4         /* CS flag variable     */
N29           4         /* CS flag variable     */
N30           4         /* CS flag variable     */
N31           4         /* CS flag variable     */
N32A          4         /* CS flag variable     */
N32B          4         /* CS flag variable     */
N33           4         /* CS flag variable     */
N34           4         /* CS flag variable     */
N35           4         /* CS flag variable     */

MISS_1        8         /* CS Count             */
MISS_4        8         /* CS Count             */
MISS_5        8         /* CS Count             */
MISS_6        8         /* CS Count             */
MISS_7        8         /* CS Count             */
MISS_9        8         /* CS Count             */
MISS_TOT      8         /* CS Count             */
XSEXA         8         /* constructed       */
CONUS         3         /* constructed       */
XENRLLMT      8         /* constructed       */
XENR_PCM      8         /* constructed       */
XINS_COV      8         /* constructed       */
XBNFGRP       8         /* constructed       */
XBMIPCT       4         /* constructed       */
XBMICAT       3         /* constructed       */
```

```
      XTNEXREG      3         /* constructed       */
      /*KMILOFFC      8 */         /* constructed       */
      /*KCIVOFFC      8 */         /* constructed       */
      /*KBGPRB1       8 */         /* constructed       */
      /*KBGPRB2       8 */         /* constructed       */
      KMILOP        8         /* constructed       */
      KCIVOP        8         /* constructed       */
      KCIVINS       8         /* constructed       */
     ;

   SET MERGEC;

    RUN;

PROC CONTENTS DATA=OUT.MERGEC POSITION;
RUN;
```

E.9 WEIGHTING\CHILD\ADJWT.SAS - CALCULATE ADJUSTED WEIGHTS.

```
*************************************************************
*** Project: DoD Child Sampling - Nonresponse adjustments
*** Program: L:\Q3FY2010\Programs\Weighting\Child\adjwt.sas,
***
*** TASK:    Q3FY2010 CHILD DOD HEALTH CARE SURVEY
*** PURPOSE: CALCULATE THE FINAL WEIGHT.
***          WEIGHTS FOR DOD CHILD SURVEY.
***          DOD HEALTH CARE SURVEY FILE.
***          REQUESTED BY DON JANG.
***
***          (Do the unknown eligibility and nonresponse adjustments i by the sampling stratum)
***
*** WRITTEN: 11/09/1999   by KEITH RATHBUN
*** Updated: 1)10/01/2003 by Esther Friedman
***          2)12/18/2003 by Haixia Xu
***          3)10/11/2004 by Haixia Xu for 2004 child weighting
***          4)10/26/2004 by Lucy Lu for child late response weighting
***          5)11/23/2004 by Haixia Xu for reweighting due to the fnstatus coding changes
***          6)07/14/2008 by Sabrina Rahman for Q3FY2008 Child Weighting
***
*** INPUTS:  selectc.sas7bdat
***          FRAMEC.sas7bdat
***
*** OUTPUT:  adjwt.sas7bdat
***
*************************************************************************;
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER /*mprint mlogic symbolgen*/;

%LET Quarter=Q3FY2010;

*** libname for the input and output data ***;
libname IN  "L:\&quarter.\Data\Cfinal";
libname OUT "L:\&quarter.\Data\Cfinal";

%include "L:\&quarter.\Programs\Weighting\Child\design_effects_unequal_weights.sas";

title1 "Child DoD Survey of Health Beneficiaries (&quarter.)";
title2 "Calculate the Final Weights";
************************************************************************
* Calculate final weight based on user-specified domains.
************************************************************************;

%MACRO PROCESS(DOMAIN,FORM,INPT);

   *** Initial Information. ***;

   title5 'Framec.sas7bdat Count';

   proc freq data=in.framec;
   table enlsmpl agesmpl tnexsmpl / list missing;
   run;

   title5 'selectc.sas7bdat Counts Using BWT as the Weight';

   proc freq data=in.&inpt.;
   table enlsmpl agesmpl tnexsmpl fnstatus / list missing;
   weight BWT;
   format _all_;
   run;

   title5 'selectc.SD2 Counts';

   proc freq data=in.&inpt.;
   table enlsmpl agesmpl tnexsmpl fnstatus
   web*enlsmpl web*agesmpl web*tnexsmpl web*fnstatus/ list missing;
   format _all_;
   run;

   *** Create the adjustment cells for nonresponse. ***;

   data &inpt. (KEEP = MPRID FNSTATUS BWT enlsmpl tnexsmpl sexsmpl svcsmpl agesmpl stratum
poststr);;
```

```
   set in.&inpt.;
   format _all_;
   run;

PROC SORT DATA=&inpt. OUT=&INPT.;
BY &DOMAIN.;
RUN;

*****************************************************************************
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
*****************************************************************************;
DATA CELLSA1  (KEEP=SUMBWT SUMG1-SUMG4 A1 CELLCNT cntg1-cntg4 &domain.)
     MPRIDSA1 (KEEP=MPRID FNSTATUS BWT &DOMAIN. enlsmpl tnexsmpl agesmpl)
    ;
   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 MPRIDSA1;

RUN;


title5 'Check for CELLSA1 Data Set';

proc print data=cellsa1;
var stratum cntg1-cntg4 cellcnt sumg1-sumg4 sumBWT a1;
sum cellcnt cntg1 cntg2 cntg3 cntg4 sumBWT sumg1 sumg2 sumg3 sumg4;
run;

proc print data=cellsa1;
where ( a1 > 3.25 ) or ( cntg1 + cntg2 < 10 );
var stratum cntg1-cntg4 cellcnt sumg1-sumg4 sumBWT a1;
sum cellcnt cntg1 cntg2 cntg3 cntg4 sumBWT sumg1 sumg2 sumg3 sumg4;
run;

proc univariate data=cellsa1 normal plot;
var a1;
run;

proc sort data=mpridsa1;
by &domain.;
run;

proc sort data=cellsa1;
by &domain.;
run;

data adj_one;
merge mpridsa1 cellsa1;
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 stratum*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 sum;
where _type_=1;
run;

proc means data=adj_one n sum NOPRINT;
class enlsmpl;
var adj_wt1;
output out=print sum=sum;
run;
```

```
Proc print data=print;
sum sum;
where _type_=1;
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 &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 > 3.25 ) or ( denomcnt < 10 );
var &domain. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

proc univariate data=cellsa2 normal plot;
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 stratum enlsmpl;
run;

title5 'Check for ADJ_TWO Data Set';

proc freq data=adj_two;
table stratum*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;
sum sum;
where _type_=1;
run;

proc means data=adj_two n sum NOPRINT;
class enlsmpl;
var adjwt;
output out=print sum=sum;
run;

Proc print data=print;
sum sum;
where _type_=1;
run;

data adj_two;
set adj_two(drop=fnstatus enlsmpl);
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 'Checks for adjwt Data Set';

proc means data=out.adjwt n sum NOPRINT;
class fnstatus;
var adjwt;
output out=print sum=sum;
run;
```

```
Proc print data=print;
sum sum;
where _type_=1;
run;

proc means data=out.adjwt n sum;
class stratum;
var BWT adjwt;
run;

proc sort data=out.adjwt out=chk;
by stratum fnstatus;
run;

data sub_chk;
set chk(keep = stratum fnstatus BWT adj1 adj2 adjwt);
by stratum 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 stratum fnstatus BWT adj1 adj2 prodadjs adjwt cellcnt sumadjwt;
sum cellcnt sumadjwt;
run;

proc univariate data=sub_chk normal plot;
where prodadjs ~= 0;
var prodadjs;
run;

proc univariate data=out.adjwt;
where fnstatus=11;
var adjwt;
run;
%MEND PROCESS;

*************************************************************************
* Calculate final weight based on user-specified parameters.
*************************************************************************;

%PROCESS(stratum,c,selectc);
RUN;
```

E.10 WEIGHTING\CHILD\DESIGN_EFFECTS_UNEQUAL_WEIGHTS.SAS - INCLUDE FILE FOR ADJWT.SAS.

```
*************************************************************************


Name:
design_effects_unequal_weights


Purpose:
Calculate the design effects due to unequal weights.  Creates two data sets.
One data set contains the overall design effect and the information used to
calculate the design effect.  The other data set contains the design effects
for each category of the analysis variable and the information used to
calculate these design effects.  In the two data sets, the additional
information refers to the number of observations, the sum of the squared
weights, and the sum of the weights squared.


Programmer:
Darryl V. Creel


Parameters:
There are five:

   (1) in_data_set - The input data set.

   (2) analysis_variable - The analysis variable contains the categories
                           by which the design effects are calculated.

   (3) weight_variable - The weight variable.

   (4) out_overall_data_set - Name of the data set that contains the
                              overall design effect.

   (5) out_data_set - Name of the output data set that contains the
                      design effects for each category of the analysis
                      variable.


Output:
There are two data sets:

   (1) A data set that contains the overall design effect and the
       information used to calculte the overall design effect.  It
       includes observations that have a missing value for the analysis
       variable.  This data set is named by the out_overall_data_set
       parameter.

   (2) A data set that contains the design effects for each category
       of the analysis variable and the information used to calculate
       these design effects.  There is one observation for each category
       of the analysis variable, including a missing category, if there
       are missing values for the analysis variable. This data set is
       named by the out_data_set parameter.


Side Effects:
None


Notes:

   (1) Use with SAS V8.

   (2) Do NOT use the following variable names as parameters:
       (a) _weight_variables
       (b) _overall_design_effect
       (c) _design_effect.


*************************************************************************;
```

```
%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;
```

E.11 WEIGHTING\CHILD\RECOUNTC.SAS - CREATE THE COUNT DATA SET FOR THE CHILD SURVEY.

```
*************************************************************************
*** Project: 2010 Health Care Survey of DoD Beneficiaries - Child
*** Program: L:\Q3FY2010\Programs\Weighting\Child\recountc.sas,
*** Purpose: Create the count data set for the child survey.
***          This consists of the population counts by various cell definitions:
***
***             PSUM0 = Stratifcation Variable Count
***             PSUM1 = tnexsmpl Count
***             PSUM2 = ENLSMPL Count
***             PSUM3 = AGESMPL Count
***             TOTAL = Total Population
***
*** Input: FRAMEC.sas7bdat
*** Output: recountc.sas7bdat
***
*** Updated: 10/11/2004 by Haixia Xu
***          07/16/2008 by Sabrina Rahman for Q3FY2008 Child Weighting

*************************************************************************;
*** Setup the options. ***;
options ls=132 ps=79 nocenter compress=yes mlogic mprint symbolgen;

%LET Quarter=Q3FY2010;

*** Setup the titles. ***;
title1 "2010 Health Care Survey of DoD Beneficiaries - Child (&quarter.)";
title2 "Create population counts by various cell definitions.";

*** Setup the paths where the files are located. ***;
libname IN  "L:\&quarter.\Data\Cfinal";
libname OUT "L:\&quarter.\Data\Cfinal";

proc freq data=in.framec;
tables stratum*tnexsmpl*enlsmpl*agesmpl/list;
run;

*** Set the stratification variable. ***;
%let strata = stratum;

* get sampling vars before collapsements;
data framec ;
   set in.framec;
run;

TITLE5 "FREQS of sample FRAMEC.SD2";
PROC FREQ DATA=framec;
   TABLES &strata. tnexsmpl ENLSMPL AGESMPL
  /MISSING LIST;
RUN;

PROC SORT DATA=framec OUT=FRAMEC;
   BY &strata. tnexsmpl ENLSMPL AGESMPL;
RUN;

PROC MEANS DATA=FRAMEC NOPRINT;
   BY  &strata. tnexsmpl ENLSMPL AGESMPL;
   VAR ENLSMPL;
   OUTPUT
   OUT=T0(KEEP=&strata. tnexsmpl ENLSMPL AGESMPL)
   N=DUMMY;
RUN;

PROC FREQ DATA=FRAMEC NOPRINT;
   TABLES &strata.
  /MISSING LIST OUT=T1(RENAME=(COUNT=PSUM0)
               KEEP=COUNT &strata.) NOPERCENT NOCUM NOPRINT;
RUN;

PROC FREQ DATA=FRAMEC NOPRINT;
   TABLES tnexsmpl
  /MISSING LIST OUT=T2(RENAME=(COUNT=PSUM1)
               KEEP=COUNT tnexsmpl) NOPERCENT NOCUM NOPRINT;
```

```
RUN;

PROC FREQ DATA=FRAMEC NOPRINT;
   TABLES ENLSMPL
  /MISSING LIST OUT=T3(RENAME=(COUNT=PSUM2)
                KEEP=COUNT ENLSMPL) NOPERCENT NOCUM NOPRINT;
RUN;

PROC FREQ DATA=FRAMEC NOPRINT;
   TABLES AGESMPL
  /MISSING LIST OUT=T4(RENAME=(COUNT=PSUM3)
                KEEP=COUNT AGESMPL) NOPERCENT NOCUM NOPRINT;
RUN;

PROC SORT DATA=T0; BY &strata.; RUN;
DATA T0;
   MERGE T0 T1;
   BY  &strata.;
RUN;

PROC SORT DATA=T0; BY tnexsmpl; RUN;
DATA T0;
   MERGE T0 T2;
   BY  tnexsmpl;
RUN;

PROC SORT DATA=T0; BY ENLSMPL; RUN;
DATA T0;
   MERGE T0 T3;
   BY  ENLSMPL;
RUN;

PROC SORT DATA=T0; BY AGESMPL; RUN;

proc means data=framec noprint;
var prn;
output out=total n=total;
run;

DATA OUT.recountc;
if _n_=1 then set total(drop = _type_ _freq_);
   MERGE T0 T4;
   BY  AGESMPL;
   LABEL PSUM0 = 'PSUM0 - &strata. Count'
         PSUM1 = 'PSUM1 - tnexsmpl Count'
         PSUM2 = 'PSUM2 - ENLSMPL Count'
         PSUM3 = 'PSUM3 - AGESMPL Count'
         TOTAL = 'TOTAL Population'
   ;
RUN;

TITLE5 "Information for recountc.sas7bdat";
PROC CONTENTS data=out.recountc;
RUN;

PROC PRINT data=out.recountc;
var &strata. tnexsmpl enlsmpl agesmpl psum0-psum3 total;
sum psum0;
RUN;
```

E.12 WEIGHTING\CHILD\POSTSTR4.SAS - CHILD SAMPLING - POSTSTRATIFICATION ADJUSTMENTS.

```
************************************************************************
*** Project: DoD Child Sampling - Poststratification adjustments
*** Program: L:\Q3FY2010\Programs\Weighting\Child\poststr4.SAS,
*** TASK:    2006 CHILD DOD HEALTH CARE SURVEY
*** PURPOSE: BUILD AND ASSIGN FINAL WEIGHTS - POST STRATIFICATION - Child Survey.
***          WEIGHTS FOR CHILD DOD SURVEY.
***          DOD HEALTH CARE SURVEY FILE.
***          REQUESTED BY DON JANG.
*** 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
***          07/16/2008 by Sabrina Rahman for Q3FY2008 Child Weighting

*** INPUTS:   adjwt.sas7bdat - Adjusted Weights file - Form C
***           recountc.sas7bdat
***           framec.sas7bdat
***           selectc.sas7bdat
*** OUTPUTS   POST_WT.sas7bdat - Final Weights file - Form C
************************************************************************;

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER mprint mlogic symbolgen;

%LET Quarter=Q3FY2010;

*** Setup the paths where the files are located. ***;
*** libname for the input and output data ***;
libname IN  "L:\&quarter.\Data\Cfinal";  /* adjwt.sd2, recountc.sd2, framec.sd2, selectc.sd2 */
libname OUT "L:\&quarter.\Data\Cfinal";  /* post_wt.sd2 */

%include "L:\&quarter.\Programs\Weighting\Child\design_effects_unequal_weights.sas";

*** Setup the titles. ***;
title1 "Child DoD Survey of Health Beneficiaries (&quarter.)";
title2 "Calculate the Poststratified Weights";

%MACRO PROCESS(DOMAIN,FORM,INPT);

************************************************************************
* 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 CELLS  (KEEP=SUMADJWT SUMFN11 &DOMAIN)
     MPRIDS (KEEP=MPRID FNSTATUS ADJWT &DOMAIN)
    ;
   SET &inpt.;
   BY &DOMAIN;

   IF FIRST.&DOMAIN THEN DO;
      SUMADJWT   = 0.0;
      SUMFN11  = 0;
   END;

   ************************************************************************
   * Accumulate sum of adjusted weight
   ************************************************************************;
   SUMADJWT + ADJWT;

   ************************************************************************
   * COUNT the FNSTATUS = 11 within each DOMAIN
   ************************************************************************;
   IF FNSTATUS = 11 THEN SUMFN11 + 1;

   RETAIN SUMADJWT SUMFN11;
```

```
   IF LAST.&DOMAIN THEN DO;
      OUTPUT CELLS;
      SUMADJWT  = 0.0;
      SUMFN11  = 0;
   END; * DOMAIN;
   OUTPUT MPRIDS;
RUN;

*************************************************************************
* Merge the population counts and calculate the adjusted population (AP)
*************************************************************************;
DATA recountc;
SET IN.recountc (KEEP = stratum PSUM0);
   POSTSTR = stratum;
   POP = PSUM0;
RUN;

PROC SORT DATA=recountc OUT=recountc; BY &DOMAIN; RUN;

DATA AP;
   MERGE recountc CELLS;
   BY &DOMAIN;
   AP = POP/SUMADJWT;
RUN;

PROC PRINT DATA=AP;
VAR &DOMAIN. POP SUMADJWT AP;
SUM POP SUMADJWT;
RUN;

*************************************************************************
* Merge the adjusted population and calculate the final weight (WRWT)
*************************************************************************;
DATA POST_WT;
   MERGE AP(IN=IN1) MPRIDS(IN=IN2);
   BY &DOMAIN;

   IF IN2 THEN DO;
      WRWT = AP*ADJWT;
      OUTPUT;
   END;

   LABEL WRWT     = 'Final Weight';
   LABEL AP       = 'Poststratification Adjustment Factor';
   LABEL POP      = 'DEERS population by CELLNAME for weights';
   LABEL SUMFN11  = 'COUNT of FNSTATUS=11 within CELLNAME';

   KEEP FNSTATUS WRWT ADJWT AP MPRID POP SUMFN11 &DOMAIN;
RUN;

PROC MEANS DATA=POST_WT NOPRINT;
   VAR POP WRWT AP SUMFN11;
   BY &DOMAIN;
   OUTPUT OUT=STATS(KEEP=POSTSTR DEERSPOP PSA_CNT AP_MEAN FN11CNT )
                    SUM= DUMMY1   PSA_CNT DUMMY2  DUMMY3
                    MEAN=DUMMY4   DUMMY5  AP_MEAN DUMMY6
                    MAX= DEERSPOP DUMMY7  DUMMY8  FN11CNT;
RUN;

PROC PRINT;
   SUM DEERSPOP AP_MEAN PSA_CNT FN11CNT;
RUN;

proc sort data=cells;
by &domain.;
run;

proc sort data=post_wt;
by &domain.;
run;

data printchk;
merge cells post_wt;
by &domain;
```

```
run;

proc sort data=printchk;
by mprid;
run;

title4 "Print of key variables for 50 records";

Proc print data=Printchk (obs=50);
var &domain. AP ADJWT WRWT ;
where wrwt~=0;
run;
************************************************************************
* Sort the original data and append the final weight (WRWT)
************************************************************************;

PROC SORT DATA=IN.&INPT. OUT=ADJWT TAGSORT; BY MPRID; RUN;
PROC SORT DATA=POST_WT TAGSORT; BY MPRID; RUN;

DATA OUT.POST_WT;
   MERGE ADJWT POST_WT;
   BY MPRID;
RUN;

************************************************************************
* Counts for population total for enrollment group, age, and superregion
************************************************************************;

TITLE4 "POPULATION COUNTS";

PROC FREQ data=in.framec;
   TABLE ENLSMPL AGESMPL tnexsmpl;
RUN;

************************************************************************
* Weighted frequencies for enrollment group, age, and superregion
* using poststratification adjusted weight
************************************************************************;

TITLE4 "WEIGHTED FREQUENCIES";

PROC FREQ data=in.post_wt;
   WEIGHT WRWT;
   TABLE ENLSMPL AGESMPL tnexsmpl;
RUN;

title4 "CHECK Individual Level WRWT";
proc univariate data=in.post_wt normal;
where fnstatus=11;
var wrwt;
run;

***********************************
***Added on 10/15/2004 by Haixia Xu for 2004 child weighting***
Merge post_wt with selectc to get the variable MPCSMPL
Merge post_wt with framec to get the variable TNEXREG
***********************************;
data selectc;
set in.selectc(keep=MPRID MPCSMPL);
run;

data framec;
set in.framec(keep=MPRID TNEXREG);
run;

proc sort data=in.post_wt out=post_wt;
by MPRID;
run;

proc sort data=selectc;
by MPRID;
run;

proc sort data=framec;
```

```
by MPRID;
run;

data merged;
merge post_wt(in=A) selectc(in=B) framec(in=C);
by MPRID;
if MPCSMPL=1 then MPCSMPLc=1;
else MPCSMPLc=2;
label MPCSMPLc="Collapsed MPCSMPL:1-Enlisted/Unknown, 2-Officer/Warrant";
if A and B and C;
run;

proc contents data=merged;
run;

title4 "Freq of MPCSMPLc*MPCSMPL";
proc freq data=merged;
table MPCSMPLc*MPCSMPL/missing list;
run;

data OUT.post_wt;
set merged;
run;

**********************************;
*** Calculate the Design Effects ***;
**********************************;
data post_wt_fnl11;
set in.post_wt;
where fnstatus=11;
run;

%design_effects_unequal_weights ( post_wt_fnl11, tnexsmpl, WRWT, deff_overall, deff_tnex );
%design_effects_unequal_weights ( post_wt_fnl11, agesmpl , WRWT, deff_overall, deff_age );
%design_effects_unequal_weights ( post_wt_fnl11, enlsmpl, WRWT, deff_overall, deff_enl );
%design_effects_unequal_weights ( post_wt_fnl11, svcsmpl, WRWT, deff_overall, deff_svc );
%design_effects_unequal_weights ( post_wt_fnl11, sexsmpl, WRWT, deff_overall, deff_sex );
***Below was Added on 10/15/2004 by Haixia Xu for 2004 child weighting;
%design_effects_unequal_weights ( post_wt_fnl11, MPCSMPL, WRWT, deff_overall, deff_mpc1 );
%design_effects_unequal_weights ( post_wt_fnl11, MPCSMPLc, WRWT, deff_overall, deff_mpc );
%design_effects_unequal_weights ( post_wt_fnl11, TNEXREG, WRWT, deff_overall, deff_tnex );

title4 "design effect overall";
proc print data = deff_overall;
run;

title4 "design effect by tnexsmpl";
proc print data= deff_tnex;
sum _freq_;
run;

title4 "design effect by agesmpl";
proc print data= deff_age;
sum _freq_;
run;

title4 "design effect by enlsmpl";
proc print data= deff_enl;
sum _freq_;
run;

title4 "design effect by svcsmpl";
proc print data= deff_svc;
sum _freq_;
run;

title4 "design effect by sexsmpl";
proc print data= deff_sex;
sum _freq_;
run;

title4 "design effect by MPCSMPL";
proc print data= deff_mpc1;
sum _freq_;
```

```
run;


title4 "design effect by MPCSMPLc";
proc print data= deff_mpc;
sum _freq_;
run;

title4 "design effect by TNEXREG";
proc print data= deff_tnex;
sum _freq_;
run;

************************************
***Added on 10/15/2004 by Haixia Xu for 2004 child weighting
Calculate the weighted total and the population total by TNEXREG
************************************;
title4 "weighted total by TNEXREG,TNEXREG*agesmpl,TNEXREG*sexsmpl using final weight WRWT";
proc freq data=in.post_wt;
tables TNEXREG TNEXREG*agesmpl TNEXREG*sexsmpl /missing list;
weight WRWT;
run;

title4 "Population total by TNEXREG,TNEXREG*agesmpl,TNEXREG*sexsmpl";
proc freq data=in.framec;
tables TNEXREG TNEXREG*agesmpl TNEXREG*sexsmpl /missing list;
run;

%MEND PROCESS;

%PROCESS(poststr,C,adjwt);
```

E.13 WEIGHTING\CHILD\REPWT.SAS - CALCULATE REPLICATED WEIGHTS.

```
*************************************************************************
*** Project: DoD Child Sampling - Poststratification adjustments
**  Program: L:\Q3FY2010\Programs\Weighting\Child\repwt.SAS,
*** TASK:    2006 DOD HEALTH CARE SURVEY ANALYSIS (8676-610)
*** PURPOSE: BUILD AND ASSIGN JK WEIGHTS - POST STRATIFICATION - CHILD SURVEY
***          WEIGHTS FOR DOD SURVEY.
***          DOD HEALTH CARE SURVEY FILE.
***          REQUESTED BY DON JANG.
*** WRITTEN: 12/30/99 BY KEITH RATHBUN
*** REVISED: 10/01/2003 BY Esther Friedman
*** UPDATED: 1)12/18/2003 BY Haixia Xu
***          2)10/11/2004 by Haixia Xu
***          3)11/22/2004 by Haixia Xu for rewighting due to the fnstatus changes
***          4)07/16/2008 by Sabrina Rahman for Q3FY2008 Child Weighting
***
*** INPUTS:  1) POST_WT.sas7bdat - Final Weights file - Form C
*** OUTPUTS  1) REPWT.sas7bdat- JackKnife (JK) Weights file - Form C
*************************************************************************;

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER /*mprint mlogic symbolgen*/ ;

%LET Quarter=Q3FY2010;

*** libname for the count***;
libname IN  "L:\&quarter.\Data\Cfinal";
libname OUT "L:\&quarter.\Data\Cfinal";

%MACRO PROCESS(DOMAIN1, DOMAIN2, FORM);

************************************************************************
* Sort the final weights file by user-specified domains
************************************************************************;
PROC SORT DATA=IN.post_wt
          OUT=post_wt(KEEP=FNSTATUS MPRID BWT &DOMAIN1 &DOMAIN2)
         ;
     BY &DOMAIN1;
RUN;

************************************************************************
* Append SUBSET index (I) to each observation
************************************************************************;
DATA SUBSETS;
   SET post_wt;
   BY &DOMAIN1;

   IF _N_ = 1 OR MOD(_N_-1,60) = 0 THEN SUBSET = 1;
   ELSE SUBSET + 1;

   RETAIN SUBSET;
   BBWT = BWT*(60/59);
RUN;

************************************************************************
************************************************************************
* Generate JackKnife/replicated weights WRWT01-WRWT60
************************************************************************
************************************************************************;
%DO I = 1 %TO 60;

DATA SUBSET;
   SET SUBSETS;
   IF &I = SUBSET THEN DELETE; *Remove the current subset;
RUN;

************************************************************************
* Calculate adjustment factor A1 for each cell
************************************************************************;
DATA CELLSA1  (KEEP=SUMBBWT SUMG1-SUMG4 A1 CELLNAME CELLCNT)
     MPRIDSA1 (KEEP=CELLNAME MPRID FNSTATUS BBWT &DOMAIN1 &DOMAIN2)
    ;
   SET SUBSET;
   BY &DOMAIN1;
```

```
   LENGTH CELLNAME $25;
   CELLNAME = PUT(&DOMAIN1,5.);

   IF FIRST.&DOMAIN1 THEN DO;
      CELLCNT = 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 SUMG1 + BBWT;
   ************************************************
   * Accumulate group 2 weight sum
   ************************************************;
   ELSE IF FNSTATUS = 20 THEN SUMG2 + BBWT;
   ************************************************
   * Accumulate group 3 weight sum
   ************************************************;
   ELSE IF FNSTATUS = 31 THEN SUMG3 + BBWT;
   ************************************************
   * Accumulate group 4 weight sum
   ************************************************;
   ELSE IF FNSTATUS = 32 THEN SUMG4 + BBWT;

   RETAIN SUMBBWT SUMG1-SUMG4 A1 CELLNAME CELLCNT MPRID;

   IF LAST.&DOMAIN1 THEN DO;
      A1 = (SUMBBWT-SUMG4)/(SUMG1 + SUMG2 + SUMG3);
      OUTPUT CELLSA1;
      CELLCNT = 0;
      SUMBBWT = 0.0;
      SUMG1   = 0.0;
      SUMG2   = 0.0;
      SUMG3   = 0.0;
         SUMG4   = 0.0;
   END; * DOMAIN;
   OUTPUT MPRIDSA1;
RUN;

*****************************************************************************
* Calculate adjustment factor A2 for each cell
*****************************************************************************;
DATA CELLSA2 (KEEP=CELLNAME CELLCNT A1 A2 NUMER DENOM);
   MERGE MPRIDSA1 CELLSA1;
   BY CELLNAME;

   IF FIRST.CELLNAME THEN DO;
      A2 = 0.0;
      NUMER = 0.0;
      DENOM = 0.0;
   END;
   RETAIN NUMER DENOM A2;

   IF FNSTATUS IN(11,12,20) THEN NUMER + BBWT*A1;
   IF FNSTATUS  = 11 THEN DENOM + BBWT*A1;

   IF LAST.CELLNAME THEN DO;
      A2 = NUMER/DENOM;
      OUTPUT CELLSA2;
   END;
RUN;
```

```
*************************************************************************
* Calculate Adjusted Weight
*************************************************************************;
DATA ADJWGT;
   MERGE CELLSA2 MPRIDSA1;
   BY CELLNAME;
   IF FNSTATUS = 11 THEN
      AWT = A1*A2*BBWT;
   ELSE IF FNSTATUS IN(12,20,41,42) THEN
      AWT = 0;
   ELSE IF FNSTATUS =31 THEN
      AWT = A1*BBWT;
   ELSE IF FNSTATUS =32 THEN
      AWT = BBWT;
   KEEP MPRID FNSTATUS AWT BBWT &DOMAIN1 &DOMAIN2;
RUN;

************************************************************************
* Begin final weight code
************************************************************************
* Assign cell names and calculate the sum of AWT
************************************************************************;

PROC SORT DATA=ADJWGT; BY &DOMAIN2; RUN;

DATA CELLS  (KEEP=SUMAWT &DOMAIN2)
     MPRIDS (KEEP=MPRID FNSTATUS AWT &DOMAIN1 &DOMAIN2)
    ;
   SET ADJWGT;
   BY &DOMAIN2;

   IF FIRST.&DOMAIN2 THEN DO;
      SUMAWT  = 0.0;
   END;

   ************************************************************************
   * Accumulate sum of adjusted weight
   ************************************************************************;
   SUMAWT + AWT;

   RETAIN SUMAWT;

   IF LAST.&DOMAIN2 THEN DO;
      OUTPUT CELLS;
      SUMAWT  = 0.0;
   END; * DOMAIN;
   OUTPUT MPRIDS;
RUN;

************************************************************************
* Merge the population counts and calculate the adjusted population (AP)
************************************************************************;
DATA recountc;
SET in.recountc (KEEP = stratum PSUM0);
   POSTSTR = stratum;
   POP = PSUM0;
RUN;

PROC SORT DATA=recountc OUT=recountc; BY &DOMAIN2; RUN;

DATA AP;
   MERGE recountc CELLS ;
   BY &DOMAIN2;
   AP = POP/SUMAWT;
RUN;

************************************************************************
* Merge the adjusted population and calculate JackKnife Weights
* (WRWT1-WRWT60)
************************************************************************;
DATA SUBSET&I(KEEP=MPRID SUBSET JKWEIGHT);
   MERGE AP(IN=IN1) MPRIDS(IN=IN2);
   BY &DOMAIN2;
```

```
   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(60) WRWT1-WRWT60; RETAIN WRWT1-WRWT60;
   IF FIRST.MPRID THEN DO;
      DO I = 1 TO 60; DROP I;
         JKWT(I) = . ;
      END;
   END;
   JKWT(SUBSET) = JKWEIGHT;
   IF LAST.MPRID THEN OUTPUT;
   KEEP MPRID WRWT1-WRWT60 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.POST_WT
          OUT=POST_WT;
     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 Health Survey Final/Replicated Weights";
TITLE2 "Program Output: REPWT.SD2";

************************************************
/** Added on 10/15/2004 **/
Check the structure of the data set OUT.repwt;
************************************************;
proc sort data=OUT.repwt out=sorted1;
by stratum MPRID;
run;

proc print data=sorted1 (obs=500);
var stratum MPRID SUBSET fnstatus wrwt wrwt1-wrwt5;
run;

** End of the modification;


PROC CONTENTS DATA=OUT.REPWT;

PROC MEANS DATA=OUT.REPWT n mean stddev min max sum;
VAR  WRWT WRWT1-WRWT60;
RUN;

PROC SORT DATA=OUT.REPWT;
```

```
BY MPRID;
RUN;

DATA OUT.REPWT;
   SET OUT.REPWT;
   BY MPRID;

   ARRAY WGTS(60) WRWT1-WRWT60;
   DO I = 1 TO 60; DROP I;
      IF WGTS(I) EQ . THEN WGTS(I) = 0;
   END;

   KEEP MPRID BWT adjwt POP POSTSTR FNSTATUS WRWT WRWT1-WRWT60;
RUN;

PROC SORT DATA=OUT.REPWT; BY &DOMAIN2; RUN;
PROC MEANS DATA=OUT.REPWT NOPRINT;
   VAR POP WRWT;
   BY &DOMAIN2;
   OUTPUT OUT=STATS(KEEP=&DOMAIN2 DEERSPOP POPCNT)
                    SUM= DUMMY1   POPCNT
                    MAX= DEERSPOP DUMMY2;
RUN;
Proc print data=stats;

PROC MEANS DATA=OUT.REPWT n mean stddev min max sum;
VAR WRWT WRWT1-WRWT60;
RUN;

PROC MEANS DATA=OUT.REPWT n mean stddev min max sum;
VAR WRWT WRWT1-WRWT60;
WHERE FNSTATUS=11;
RUN;
************************************************
/** Added on 10/15/2004 **/
Check the structure of the data set OUT.repwt;
************************************************;
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 WRWT wrwt1-wrwt60;
output out = check2 sum= / autoname;
run;

proc print data = check2;
SUM _FREQ_ WRWT_SUM WRWT1_SUM WRWT2_SUM WRWT59_SUM WRWT60_SUM;
run;
** End of the modification;

***Added on 10/15/2004 for 2004 child weighting.
Drop the variable fnstatus which was not kept in the previous years;
data OUT.repwt;
set OUT.repwt;
drop fnstatus ;
run;

%MEND;

%PROCESS(stratum, POSTSTR, C);
```

E.14 WEIGHTING\CHILD\RESPONSE_RATE\TABLE02.SAS - CALCULATE RESPONSE RATES.

```
*************************************************************************
*
* PROGRAM: TABLE02.SAS
* TASK:    2006 DOD HEALTH CARE SURVEY ANALYSIS (6663-300)
* 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) 01/30/2003, Esther Friedman - added nested macro so it would run for all 4 quarters trickle
files
* INCLUDES: 1) TABLE02.IN1
*           2) TABLE02.IN2
* UPDATED: 1)12/22/2003 By Haixia Xu
*          2)10/19/2004 by Haixia Xu for 2004 data
*          3)10/26/2004 by Haixia Xu after the late response
*          4)11/23/2004 BY Haixia Xu for the reweighting due to the fnstatus coding changes
*           5)01/27/2006 by Haixia Xu for 2005 child RR -- Change supreg to tnexsmpl, and fix
enlsmpl
*          6)08/07/2006 by Haixia Xu for 2006 child RR
*************************************************************************;
*LIBRARIES;

 LIBNAME IN3    v8   "..\..\..\..\Data\Cfinal"; /* newmerge.sd7 */
 LIBNAME DODIN3 v8   "..\..\..\..\Data\Cfinal"; /* selectc.sd2 */

OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=1 NOCENTER NOFMTERR;

%let folder=Q3FY2010;
%LET DATE=8-13-2010;

%macro doit;
  %do qtr=3 %to 3;

************************************************************************
* Merge repwt and selectc files to add ebg_com
************************************************************************;

data IN&qtr..newmerge;
 set DODIN&qtr..selectc;
 format _all_;

/*this part below is added for 2005 to correct PCM.
We should remove it in 2006, since PCM is correct in STI file*/

if tnexreg in ('N', 'S', 'W') then do;
   LENGTH PCM_OLD $3.;

   PCM_OLD=PCM;

   IF ACV = 'Z' THEN PCM = ' ';

   ELSE IF ACV = ' ' THEN PCM = ' ';

   ELSE IF ('6900' < ENRID <= '6919' OR
         '7900' < ENRID <= '7919' OR
         '8000' < ENRID < '8090' OR
         '0190' <= ENRID <= '0199')
         THEN PCM='CIV';

   ELSE PCM='MTF';


   if pcm in ('MTF', 'CIV') then enlsmpl = 1;
   if pcm = ' ' then enlsmpl = 2;
end;
```

```
else if tnexreg = 'O' then do; enlsmpl=9; end;
else enlsmpl = 4;


if tnexsmpl in (1,2,3) then conus=1;
else conus=0;

run;

proc freq;
tables tnexreg*pcm_old*pcm tnexreg*pcm*enlsmpl tnexsmpl*conus/missing list;
run;

data IN&qtr..newmerge;
set IN&qtr..newmerge(drop=pcm_old);
run;

%MACRO PROCESS(INPT,FORM);


************************************************************************
* Process OVERALL Summary of response rates
************************************************************************
;

DATA _NULL_;
   SET IN&qtr..&INPT END=FINISHED;
   format _all_;
   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;

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 "L:\&folder.\Data\Cfinal\Response_Rate\TABLE02&FORM..OUT" LRECL=132;
   PUT; PUT;
   PUT @001 "TABLE 2: OVERALL RESPONSE RATES SUMMARY";
   PUT @001 "DATE., TASK: 6663-300";
   PUT;
   PUT "SUMMARY OF GROUP COUNTS: FORM &FORM";
   PUT;
   PUT @050 "UNWEIGHTED COUNT"
       @100 "WEIGHTED COUNT"
      ;
   PUT @040 'FLR'
       @050 'FCR'
       @060 'FRR'
       @070 'POP'
       @090 'FLR'
       @100 'FCR'
       @110 'FRR'
       @120 'POP'
      ;
   %INCLUDE "L:\&folder.\Programs\Weighting\child\Response_Rate\TABLE02.IN2";
RUN;
%MEND PROCESS;
```

```
************************************************************************
* Process Single Domain where domain1 is the variable of interest
************************************************************************;

%MACRO PROCESS1(DOMAIN1,INPT,FORM);

*LIBNAME LIBRARY &LIB;

PROC SORT DATA=IN&qtr..&INPT OUT=&INPT ; BY &DOMAIN1; RUN;


DATA _NULL_;
   SET &INPT;
   format _all_;
   BY &DOMAIN1;
   FILE "L:\&folder.\Data\Cfinal\Response_Rate\&DOMAIN1..OUT" LRECL=132;
   LENGTH VARNAME1 $8;
   LENGTH VARIABLE $30;
   CALL VNAME(&DOMAIN1,VARNAME1);
   VARIABLE = VARNAME1;
   %INCLUDE "L:\&folder.\Programs\Weighting\child\Response_Rate\TABLE02.IN1";
   IF LAST.&DOMAIN1 THEN DO;
      PUT @001 &DOMAIN1 @;
      %INCLUDE "L:\&folder.\Programs\Weighting\child\Response_Rate\TABLE02.IN2";
   END; * DOMAIN;
RUN;
%MEND PROCESS1;

************************************************************************
* Process Double Domain where domain1/domain2 are the variables of interest
************************************************************************
;
%MACRO PROCESS2(DOMAIN1,DOMAIN2,INPT,FORM);

*LIBNAME LIBRARY &LIB;

PROC SORT DATA=IN&qtr..&INPT OUT=&INPT ; BY &DOMAIN1 &DOMAIN2; RUN;

DATA _NULL_;
   format _all_;
   SET &INPT;
   BY &DOMAIN1 &DOMAIN2;
   FILE "L:\&folder.\Data\Cfinal\Response_Rate\&DOMAIN1&DOMAIN2..OUT" LRECL=132;
   LENGTH VARNAME1 $8;
   LENGTH VARNAME2 $8;
   LENGTH VARIABLE $30;
   CALL VNAME(&DOMAIN1,VARNAME1);
   CALL VNAME(&DOMAIN2,VARNAME2);
   VARIABLE = VARNAME1 || " " || VARNAME2;
   %INCLUDE "L:\&folder.\Programs\Weighting\child\Response_Rate\TABLE02.IN1";
   IF LAST.&DOMAIN2 THEN DO;
      PUT @001 &DOMAIN1 @;
      PUT @025 &DOMAIN2 @;
      %INCLUDE "L:\&folder.\Programs\Weighting\child\Response_Rate\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);

*LIBNAME LIBRARY &LIB;

PROC SORT DATA=IN&qtr..&INPT OUT=&INPT ; BY &DOMAIN1 &DOMAIN2 &DOMAIN3; RUN;

DATA _NULL_;
  format _all_;
   SET &INPT;
   BY &DOMAIN1 &DOMAIN2 &DOMAIN3;
   FILE "L:\&folder.\Data\Cfinal\Response_Rate\&DOMAIN1&DOMAIN2&DOMAIN3..OUT" LRECL=132;
   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 "L:\&folder.\Programs\Weighting\child\Response_Rate\TABLE02.IN1";
   IF LAST.&DOMAIN3 THEN DO;
      PUT @001 &DOMAIN1 @;
      PUT @015 &DOMAIN2 @;
      PUT @035 &DOMAIN3 @;
      %INCLUDE "L:\&folder.\Programs\Weighting\child\Response_Rate\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;


*********************************************************
* PROCESS OVERALL RESPONSE RATE TABULATION - FORM C
*********************************************************
;
%PROCESS(newmerge, C);

*********************************************************
* PROCESS SINGLE DOMAIN RESPONSE RATE TABULATION - FORM C
*********************************************************
;
%PROCESS1(tnexsmpl, newmerge, "FORM C");
%PROCESS1(enlsmpl, newmerge, "FORM C");
%PROCESS1(conus, newmerge, "FORM C");
%PROCESS1(agesmpl,  newmerge, "FORM C");
*%PROCESS1(raceethn,  selectc, "FORM A",
        "J:\&PERIOD\DATA\AFINAL\FMTLIB");
*%PROCESS1(ebg_com,  selectc, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
```

```
*%PROCESS1(enbgsmpl, selectc, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
*%PROCESS1(cacsmpl, selectc, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
*%PROCESS1(patcat, selectc, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");

*********************************************************
* PROCESS DOUBLE DOMAIN RESPONSE RATE TABULATION - FORM A
*********************************************************
;
*%PROCESS2(patcat, svcsmpl, selectc, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
*%PROCESS2(patcat, sexsmpl, selectc, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
*%PROCESS2(patcat, raceethn,selectc, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
*%PROCESS2(xregion, cacsmpl,selectc, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
*********************************************************
* PROCESS TRIPLE DOMAIN RESPONSE RATE TABULATION - FORM A
*********************************************************
;
*%PROCESS3(XXXXXXXX, XXXXXXXX, XXXXXXXX, XXXXXXXX, "FORM A",
         *"D:\KEITH\&PERIOD\DATA\FMTLIB");

                %end; *end of do for each quarter;
                %mend doit;
                %doit;
run;
```

E.15 WEIGHTING\CHILD\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).
*
*************************************************************************
*;
IF _N_ = 1 THEN DO;
   PUT; PUT;
   PUT @001 "TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY";
   PUT @001 "&DATE.";
   PUT;
   PUT "SUMMARY OF GROUP COUNTS: " &FORM;
   PUT "VARIABLE = " VARIABLE;
   PUT;
   PUT @050 "UNWEIGHTED COUNT"
       @100 "WEIGHTED COUNT"
      ;
   PUT @040 'FLR'
       @050 'FCR'
       @060 'FRR'
       @070 'POP'
       @090 'FLR'
       @100 'FCR'
       @110 'FRR'
       @120 '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;

DROP I;
RETAIN
   SN
   SN1
   SN11
   SN12
   SN2
   SN31
   SN4
   SN41
   SN42
   WN
   WN1
   WN11
   WN12
   WN2
   WN31
   WN4
   WN41
   WN42
  ;
```

E.16 WEIGHTING\CHILD\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.
*
*************************************************************************
*;

   *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 @040 FLR1  4.3
       @050 FCR1  4.3
       @060 FRR1  4.3
       @066 SN   7.0
       @090 FLR2  4.3
       @100 FCR2  4.3
       @110 FRR2  4.3
       @116 WN    7.0
      ;
```

E.17 WEIGHTING\ADDWGTSC.SAS - MERGE WEIGHTS ONTO DATA FILE.

```
*************************************************************************
*
* PROGRAM:  ADDWGTS.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (6077-220)
* PURPOSE:  MERGE THE FINAL WEIGHTS FILE WITH THE FINAL
*           QUESTIONNAIRE/SAMPLE FILE
*
* WRITTEN:  02/02/2001 BY KEITH RATHBUN
*
* INPUTS:   1) REPWT.sas7bdat  - Final/Replicated Weights file - FORM A
*           2) MERGEC.sas7bdat - Final FORM C Questionnaire/Sample File
*
* OUTPUTS:  1) HCSyyc_n.sas7bdat - Final FORM C Questionnaire/Sample File
*              combined with Final/Replicated Weights file - FORM A
*              where  yy = Year
*                      c = Child
*                      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) 8/4/2010 - MER added creation of private use file
*************************************************************************;
* Define global parameters.
*************************************************************************;
%LET DSN1 = HCS10C_1; * Public-Use data set;
%LET DSN2 = HCS10C_2; * Private-Use data set;
%LET DSNw = REPWT;   * Final and replicate weight file;
%LET QTR  = Q3FY2010; * Current Quarters data folder name;

************************************************************************
* Define libraries and options.
*************************************************************************;
LIBNAME IN1       "..\..\DATA\CFINAL";
LIBNAME IN2     "K:\&QTR";                  * Location of restricted-use sample file;
LIBNAME OUT      "..\..\DATA\CFINAL";
LIBNAME LIBRARY  "..\..\DATA\CFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

************************************************************************
* Merge the final weights file with the final Questionnaire/Sample file
*************************************************************************;
PROC SORT DATA=IN1.&DSNw   OUT=&DSNw;  BY MPRID; RUN;
PROC SORT DATA=IN1.MERGEC  OUT=MERGEC; BY MPRID; RUN;

PROC CONTENTS DATA=IN1.&DSNw;  Title 'repwt - New weights'; RUN;
PROC CONTENTS DATA=IN1.MERGEC; Title 'mergec'; RUN;

DATA OUT.&DSN1(DROP=ENRID DCATCH DAGEQY FIELDAGE PNLCATCD
                    DMEDELG MEDTYPE MBRRELCD MRTLSTAT)
       T_&DSN2;
   MERGE MERGEC(IN=IN2 DROP=MIQCNTL)
         &DSNw(IN=IN1 KEEP=MPRID BWT ADJWT POP WRWT WRWT1-WRWT60
               RENAME=(adjwt=ADJWT));
   BY MPRID;
   IF FNSTATUS = 11;

   IF NOT (IN1 AND IN2)
   THEN PUT "ERROR: NO MATCHING MPRID WITH MERGEC..sas7bdat AND &DSNw..sas7bdat";

   IF IN1 AND IN2;
RUN;


************************************************************************
* Extract private-use variables from quarterly sample file.
*************************************************************************;
DATA SAMPLC02;
   SET IN2.SAMPLC02
       (KEEP=MPRID MASTCD MAPRZIP MAPRZIPX PNBRTHDT PGCD RANKCD);
RUN;
```

```
PROC SORT DATA=SAMPLC02; BY MPRID; RUN;

*************************************************************************
* Append private-use variables to the public-use file.
*************************************************************************;
DATA OUT.&DSN2;
   MERGE T_&DSN2(IN=IN1) SAMPLC02(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2; *KEEP only eligible respondents;
RUN;


TITLE1 "DOD Quarterly Health Care Survey (6663-300)";
TITLE2 "Program Name: ADDWGTSC.SAS";
TITLE3 "Program Inputs: Mergec.sas7bdat -- &DSNw..sas7bdat";
TITLE4 "Program Outputs: &DSN1..sas7bdat/XPT";
PROC CONTENTS DATA=OUT.&DSN1; RUN;

*************************************************************************
* Output the restricted use CONTENTS text file for delivery with the
* database CD.
*************************************************************************;
PROC PRINTTO PRINT="&DSN2..TXT" NEW; RUN;
OPTIONS PAGENO=1;
TITLE4 "Program Outputs: &DSN2..sas7bdat/XPT";
PROC CONTENTS DATA=OUT.&DSN2; RUN;

*************************************************************************
* Define and generate SAS Transport file.
*************************************************************************;
LIBNAME XFILE1 XPORT "..\..\data\cfinal\&DSN1..XPT";
PROC COPY IN=OUT OUT=XFILE1; * Converts input file to transport file;
          SELECT &DSN1;      * Selects sas7bdat file to copy;
RUN;

LIBNAME XFILE2 XPORT "..\..\data\cfinal\&DSN2..XPT";
PROC COPY IN=OUT OUT=XFILE2; * Converts input file to transport file;
          SELECT &DSN2;      * Selects sas7bdat file to copy;
RUN;

*************************************************************************
* END IT HERE
* Note that SPSS and STATA exports are not being created here because
* proc export does not support the library/formatted file option needed
* for delivery.  The code below is kept just in case this option is
* supported at a later time.
*************************************************************************;
ENDSAS;
*************************************************************************
* Generate Dataset in STATA format.
*************************************************************************;
PROC EXPORT
   DATA = OUT.&DSN1
   OUTFILE = "..\..\DATA\CFINAL\&DSN1..DTA"
   DBMS = DTA
   REPLACE;
RUN;

PROC EXPORT
   DATA = OUT.&DSN2
   OUTFILE = "..\..\DATA\CFINAL\&DSN2..DTA"
   DBMS = DTA
   REPLACE;
RUN;

*************************************************************************
* Generate Dataset in SPSS format.
*************************************************************************;
PROC EXPORT
   DATA = OUT.&DSN1
   OUTFILE = "..\..\DATA\CFINAL\&DSN1..SAV"
   DBMS = SAV
   REPLACE;
RUN;
```

```
PROC EXPORT
   DATA = OUT.&DSN2
   OUTFILE = "..\..\DATA\CFINAL\&DSN2..SAV"
   DBMS = SAV
   REPLACE;
RUN;
```

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APPENDIX F

CHILD SAMPLING STRATIFICATION SUMMARY

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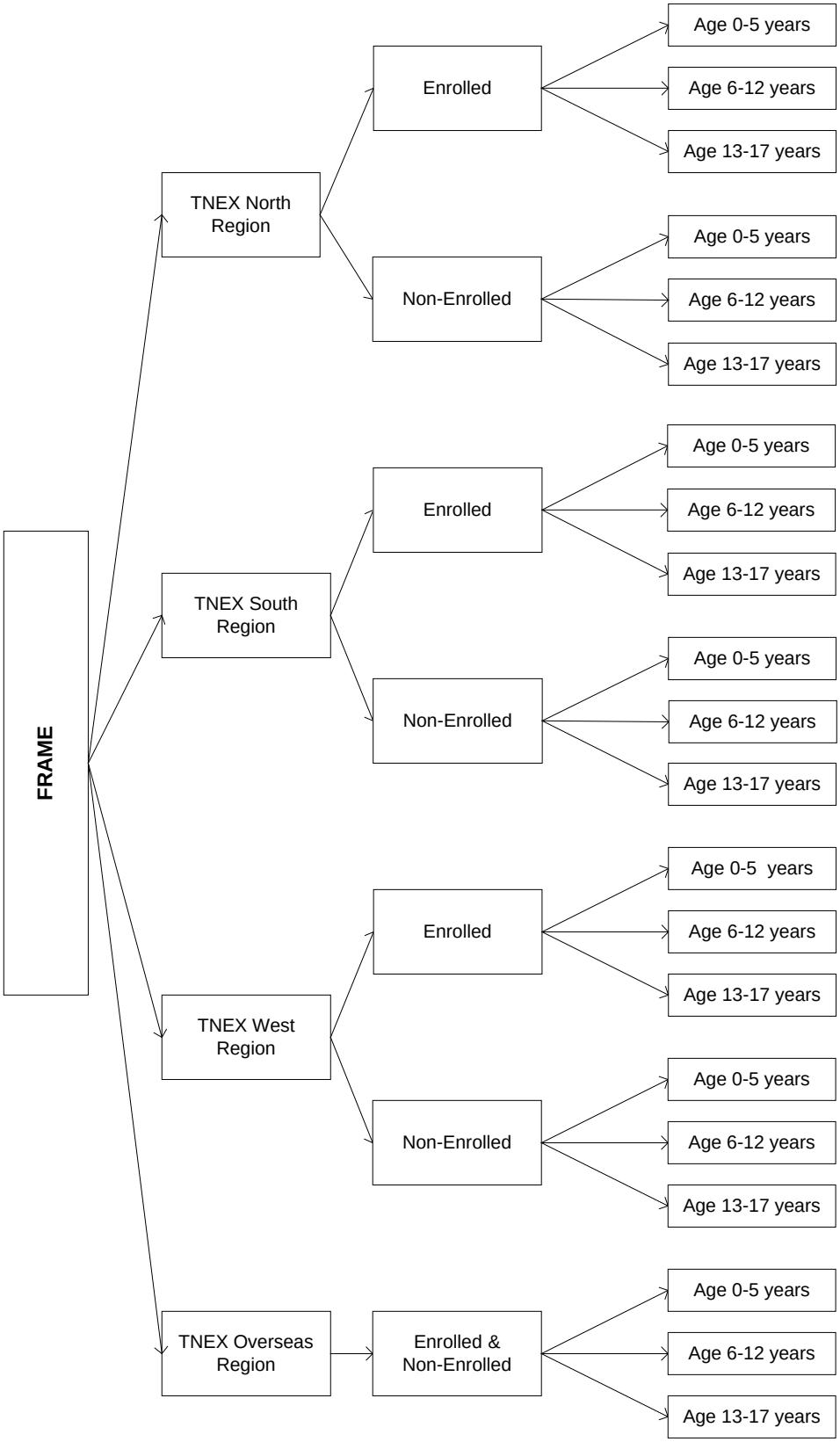
HCSDB FY2010 CHILD SAMPLING SCHEME



NOTE on Precision Requirement:
For CONUS sampling strata, 95% HL =0.05, and for OCONUS sampling strata, 95% HL = 0.065;
For CONUS region, 95% HL=0.02, and for OCONUS region, 95% HL= 0.05;
For the whole sample, 95% HL=0.01.