APPENDIX F

SAS CODE FOR FILE DEVELOPMENT

1. CREATE POST-STRATIFICATION VARIABLES

A. POST-STRATIFICATION (QUARTER I AND QUARTER II ONLY)

```
  ****************************************************************************
*
* PROGRAM: WRWT.SAS
* TASK:    2000 QUARTERLY DOD HEALTH CARE SURVEY
* PURPOSE: CALCULATE THE FINAL WEIGHT.
*          WEIGHTS FOR DOD SURVEY.
*          DOD HEALTH CARE SURVEY FILE.
*          REQUESTED BY DON JANG.
* WRITTEN: 11/09/1999 BY KEITH RATHBUN
* Updated: 02/28/2001 by Darryl V. Creel
*
* INPUTS:  MERGEQ.SD2
*          COLLAPSE.INC
*
* OUTPUTS: WRWT.SD2
*          WRWT_CHK.TXT
*
*****************************************************************************
*;

libname in_f 'd:\projects\8687-420\data';
LIBNAME IN  "j:\dod\q1_2000\data\afinal";
LIBNAME OUT "j:\dod\q1_2000\data\afinal";
libname library "j:\dod\q1_2000\data\afinal\fmtlib";

OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=0 NOCENTER mprint mlogic symbolgen;

title1 'DoD Quarterly Survey of Health Beneficiaries';
title2 'Calculate the Final Weights';
title3 'Program: WRWT.SAS by Darryl V. Creel';


*****************************************************************************
* Calculate final weight based on user-specified domains.
*****************************************************************************;

%MACRO PROCESS(DOMAIN,FORM,INPT);

   *** Initial Information. ***;

   title5 'FRAMEA.SD2 Count';

   proc freq data=in_f.framea;
   table enbgsmpl / list missing;
   run;

   title5 'MERGEQ.SD2 Counts Using BWT as the Weight';

   proc freq data=in.&inpt.;
   table enbgsmpl fnstatus / list missing;
   weight bwt;
   run;

   title5 'MERGEQ.SD2 Counts';

   proc freq data=in.&inpt.;
   table enbgsmpl fnstatus / list missing;
   run;

   *** Create the adjustment cells. ***;

   data out.&inpt;
   set in.&inpt.(KEEP = MPRID FNSTATUS BWT enbgsmpl cacsmpl stratum);
   adj_cell = stratum;
   %include "D:\Projects\8687-420\Weight\collapse.inc";
   run;

PROC SORT DATA=in.&inpt OUT=&INPT.;
```

```
BY &DOMAIN.;
RUN;

*************************************************************************
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
*************************************************************************;
DATA CELLSA1  (KEEP=SUMBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 &domain.)
     MPRIDSA1 (KEEP=MPRID FNSTATUS BWT &DOMAIN. enbgsmpl cacsmpl)
    ;
   SET &INPT.;
   BY &DOMAIN;

   IF FIRST.&DOMAIN. THEN DO;
      CELLCNT = 0;
      cntg1   = 0;
      cntg2   = 0;
      cntg3   = 0;
      SUMBWT  = 0.0;
      SUMG1   = 0.0;
      SUMG2   = 0.0;
      SUMG3   = 0.0;
      A1 = 0.0;
   END;
   CELLCNT + 1;

   ******************************************************
   * Accumulate total weight sum
   ******************************************************;

   SUMBWT + BWT;

   ******************************************************
   * Accumulate group 1 weight sum
   ******************************************************;

   IF FNSTATUS IN (11,12) THEN
      do;
         SUMG1 + BWT;
         cntg1 + 1;
      end;

   ******************************************************
   * Accumulate group 2 weight sum
   ******************************************************;

   ELSE IF FNSTATUS in (20,30) THEN
      do;
         SUMG2 + BWT;
         cntg2 + 1;
      end;

   ******************************************************
   * Accumulate group 3 weight sum
   ******************************************************;

   ELSE IF FNSTATUS in (41,42) THEN
      do;
         SUMG3 + BWT;
         cntg3 + 1;
      end;

   RETAIN SUMBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 MPRID;

   IF LAST.&DOMAIN. THEN DO;
      A1 = SUMBWT/(SUMG1 + SUMG2);
      OUTPUT CELLSA1;
   END;

   OUTPUT MPRIDSA1;
```

```
RUN;

title5 'Check for CELLSA1 Data Set';

proc print data=cellsa1;
var adj_cell cntg1-cntg3 cellcnt sumg1-sumg3 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 sumbwt sumg1 sumg2 sumg3;
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 (11,12,20,30) then adj1 = a1;
   else adj1 = 0;
adj_wt1 = adj1 * bwt;
run;

title5 'Check for ADJ_ONE Data Set';

proc freq data=adj_one;
table adj_cell*fnstatus*adj1 / list missing;
run;

proc means data=adj_one n sum;
class fnstatus;
var adj_wt1;
run;

proc means data=adj_one n sum;
class enbgsmpl;
var adj_wt1;
run;


*****************************************************************************
* Calculate adjustment factor A2 for each cell.
* This is the Nonresponse adjustment and creates the final weight (WRWT).
*****************************************************************************;

proc sort data=adj_one;
by &domain.;
run;

DATA CELLSA2 (KEEP= &domain. NUMER DENOM numercnt denomcnt A2);
   set adj_one ;
   BY &domain.;

   IF FIRST.&domain. THEN DO;
      A2 = 0.0;
      NUMER = 0.0;
      DENOM = 0.0;
      numercnt = 0;
      denomcnt = 0;
   END;


   RETAIN NUMER DENOM A2 numercnt denomcnt;

   IF FNSTATUS IN (11,12,20) THEN
```

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      do;
         NUMER + BWT*A1;
         numercnt + 1;
      end;

   IF FNSTATUS = 11 THEN
      do;
         DENOM + BWT*A1;
         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 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 = 30 then adj2 = 1;
   else adj2 = 0;
wrwt = adj2 * adj_wt1;
label wrwt = 'Final Weight';
KEEP MPRID fnstatus adj1 adj2 wrwt adj_cell enbgsmpl;
run;

title5 'Check for ADJ_TWO Data Set';

proc freq data=adj_two;
table adj_cell*fnstatus*adj2 / list missing;
run;

proc means data=adj_two n sum;
class fnstatus;
var wrwt;
run;

proc means data=adj_two n sum;
class enbgsmpl;
var wrwt;
run;

data adj_two;
set adj_two(drop=fnstatus enbgsmpl);
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 (WRWT)
*****************************************************************************;
DATA OUT.WRWT;
   MERGE adj_two &INPT.;
   BY MPRID;
RUN;

title5 'Checks for WRWT Data Set';

proc means data=in.wrwt n sum;
class fnstatus;
var wrwt;
run;

proc means data=in.wrwt n sum;
class adj_cell;
var bwt wrwt;
run;

proc sort data=in.wrwt out=chk;
by adj_cell fnstatus;
run;

data sub_chk;
set chk(keep = adj_cell fnstatus bwt adj1 adj2 wrwt);
by adj_cell fnstatus;
prodadjs = adj1 * adj2;
retain cellcnt sumwrwt;
if first.fnstatus then
   do;
      cellcnt = 1;
      sumwrwt = wrwt;
   end;
   else
      do;
         cellcnt = cellcnt +1;
         sumwrwt = sumwrwt + wrwt;
      end;
if last.fnstatus then output sub_chk;
run;

proc print data=sub_chk;
var adj_cell fnstatus bwt adj1 adj2 prodadjs wrwt cellcnt sumwrwt;
sum cellcnt sumwrwt;
run;

proc univariate data=sub_chk normal plot;
where prodadjs ne 0;
var prodadjs;
run;

proc univariate data=sub_chk normal plot;
where wrwt ne 0;
var wrwt;
run;

************************************;
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```
*** Calculate the Design Effects ***;
************************************;

*** For Catchment Area ***;

title5 'Design Effects for CACSMPL';

proc sort data=in.wrwt out=wrwt;
by cacsmpl fnstatus;
run;

data deff_c;
set wrwt;
by cacsmpl fnstatus;
retain n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r;
if first.cacsmpl = 1 then
   do;
      n_s = 1;
      sum_w_s = bwt;
      sumsqw_s = bwt * bwt;
      if fnstatus = 11 then
         do;
            n_r = 1;
            sum_w_r = wrwt;
            sumsqw_r = wrwt * wrwt;
            n_nr = 0;
         end;
      else
         do;
            n_r = 0;
            sum_w_r = 0;
            sumsqw_r = 0;
            n_nr = 1;
         end;
   end;
   else
      do;
        n_s = n_s + 1;
        sum_w_s = sum_w_s + bwt;
        sumsqw_s = sumsqw_s + (bwt * bwt);
        if fnstatus = 11 then
           do;
              n_r = n_r + 1;
              sum_w_r = sum_w_r + wrwt;
              sumsqw_r = sumsqw_r + (wrwt * wrwt);
              n_nr = n_nr + 0;
           end;
           else n_nr = n_nr + 1;
      end;
deff_s = (n_s * sumsqw_s) / (sum_w_s * sum_w_s);
deff_r = (n_r * sumsqw_r) / (sum_w_r * sum_w_r);
deff_d = deff_s - deff_r;
deff_f = deff_s / deff_r;
if last.cacsmpl = 1 then output deff_c;
run;

proc print data=deff_c;
var cacsmpl n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r deff_s deff_r deff_d deff_f;
sum n_s n_r n_nr sum_w_s sum_w_r;
run;

*** For Enrollee/Beneficiary Groups ***;

title5 'Design Effects for ENBGSMPL';

proc sort data=wrwt out=wrwt;
by enbgsmpl fnstatus;
run;

data deff_e;
set wrwt;
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```
by enbgsmpl fnstatus;
retain n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r;
if first.enbgsmpl = 1 then
   do;
      n_s = 1;
      sum_w_s = bwt;
      sumsqw_s = bwt * bwt;
      if fnstatus = 11 then
         do;
            n_r = 1;
            sum_w_r = wrwt;
            sumsqw_r = wrwt * wrwt;
            n_nr = 0;
         end;
      else
         do;
            n_r = 0;
            sum_w_r = 0;
            sumsqw_r = 0;
            n_nr = 1;
         end;
   end;
   else
      do;
        n_s = n_s + 1;
        sum_w_s = sum_w_s + bwt;
        sumsqw_s = sumsqw_s + (bwt * bwt);
        if fnstatus = 11 then
           do;
              n_r = n_r + 1;
              sum_w_r = sum_w_r + wrwt;
              sumsqw_r = sumsqw_r + (wrwt * wrwt);
              n_nr = n_nr + 0;
           end;
           else n_nr = n_nr + 1;
      end;
deff_s = (n_s * sumsqw_s) / (sum_w_s * sum_w_s);
deff_r = (n_r * sumsqw_r) / (sum_w_r * sum_w_r);
deff_d = deff_s - deff_r;
deff_f = deff_s / deff_r;
if last.enbgsmpl = 1 then output deff_e;
run;

proc print data=deff_e;
var enbgsmpl n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r deff_s deff_r deff_d deff_f;
sum n_s n_r n_nr sum_w_s sum_w_r;
run;

*** Overall ***;

title5 'Design Effects';

data deff_o;
set wrwt;
retain n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r 0;
n_s = n_s + 1;
sum_w_s = sum_w_s + bwt;
sumsqw_s = sumsqw_s + (bwt * bwt);
if fnstatus = 11 then
   do;
      n_r = n_r + 1;
      sum_w_r = sum_w_r + wrwt;
      sumsqw_r = sumsqw_r + (wrwt * wrwt);
      n_nr = n_nr + 0;
   end;
   else n_nr = n_nr + 1;
deff_s = (n_s * sumsqw_s) / (sum_w_s * sum_w_s);
deff_r = (n_r * sumsqw_r) / (sum_w_r * sum_w_r);
deff_d = deff_s - deff_r;
deff_f = deff_s / deff_r;
if _n_ = 45000 then output deff_o;
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```
run;

proc print data=deff_o;
var n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r deff_s deff_r deff_d deff_f;
sum n_s n_r n_nr sum_w_s sum_w_r;
run;

title5 'Checks for Keith Rathbun';
title6 'Where FNSTATUS = 11';

proc means data=in.wrwt n sum;
where fnstatus = 11;
class enbgsmpl;
var wrwt;
output out=wrwt_chk n=n sum=sum;
run;

proc printto print='D:\Projects\8687-420\Weight\wrwt_chk.txt' new;
run;

proc print data=wrwt_chk;
run;

proc printto print=print;
run;

%MEND PROCESS;

*****************************************************************************
* Calculate final weight based on user-specified parameters.
*****************************************************************************;

%PROCESS(adj_cell,A,mergeq);


RUN;


*** Firt Round Collapsing ***;

select(adj_cell);
*   when ('0000106')                      adj_cell = '0000103';
*   when ('0000302','0000303','0000304') adj_cell = '0000301';
*   when ('0000306')                      adj_cell = '0000305';
   when ('0000503')                     adj_cell = '0000502';
*   when ('0000507','0000510')            adj_cell = '0000506';
   when ('0000603')                     adj_cell = '0000602';
   when ('0000606')                     adj_cell = '0000605';
*   when ('0000810')                      adj_cell = '0000806';
*   when ('0000902','0000903','0000904') adj_cell = '0000901';
*   when ('0000906')                      adj_cell = '0000905';
*   when ('0001010')                      adj_cell = '0001006';
   when ('0001403','0001404')           adj_cell = '0001402';
*   when ('0001406')                      adj_cell = '0001405';
*   when ('0001506')                      adj_cell = '0001503';
*   when ('0001906','0001910')            adj_cell = '0001903';
*   when ('0002403')                      adj_cell = '0002402';
*   when ('0002406')                      adj_cell = '0002405';
*   when ('0002610')                      adj_cell = '0002606';
*   when ('0002802','0002803','0002804') adj_cell = '0002801';
*   when ('0002806')                      adj_cell = '0002805';
*   when ('0002810')                      adj_cell = '0002807';
*   when ('0002903')                      adj_cell = '0002902';
*   when ('0002906')                      adj_cell = '0002905';
   when ('0003003','0003004')           adj_cell = '0003002';
*   when ('0003006','0003007','0003010') adj_cell = '0003002';
*   when ('0003203')                      adj_cell = '0003202';
*   when ('0003206')                      adj_cell = '0003205';
*   when ('0003303')                      adj_cell = '0003302';
*   when ('0003306')                      adj_cell = '0003305';
*   when ('0003510')                      adj_cell = '0003506';
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```
*   when ('0003607')                    adj_cell = '0003606';
*   when ('0003703')                    adj_cell = '0003702';
*   when ('0003706')                    adj_cell = '0003705';
*   when ('0003803')                    adj_cell = '0003802';
*   when ('0003806')                    adj_cell = '0003805';
*   when ('0003903','0003904')          adj_cell = '0003902';
*   when ('0003906')                    adj_cell = '0003905';
*   when ('0003910')                    adj_cell = '0003907';
*   when ('0004203')                    adj_cell = '0004202';
*   when ('0004206')                    adj_cell = '0004205';
*   when ('0004502','0004503','0004504') adj_cell = '0004501';
*   when ('0004506','0004507')          adj_cell = '0004505';
*   when ('0004610')                    adj_cell = '0004606';
   when ('0004703','0004704')          adj_cell = '0004702';
*   when ('0004706')                    adj_cell = '0004705';
*   when ('0004710')                    adj_cell = '0004707';
   when ('0004803','0004804')          adj_cell = '0004802';
*   when ('0004806')                    adj_cell = '0004805';
*   when ('0004810')                    adj_cell = '0004807';
   when ('0004903')                    adj_cell = '0004902';
   when ('0004906')                    adj_cell = '0004905';
*   when ('0005203','0005204')          adj_cell = '0005202';
*   when ('0005206','0005207')          adj_cell = '0005205';
*   when ('0005303','0005304')          adj_cell = '0005302';
*   when ('0005306')                    adj_cell = '0005305';
*   when ('0005310')                    adj_cell = '0005307';
   when ('0005503','0005504')          adj_cell = '0005502';
*   when ('0005506')                    adj_cell = '0005505';
*   when ('0005603','0005604')          adj_cell = '0005602';
*   when ('0005606','0005607','0005610') adj_cell = '0005605';
*   when ('0005703','0005704')          adj_cell = '0005702';
   when ('0005706')                    adj_cell = '0005705';
*   when ('0006003','0006004')          adj_cell = '0006002';
*   when ('0006006','0006007')          adj_cell = '0006005';
*   when ('0006103','0006104')          adj_cell = '0006102';
*   when ('0006106','0006107')          adj_cell = '0006105';
*   when ('0006210')                    adj_cell = '0006206';
   when ('0006403')                    adj_cell = '0006402';
*   when ('0006406')                    adj_cell = '0006405';
*   when ('0006410')                    adj_cell = '0006407';
*   when ('0006603')                    adj_cell = '0006602';
*   when ('0006606')                    adj_cell = '0006605';
*   when ('0006703')                    adj_cell = '0006702';
*   when ('0006706')                    adj_cell = '0006705';
*   when ('0006910')                    adj_cell = '0006906';
   when ('0007303','0007304')          adj_cell = '0007302';
*   when ('0007306')                    adj_cell = '0007305';
   when ('0007504')                    adj_cell = '0007503';
*   when ('0007506','0007507','0007510') adj_cell = '0007505';
*   when ('0007803','0007804')          adj_cell = '0007802';
*   when ('0007806','0007807','0007810') adj_cell = '0007805';
   when ('0007903','0007904') adj_cell = '0007902';
*   when ('0007906','0007907')          adj_cell = '0007905';
*   when ('0008310')                    adj_cell = '0008306';
*   when ('0008602','0008603','0008604') adj_cell = '0008601';
*   when ('0008606','0008607')          adj_cell = '0008605';
   when ('0008903','0008904')          adj_cell = '0008902';
*   when ('0008906','0008907','0008910') adj_cell = '0008905';
*   when ('0009010')                    adj_cell = '0009006';
*   when ('0009103')                    adj_cell = '0009102';
*   when ('0009106')                    adj_cell = '0009105';
   when ('0009203')                    adj_cell = '0009202';
*   when ('0009206')                    adj_cell = '0009205';
*   when ('0009304')                    adj_cell = '0009303';
*   when ('0009306','0009307','0009310') adj_cell = '0009305';
*   when ('0009502','0009503','0009504') adj_cell = '0009501';
*   when ('0009506')                    adj_cell = '0009505';
*   when ('0009510')                    adj_cell = '0009507';
*   when ('0009610')                    adj_cell = '0009606';
   when ('0009803')                    adj_cell = '0009802';
*   when ('0009806')                    adj_cell = '0009805';
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   when ('0010103')                     adj_cell = '0010102';
*   when ('0010106')                     adj_cell = '0010105';
*   when ('0010103')                     adj_cell = '0010102';
*   when ('0010106')                     adj_cell = '0010105';
*   when ('0010403','0010405','0010406') adj_cell = '0010402';
*   when ('0010503','0010505','0010506') adj_cell = '0010502';
   when ('0010803','0010804')           adj_cell = '0010802';
*   when ('0010806')                     adj_cell = '0010805';
*   when ('0010810')                     adj_cell = '0010807';
*   when ('0010902','0010903')           adj_cell = '0010901';
*   when ('0010906')                     adj_cell = '0010905';
*   when ('0011002','0011003','0011004') adj_cell = '0011001';
*   when ('0011006')                     adj_cell = '0011005';
*   when ('0011010')                     adj_cell = '0011007';
*   when ('0011202','0011203','0011204') adj_cell = '0011201';
*   when ('0011206')                     adj_cell = '0011205';
*   when ('0011210')                     adj_cell = '0011207';
   when ('0011303')                     adj_cell = '0011302';
   when ('0011306')                     adj_cell = '0011305';
*   when ('0011702','0011703')           adj_cell = '0011701';
*   when ('0011706')                     adj_cell = '0011705';
*   when ('0011906')                     adj_cell = '0011903';
*   when ('0012003','0012005','0012006') adj_cell = '0012002';
*   when ('0012103')                     adj_cell = '0012102';
   when ('0012106')                     adj_cell = '0012105';
*   when ('0012203')                     adj_cell = '0012201';
*   when ('0012210')                     adj_cell = '0012206';
*   when ('0012303')                     adj_cell = '0012302';
*   when ('0012306')                     adj_cell = '0012305';
*   when ('0012403','0012405','0012406') adj_cell = '0012402';
*   when ('0012503')                     adj_cell = '0012502';
*   when ('0012506')                     adj_cell = '0012505';
*   when ('0012603')                     adj_cell = '0012602';
*   when ('0012606')                     adj_cell = '0012605';
   when ('0012703')                     adj_cell = '0012702';
*   when ('0012810')                     adj_cell = '0012806';
   when ('0013103')                     adj_cell = '0013102';
*   when ('0013106','0013107','0013110') adj_cell = '0013105';
*   when ('0028006')                     adj_cell = '0028003';
*   when ('0028706')                     adj_cell = '0028703';
*   when ('0030606')                     adj_cell = '0030603';
*   when ('0032106')                     adj_cell = '0032103';
*   when ('0032606')                     adj_cell = '0032603';
*   when ('0033006')                     adj_cell = '0033003';
*   when ('0037810')                     adj_cell = '0037806';
*   when ('0038506')                     adj_cell = '0038503';
*   when ('0038706')                     adj_cell = '0038703';
*   when ('0039506')                     adj_cell = '0039503';
*   when ('0050803','0050806')           adj_cell = '0050801';
*   when ('0051106')                     adj_cell = '0051103';
   when ('0060603','0060604','0060605') adj_cell = '0060602';
   when ('0060606','0060607','0060610') adj_cell = '0060602';
   when ('0060703','0060704','0060705') adj_cell = '0060702';
   when ('0060706','0060707','0060710') adj_cell = '0060702';
   when ('0060903','0060904')           adj_cell = '0060902';
   when ('0060906','0060907','0060910') adj_cell = '0060902';
   when ('0061202','0061203','0061204') adj_cell = '0061201';
   when ('0061206','0061207','0061210') adj_cell = '0061201';
   when ('0061603','0061604')           adj_cell = '0061602';
   when ('0061606','0061607','0061610') adj_cell = '0061602';
   when ('0061703','0061704')           adj_cell = '0061702';
   when ('0061706','0061707','0061710') adj_cell = '0061702';
   when ('0062003','0062004')           adj_cell = '0062002';
   when ('0062006','0062007','0062010') adj_cell = '0062002';
   when ('0062103','0062104')           adj_cell = '0062102';
   when ('0062106','0062107','0062110') adj_cell = '0062102';
   when ('0062203','0062204')           adj_cell = '0062202';
   when ('0062206','0062207','0062210') adj_cell = '0062202';
   when ('0063304')                     adj_cell = '0063303';
   when ('0063306','0063307','0063310') adj_cell = '0063303';
   when ('0063804')                     adj_cell = '0063803';
```

```
   when ('0063807','0063810')           adj_cell = '0063803';
   when ('0064003','0064004')           adj_cell = '0064002';
   when ('0064006','0064007','0064010') adj_cell = '0064002';
   when ('0080403')                     adj_cell = '0080401';
*   when ('0080504','0080506')           adj_cell = '0080503';
   when ('0080510')                     adj_cell = '0080507';
   when ('0080606')                     adj_cell = '0080603';
*   when ('0158706')                     adj_cell = '0158703';
*   when ('0159203','0159206')           adj_cell = '0159201';
   when ('0164606')                     adj_cell = '0164601';
*   when ('0620110')                     adj_cell = '0620106';
*   when ('0713906')                     adj_cell = '0713903';
   when ('0714306')                     adj_cell = '0714303';
*   when ('0723606')                     adj_cell = '0723603';
*   when ('0728606','0728610')           adj_cell = '0728603';
*   when ('0729410')                     adj_cell = '0729406';
   when ('0990102')                     adj_cell = '0990101';
   when ('0990202')                     adj_cell = '0990201';
   when ('0990302')                     adj_cell = '0990301';
*   when ('0990307')                     adj_cell = '0990305';
   when ('0990402')                     adj_cell = '0990401';
   when ('0990502')                     adj_cell = '0990501';
   when ('0990602')                     adj_cell = '0990601';
   when ('0990702')                     adj_cell = '0990701';
*   when ('0990705','0990707')           adj_cell = '0990701';
   when ('0990802')                     adj_cell = '0990801';
*   when ('0990807')                     adj_cell = '0990805';
   when ('0990902')                     adj_cell = '0990901';
*   when ('0990906')                     adj_cell = '0990905';
   when ('0991002')                     adj_cell = '0991001';
*   when ('0991006')                     adj_cell = '0991005';
   when ('0991102')                     adj_cell = '0991101';
   when ('0991202')                     adj_cell = '0991201';
*   when ('0991207')                     adj_cell = '0991205';
   when ('0991302','0991303','0991304') adj_cell = '0991301';
   when ('0991306','0991307','0991310') adj_cell = '0991305';
   when ('0991502','0991503','0991504') adj_cell = '0991501';
   when ('0991506','0991507')           adj_cell = '0991505';
*   when ('0991510')                     adj_cell = '0991501';
   when ('0999902','0999904')           adj_cell = '0999901';
   when ('0999905','0999907','0999910') adj_cell = '0999901';
*   when ('2000107')                     adj_cell = '2000104';
   when ('2000210')                     adj_cell = '2000207';
*   when ('2000407')                     adj_cell = '2000404';
   when ('2000507')                     adj_cell = '2000504';
   when ('2000707')                     adj_cell = '2000704';
*   when ('2000807')                     adj_cell = '2000804';
   when ('2000907','2000910')           adj_cell = '2000904';
   when ('2001107')                     adj_cell = '2001104';
   otherwise;
end;

*** Second Round Collapsing ***;

select(adj_cell);
   when ('0000303','0000304')           adj_cell = '0000302';
   when ('0000306')                     adj_cell = '0000305';
   when ('0000504')                     adj_cell = '0000502';
   when ('0000507','0000510')           adj_cell = '0000506';
   when ('0000604')                     adj_cell = '0000602';
   when ('0000810')                     adj_cell = '0000806';
   when ('0000903','0000904')           adj_cell = '0000902';
   when ('0000906')                     adj_cell = '0000905';
   when ('0001010')                     adj_cell = '0001006';
   when ('0001910')                     adj_cell = '0001906';
   when ('0002406')                     adj_cell = '0002405';
   when ('0002610')                     adj_cell = '0002606';
   when ('0002803','0002804')           adj_cell = '0002802';
   when ('0002806')                     adj_cell = '0002805';
   when ('0003006','0003007')           adj_cell = '0003005';
   when ('0003203')                     adj_cell = '0003202';
```

```
when ('0003303')                    adj_cell = '0003302';
when ('0003306')                    adj_cell = '0003305';
when ('0003510')                    adj_cell = '0003506';
when ('0003607')                    adj_cell = '0003606';
when ('0003703')                    adj_cell = '0003702';
when ('0004203')                    adj_cell = '0004202';
when ('0004503','0004504')          adj_cell = '0004502';
when ('0004610')                    adj_cell = '0004606';
when ('0004706')                    adj_cell = '0004705';
when ('0004806')                    adj_cell = '0004805';
when ('0005203')                    adj_cell = '0005202';
when ('0005206')                    adj_cell = '0005205';
when ('0005303','0005304')          adj_cell = '0005302';
when ('0005306')                    adj_cell = '0005305';
when ('0005506')                    adj_cell = '0005505';
when ('0005603','0005604')          adj_cell = '0005602';
when ('0005606')                    adj_cell = '0005605';
when ('0005703','0005704')          adj_cell = '0005702';
when ('0006003','0006004')          adj_cell = '0006002';
when ('0006103','0006104')          adj_cell = '0006102';
when ('0006106')                    adj_cell = '0006105';
when ('0006210')                    adj_cell = '0006206';
when ('0006404')                    adj_cell = '0006402';
when ('0006406')                    adj_cell = '0006405';
when ('0006603')                    adj_cell = '0006602';
when ('0006910')                    adj_cell = '0006906';
when ('0007306')                    adj_cell = '0007305';
when ('0007503')                    adj_cell = '0007502';
when ('0007506')                    adj_cell = '0007505';
when ('0007803','0007804')          adj_cell = '0007802';
when ('0007806')                    adj_cell = '0007805';
when ('0007906')                    adj_cell = '0007905';
when ('0008310')                    adj_cell = '0008306';
when ('0008603','0008604')          adj_cell = '0008602';
when ('0008606')                    adj_cell = '0008605';
when ('0008906')                    adj_cell = '0008905';
when ('0009010')                    adj_cell = '0009006';
when ('0009106')                    adj_cell = '0009105';
when ('0009206')                    adj_cell = '0009205';
when ('0009304')                    adj_cell = '0009303';
when ('0009306')                    adj_cell = '0009305';
when ('0009310')                    adj_cell = '0009307';
when ('0009503','0009504')          adj_cell = '0009502';
when ('0009506')                    adj_cell = '0009505';
when ('0009610')                    adj_cell = '0009606';
when ('0010106')                    adj_cell = '0010105';
when ('0010303')                    adj_cell = '0010302';
when ('0010306')                    adj_cell = '0010305';
when ('0010403')                    adj_cell = '0010402';
when ('0010406')                    adj_cell = '0010405';
when ('0010503')                    adj_cell = '0010502';
when ('0010506')                    adj_cell = '0010505';
when ('0010806')                    adj_cell = '0010805';
when ('0010903')                    adj_cell = '0010902';
when ('0011004')                    adj_cell = '0011003';
when ('0011203','0011204')          adj_cell = '0011202';
when ('0011206')                    adj_cell = '0011205';
when ('0011703')                    adj_cell = '0011702';
when ('0011706')                    adj_cell = '0011705';
when ('0012003')                    adj_cell = '0012002';
when ('0012006')                    adj_cell = '0012005';
when ('0012103')                    adj_cell = '0012102';
when ('0012210')                    adj_cell = '0012206';
when ('0012303')                    adj_cell = '0012302';
when ('0012306')                    adj_cell = '0012305';
when ('0012403')                    adj_cell = '0012402';
when ('0012406')                    adj_cell = '0012405';
when ('0012603')                    adj_cell = '0012602';
when ('0012706')                    adj_cell = '0012705';
when ('0012810')                    adj_cell = '0012806';
when ('0013104')                    adj_cell = '0013102';
```

```
   when ('0013106')                     adj_cell = '0013105';
   when ('0033006')                     adj_cell = '0033003';
   when ('0037810')                     adj_cell = '0037806';
   when ('0050806')                     adj_cell = '0050803';
   when ('0080504','0080506','0080507') adj_cell = '0080503';
   when ('0159206')                     adj_cell = '0159203';
   when ('0620110')                     adj_cell = '0620106';
   when ('0713906')                     adj_cell = '0713903';
   when ('0728610')                     adj_cell = '0728606';
   when ('0729410')                     adj_cell = '0729406';
   when ('0990207')                     adj_cell = '0990205';
   when ('0990705')                     adj_cell = '0990704';
   when ('0990906')                     adj_cell = '0990905';
   when ('0991005','0991006')           adj_cell = '0991004';
   when ('0991105')                     adj_cell = '0991104';
   when ('2000407')                     adj_cell = '2000404';
   when ('2000710')                     adj_cell = '2000704';
   when ('2000807')                     adj_cell = '2000804';
   otherwise;
end;

*****************************************************************************
*
* PROGRAM: REPWT.SAS
* TASK:    2000 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE REPLICATE WEIGHTS FOR DOD SURVEY.
*          REQUESTED BY DON JANG.
* WRITTEN: 12/30/1999 BY KEITH RATHBUN
* Updated: 03/05/2001 by Darryl V. Creel
*
* INPUTS:  WRWT.SD2 - Final Weights file
*
* OUTPUTS: REPWT.SD2 - Replicate Weights File
*          REPWT_CHK.TXT - Summary Checks for Keith
*
*****************************************************************************
*;
LIBNAME IN   "j:\dod\q1_2000\data\afinal";
LIBNAME OUT  "j:\dod\q1_2000\data\afinal";
LIBNAME LIBRARY  "j:\dod\q1_2000\data\afinal\fmtlib";

OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=0 NOCENTER mlogic mprint symbolgen;

proc contents data=in.wrwt;
run;

%MACRO PROCESS(DOMAIN1,DOMAIN2,reps);

*********************************************************************
* Sort the final weights file by user-specified domains
*********************************************************************;

PROC SORT DATA=IN.wrwt(KEEP=FNSTATUS MPRID BWT &DOMAIN1. &DOMAIN2. stratum) OUT=wrwt;
     BY stratum &DOMAIN2.;
RUN;

*********************************************************************
* Append SUBSET index (I) to each observation
*********************************************************************;
DATA SUBSETS;
   SET wrwt;
   BY stratum &DOMAIN2.;

   IF _N_ = 1 OR MOD(_N_-1,&reps.) = 0 THEN SUBSET = 1;
   ELSE SUBSET + 1;

   RETAIN SUBSET;
   BBWT = BWT * (&reps. / (&reps. - 1));
RUN;

*********************************************************************
```

```
************************************************************************
* Generate JackKnife/replicated weights WRWT01-WRWT60
************************************************************************
*************************************************************************;
%DO I = 1 %TO &reps.;

DATA SUBSET;
   SET SUBSETS;
   IF &I. = SUBSET THEN DELETE; *Remove the current subset;
RUN;

*************************************************************************
* Calculate adjustment factor A1 for each cell
*************************************************************************;

proc sort data=subset;
by &domain1.;
run;


*************************************************************************
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
*************************************************************************;
DATA CELLSA1  (KEEP=SUMBBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 &domain1.)
     MPRIDSA1 (KEEP=MPRID FNSTATUS BBWT &DOMAIN1.)
    ;
   SET subset;
   BY &DOMAIN1.;

   IF FIRST.&DOMAIN1. THEN DO;
      CELLCNT = 0;
      cntg1   = 0;
      cntg2   = 0;
      cntg3   = 0;
      SUMBBWT  = 0.0;
      SUMG1   = 0.0;
      SUMG2   = 0.0;
      SUMG3   = 0.0;
      A1 = 0.0;
   END;
   CELLCNT + 1;

   ****************************************************
   * Accumulate total weight sum
   ****************************************************;

   SUMBBWT + BBWT;

   ****************************************************
   * Accumulate group 1 weight sum
   ****************************************************;

   IF FNSTATUS IN (11,12) THEN
      do;
         SUMG1 + BBWT;
         cntg1 + 1;
      end;

   ****************************************************
   * Accumulate group 2 weight sum
   ****************************************************;

   ELSE IF FNSTATUS in (20,30) THEN
      do;
         SUMG2 + BBWT;
         cntg2 + 1;
      end;

   ****************************************************
   * Accumulate group 3 weight sum
```

```
   ****************************************************;

   ELSE IF FNSTATUS in (41,42) THEN
      do;
         SUMG3 + BBWT;
         cntg3 + 1;
      end;

   RETAIN SUMBBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 MPRID;

   IF LAST.&DOMAIN1. THEN DO;
      A1 = SUMBBWT/(SUMG1 + SUMG2);
      OUTPUT CELLSA1;
   END;

   OUTPUT MPRIDSA1;

RUN;

proc sort data=mpridsa1;
by &domain1.;
run;

proc sort data=cellsa1;
by &domain1.;
run;

data adj_one;
merge mpridsa1 cellsa1;
by &domain1.;
if fnstatus in (11,12,20,30) then adj1 = a1;
   else adj1 = 0;
adj_wt1 = adj1 * bbwt;
run;


*****************************************************************************
* Calculate adjustment factor A2 for each cell.
* This is the Nonresponse adjustment and creates the final weight (WRWT).
*****************************************************************************;

proc sort data=adj_one;
by &domain1.;
run;

DATA CELLSA2 (KEEP= &domain1. NUMER DENOM numercnt denomcnt A2);
   set adj_one;
   BY &domain1.;

   IF FIRST.&domain1. THEN DO;
      A2 = 0.0;
      NUMER = 0.0;
      DENOM = 0.0;
      numercnt = 0;
      denomcnt = 0;
   END;


   RETAIN NUMER DENOM A2 numercnt denomcnt;

   IF FNSTATUS IN (11,12,20) THEN
      do;
         NUMER + BBWT*A1;
         numercnt + 1;
      end;

   IF FNSTATUS = 11 THEN
      do;
         DENOM + BBWT*A1;
         denomcnt + 1;
      end;
```

```
   IF LAST.&domain1. THEN DO;
      A2 = NUMER/DENOM;
      OUTPUT CELLSA2;
   END;

RUN;

proc sort data=adj_one;
by &domain1.;
run;

proc sort data=cellsa2;
by &domain1.;
run;

data subset&i.;
merge adj_one cellsa2;
by &domain1.;
if fnstatus = 11 then adj2 = a2;
   else if fnstatus = 30 then adj2 = 1;
   else adj2 = 0;
jkweight = adj2 * adj_wt1;
subset = &i.;
KEEP MPRID subset jkweight;
run;

proc sort data=subset&i.;
by mprid;
run;

***************************************************************************
***************************************************************************
* End of JackKnife/replicated weights WRWT01-WRWT60 assignments
***************************************************************************
***************************************************************************;
%END;

***************************************************************************
* Combine all of the JackKnife weight subsets by MPRID
***************************************************************************;
DATA ALLSETS;
   SET SUBSET1   SUBSET2   SUBSET3   SUBSET4   SUBSET5
       SUBSET6   SUBSET7   SUBSET8   SUBSET9   SUBSET10
       SUBSET11  SUBSET12  SUBSET13  SUBSET14  SUBSET15
       SUBSET16  SUBSET17  SUBSET18  SUBSET19  SUBSET20
       SUBSET21  SUBSET22  SUBSET23  SUBSET24  SUBSET25
       SUBSET26  SUBSET27  SUBSET28  SUBSET29  SUBSET30
       SUBSET31  SUBSET32  SUBSET33  SUBSET34  SUBSET35
       SUBSET36  SUBSET37  SUBSET38  SUBSET39  SUBSET40
       SUBSET41  SUBSET42  SUBSET43  SUBSET44  SUBSET45
       SUBSET46  SUBSET47  SUBSET48  SUBSET49  SUBSET50
       SUBSET51  SUBSET52  SUBSET53  SUBSET54  SUBSET55
       SUBSET56  SUBSET57  SUBSET58  SUBSET59  SUBSET60
   ;
   BY MPRID;
   ARRAY JKWT(&reps.) WRWT1-WRWT&reps.; RETAIN WRWT1-WRWT&reps.;
   IF FIRST.MPRID THEN DO;
      DO I = 1 TO &reps.; DROP I;
         JKWT(I) = . ;
      END;
   END;
   JKWT(SUBSET) = JKWEIGHT;
   IF LAST.MPRID THEN OUTPUT;
   KEEP MPRID WRWT1-WRWT&reps.;
RUN;

***************************************************************************
* Sort the original data, get the final weight (WRWT), append the
* JackKnife/Replicated weights (WRWT1-WRWT60), and label variables.
***************************************************************************;
```

```
PROC SORT DATA=IN.wrwt
          OUT=wrwt;
     BY MPRID;
RUN;

proc sort data=allsets;
by mprid;
run;

DATA OUT.repwt;
   MERGE wrwt 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 "2000 DoD Quarterly Health Survey Final/Replicated Weights";
title2 "Checks for the Replicate Weights";
TITLE3 "Program Name: REPWT.SAS By Darryl V. Creel";

PROC CONTENTS DATA=OUT.repwt;
run;

PROC MEANS DATA=OUT.repwt n sum;
VAR  WRWT WRWT1-WRWT&reps.;
RUN;

PROC SORT DATA=OUT.repwt;
BY MPRID;
RUN;

DATA OUT.repwt;
   SET OUT.repwt;
   BY MPRID;

   ARRAY WGTS(&reps.) WRWT1-WRWT&reps.;
   DO I = 1 TO &reps.; DROP I;
      IF WGTS(I) EQ . THEN WGTS(I) = 0;
   END;

   KEEP MPRID BWT WRWT WRWT1-WRWT&reps. fnstatus &domain1.;
RUN;

PROC MEANS DATA=OUT.repwt n sum;
VAR  WRWT WRWT1-WRWT&reps.;
output out=sums sum(wrwt wrwt1-wrwt&reps.) = wrwt wrwt1-wrwt&reps.;
RUN;

proc transpose data=sums out=t_sums;
var wrwt wrwt1-wrwt&reps.;
run;

proc univariate data=t_sums normal plot;
var col1;
run;

title5 'Checks for Keith Rathbun';
title6 'Where FNSTATUS = 11';

proc means data=in.repwt n sum;
where fnstatus = 11;
var wrwt wrwt1-wrwt&reps.;
output out=rpwt_chk sum(wrwt wrwt1-wrwt&reps.) = wrwt wrwt1-wrwt&reps.;
run;

proc printto print='D:\Projects\8687-420\Weight\repwt_chk.txt' new;
run;

proc print data=rpwt_chk;
run;

proc printto print=print;
run;

%MEND process;

%PROCESS(adj_cell,mprid,60);


*****************************************************************
***
```

```
*** Project:        DoD Quarterly Sampling - Poststratification
*** Project Number: 8687
*** Task Number:    610
***
*** Purpose: Postratification
***
*** Client:     Don Jang
*** Date:       April 5, 2001
*** Due Date:   April 6, 2001
*** Programmer: Darryl V. Creel
***
*** Program: d:\projects\8687-420\weight\POSTSTR4.SAS,
***          Postratification
***
*** Inputs: j:\dod\q1_2000\data\afinal\HCS001_1.SD2,
***         Survey Data
***         d:\projects\8687-420\data\FRAMEA.SAS,
***         Frame Data
***         d:\projects\8687-420\data\CONSVAR0.SAS,
***         Variable Creation
***
*** Outputs: d:\projects\8687-420\data\POSTSTR.SAS,
***          Poststratification
***
*** Notes: None
***
*****************************************************************;

*** Setup the titles. ***;
title1 'DoD Quarterly Sampling - Poststratification';
title2 'Program: d:\projects\8687-420\weight\POSTSTR4.SAS by Darryl V. Creel';

*** Setup the options. ***;
options ls = 96 ps = 54 nocenter;

*** Setup the paths where the files are located. ***;
libname inframe 'd:\projects\8687-420\data';
libname out 'd:\projects\8687-420\data';
libname insurvey 'j:\dod\q1_2000\data\afinal';
libname library 'j:\dod\q1_2000\data\afinal\fmtlib';

*** Look at the contents of the files. ***;

title4 'Information for Weight Data';

***proc contents data=insurvey.wrwt;
***run;

data wrwt;
set insurvey.wrwt (keep = mprid adj_cell wrwt);
run;

proc sort data=wrwt;
by mprid;
run;

title4 'Information from Survey Data';

***proc contents data=insurvey.mergeq;
***run;

data mergeq;
set insurvey.mergeq;
run;

proc sort data=mergeq;
by mprid;
run;

*** Merge the weight and survey data. ***;
```

```
data survey;
merge mergeq wrwt;
by mprid;
run;

*** Create the sample data set. ***;

data sample;
set survey;
where fnstatus in (11,30);
if xsexa = . then xsexa = 1;
if xbnfgrp = . then
   do;
      IF ENBGSMPL = '01' THEN xbnfgrp = 1;
         ELSE IF ENBGSMPL IN ('02','03','04') THEN XBNFGRP = 2;
         ELSE IF ENBGSMPL IN ('05','06','07') THEN XBNFGRP = 3;
         ELSE IF ENBGSMPL IN ('08','09','10') THEN XBNFGRP = 4;
   end;
select(xregion);
   when ( 1) pregion = '01';
   when ( 2) pregion = '02';
   when ( 3) pregion = '03';
   when ( 4) pregion = '04';
   when ( 5) pregion = '05';
   when ( 6) pregion = '06';
   when ( 7) pregion = '78';
   when ( 8) pregion = '78';
   when ( 9) pregion = '09';
   when (10) pregion = '10';
   when (11) pregion = '11';
   when (12) pregion = '12';
   when (13) pregion = '13';
   when (14) pregion = '14';
   when (15) pregion = '15';
   when (16) pregion = '16';
   otherwise pregion = 'MS';
end;
if ('9901' <= cacsmpl <= '9999') or (subdemo not in (' ','a')) then poststra = '0' ||
adj_cell;
else IF SUBDEMO in (' ','a') then do;
   If XBNFGRP = 1 and XSEXA = 1 then POSTSTRA = '1' || pregion || cacsmpl || '1';
      ELSE If XBNFGRP = 1 and XSEXA = 2 then POSTSTRA = '1' || pregion || cacsmpl || '2';
      ELSE If XBNFGRP = 2 and PCM = 'MTF' and XSEXA = 1 then POSTSTRA = '1' || pregion ||
cacsmpl || '3';
      ELSE If XBNFGRP = 2 and PCM = 'MTF' and XSEXA = 2 then POSTSTRA = '1' || pregion ||
cacsmpl || '4';
      ELSE If XBNFGRP = 2 and PCM = 'CIV' then POSTSTRA = '1' || PREGION || cacsmpl ||
'5';
      ELSE If XBNFGRP = 2 and PCM = ' ' then POSTSTRA = '1' || PREGION || cacsmpl || '6';
      ELSE If XBNFGRP in (3, 4) and PCM = 'MTF' then POSTSTRA = '1' || PREGION || cacsmpl
|| '7';
      ELSE If XBNFGRP in (3, 4) and PCM = 'CIV' then POSTSTRA = '1' || PREGION || cacsmpl
|| '8';
      ELSE If XBNFGRP in (3, 4) and PCM = ' ' then POSTSTRA = '1' || PREGION || cacsmpl
|| '9';
   End;
key = substr(poststra,1,7);
run;

title4 'Information for the Sample';

proc freq data=sample;
table poststra / list missing noprint out=out_samp;
weight wrwt;
format _all_;
run;

***proc freq data=sample;
***where cacsmpl in ('1646','0534');
***table poststra*cacsmpl*stratum / list missing;
***format _all_;
```

```
***run;

data samp (rename = (count = sum_wrwt));
set out_samp (keep = poststra count);
run;

title4 'Information from Frame Data';

***proc contents data=inframe.framea;
***run;

*** Create the necessary variables on the frame. ***;
*** XBNFGRP-Beneficiary Group that excludes those 65 and over-Active Duty
           and Family Members of Active Duty ***;
data frame;
set inframe.framea;
adj_cell = stratum;
%include "D:\Projects\8687-420\Weight\collapse.inc";
if pnsexcd = "F" then xsexa = 2;
   else xsexa = 1;
IF ENBGSMPL = '01' THEN xbnfgrp = 1;
   ELSE IF ENBGSMPL IN ('02','03','04') THEN XBNFGRP = 2;
   ELSE IF ENBGSMPL IN ('05','06','07') THEN XBNFGRP = 3;
   ELSE IF ENBGSMPL IN ('08','09','10') THEN XBNFGRP = 4;
%include 'd:\projects\8687-420\weight\CONSVAR0.SAS';
select (cacsmpl);
   when ('0068') cacsmpl = '0066';
   when ('0413') cacsmpl = '0066';
   when ('0097') cacsmpl = '0098';
   when ('0114') cacsmpl = '0117';
   when ('0363') cacsmpl = '0109';
   when ('0365') cacsmpl = '0117';
   otherwise;
end;
if ('9901' <= cacsmpl <= '9999') or (subdemo not in (' ','a')) then poststra = '0' ||
adj_cell;
else IF SUBDEMO in (' ','a') then do;
   If XBNFGRP = 1 and XSEXA = 1 then POSTSTRA = '1' || pregion || cacsmpl || '1';
      ELSE If XBNFGRP = 1 and XSEXA = 2 then POSTSTRA = '1' || pregion || cacsmpl || '2';
      ELSE If XBNFGRP = 2 and PCM = 'MTF' and XSEXA = 1 then POSTSTRA = '1' || pregion ||
cacsmpl || '3';
      ELSE If XBNFGRP = 2 and PCM = 'MTF' and XSEXA = 2 then POSTSTRA = '1' || pregion ||
cacsmpl || '4';
      ELSE If XBNFGRP = 2 and PCM = 'CIV' then POSTSTRA = '1' || PREGION || cacsmpl ||
'5';
      ELSE If XBNFGRP = 2 and PCM = ' ' then POSTSTRA = '1' || PREGION || cacsmpl || '6';
      ELSE If XBNFGRP in (3, 4) and PCM = 'MTF' then POSTSTRA = '1' || PREGION || cacsmpl
|| '7';
      ELSE If XBNFGRP in (3, 4) and PCM = 'CIV' then POSTSTRA = '1' || PREGION || cacsmpl
|| '8';
      ELSE If XBNFGRP in (3, 4) and PCM = ' ' then POSTSTRA = '1' || PREGION || cacsmpl
|| '9';
   End;
run;

proc freq data=frame;
table poststra / list missing noprint out = out_fram;
format _all_;
run;

***proc freq data=frame;
***where poststra in ('10100687','10104137','10600977','10601147','10603637','10603657');
***table poststra*cacsmpl*stratum*geocell / list missing;
***run;

***proc freq data=frame;
***where cacsmpl in ('1646','0534');
***table poststra*cacsmpl*stratum*geocell / list missing;
***run;
```

```
data fram (rename = (count = sum_pop));
set out_fram (keep = poststra count);
run;


***** Create the adjustment ratio. *****;

proc sort data=samp;
by poststra;
run;

proc sort data=fram;
by poststra;
run;

data adjrat;
merge samp fram;
by poststra;
adjratio = sum_pop / sum_wrwt;
run;

***** Caluclate number of respondents. *****;

title4 'Number of Respondents';

proc freq data=sample;
where fnstatus = 11;
table poststra / list missing noprint out = out_resp;
run;

data resp (rename = (count = sum_resp));
set out_resp (keep = poststra count);
run;

proc sort data=resp;
by poststra;
run;

data final;
merge adjrat resp;
by poststra;
key = substr(poststra,1,7);
lastdig = substr(poststra,8,1);
run;

title4 'Final Inforamtion';

proc print data=final;
var poststra key sum_pop sum_wrwt adjratio sum_resp;
sum sum_wrwt sum_pop sum_resp;
run;

title4 'Active Duty Adjustment Factors';

data sub_code;
set final;
firstdig = substr(poststra,1,1);
region = substr(poststra,2,2);
lastdig = substr(poststra,8,1);
select (region);
   when ('01')
      do;
         if adjratio < 1.15 then sub_reg = '011';
            else if adjratio < 1.26 then sub_reg = '012';
            else if adjratio < 1.4 then sub_reg = '013';
            else sub_reg = '014';
      end;
   when ('02')
      do;
         if adjratio < 1.05 then sub_reg = '021';
            else if adjratio < 1.25 then sub_reg = '022';
```

```
         else if adjratio < 1.4 then sub_reg = '023';
         else if adjratio < 1.5 then sub_reg = '024';
         else if adjratio < 1.6 then sub_reg = '025';
         else sub_reg = '026';
   end;
when ('03')
   do;
      if adjratio < 1.15 then sub_reg = '031';
         else if adjratio < 1.3 then sub_reg = '032';
         else if adjratio < 1.4 then sub_reg = '033';
         else sub_reg = '034';
   end;
when ('04')
   do;
      if adjratio < 1.1 then sub_reg = '041';
         else if adjratio < 1.3 then sub_reg = '042';
         else sub_reg = '043';
   end;
when ('05')
   do;
      if adjratio < 1 then sub_reg = '051';
         else if adjratio < 1.2 then sub_reg = '052';
         else sub_reg = '053';
   end;
when ('06')
   do;
      if adjratio < 1 then sub_reg = '061';
         else if adjratio < 1.16 then sub_reg = '062';
         else if adjratio < 1.2 then sub_reg = '063';
         else if adjratio < 1.4 then sub_reg = '064';
         else sub_reg = '065';
   end;
when ('09')
   do;
      if adjratio < 1.2 then sub_reg = '091';
         else sub_reg = '092';
   end;
when ('10')
   do;
      if adjratio < 1.1 then sub_reg = '101';
         else sub_reg = '102';
   end;
when ('11')
   do;
      if adjratio < 1.2 then sub_reg = '111';
         else sub_reg = '112';
   end;
when ('12')
   do;
      if adjratio < 1.1 then sub_reg = '121';
         else if adjratio < 1.2 then sub_reg = '122';
         else if adjratio < 1.5 then sub_reg = '123';
         else sub_reg = '124';
   end;
when ('13')
   do;
      if adjratio < 1.1 then sub_reg = '131';
         else if adjratio < 1.2 then sub_reg = '132';
         else sub_reg = '133';
   end;
when ('14')
   do;
      if adjratio < 1 then sub_reg = '141';
         else if adjratio < 1.1 then sub_reg = '142';
         else if adjratio < 1.2 then sub_reg = '143';
         else sub_reg = '144';
   end;
when ('15') sub_reg = '151';
when ('16') sub_reg = '161';
when ('78')
   do;
```

```
         if adjratio < 1 then sub_reg = '781';
            else if adjratio < 1.3 then sub_reg = '782';
            else if adjratio < 1.4 then sub_reg = '783';
            else if adjratio < 1.5 then sub_reg = '784';
            else sub_reg = '785';
      end;
   otherwise;
end;
if firstdig = '1' and lastdig = '1';
run;

proc sort data=sub_code;
by sub_reg adjratio;
run;

proc print data=sub_code;
var sub_reg poststra key sum_pop sum_wrwt adjratio sum_resp;
sum sum_pop sum_wrwt sum_resp;
run;

*** Merge the subregion onto the final data set. ***;

proc sort data=sub_code;
by key;
run;

proc sort data=final;
by key;
run;

title4 'Creating Poststratification Cells';

data complete;
merge final sub_code(keep = key sub_reg);
by key;
if lastdig = '2' then lastdig = '1';
   else if lastdig in ('4','5','6') then lastdig = '3';
   else if lastdig = '8' then lastdig = '7';
if sub_reg ne ' ' then reg_grp = sub_reg || lastdig;
if poststra < '10000000' then post_st = poststra;
   else post_st = '0000' || reg_grp;
select (post_st);
   when ('00001219') post_st = '00001217';
   when ('00001243','00001247') post_st = '00001241';
   when ('00001319') post_st = '00001317';
   when ('00001327','00001329') post_st = '00001323';
   when ('00001337','00001339') post_st = '00001333';
   when ('00001417','00001419') post_st = '00001413';
   when ('00001429') post_st = '00001427';
   when ('00001437','00001439') post_st = '00001433';
   when ('00001447','00001449') post_st = '00001443';
   when ('00001519') post_st = '00001517';
   otherwise;
end;
run;

proc print data=complete;
run;

title4 'Check for Postratification Groups';

proc sort data=complete;
by post_st;
run;

proc means data=complete noprint;
by post_st;
var sum_wrwt sum_pop sum_resp;
output out=groups sum(sum_wrwt sum_pop sum_resp) = grp_wrwt grp_pop grp_resp;
run;
```

```
data groups;
set groups;
grpratio = grp_pop / grp_wrwt;
run;

proc print data=groups;
var post_st grp_pop grp_wrwt grp_resp grpratio;
sum grp_pop grp_wrwt grp_resp;
run;

*** Merge to the complete data set. ***;

data post;
merge complete groups (keep = post_st grpratio);
by post_st;
rel_chg = (adjratio - grpratio) / grpratio;
run;

proc sort data=post;
by post_st;
run;

title4 'Add in the Group Ratio';

proc print data=post;
var poststra sum_wrwt sum_pop sum_resp adjratio grpratio rel_chg;
sum sum_wrwt sum_pop sum_resp;
run;

proc sort data=post;
by poststra;
run;

proc print data=post;
sum sum_wrwt sum_pop sum_resp;
run;

*** Merge to the sample data set. ***;

proc sort data=sample;
by poststra;
run;

proc sort data=post;
by poststra;
run;

data post_wt s_only p_only;
merge sample(in = in_s) post(in = in_p);
by poststra;
post_wt = grpratio * wrwt;
if in_s=1 and in_p=1 then output post_wt;
   else if in_s=1 and in_p=0 then output s_only;
   else if in_s=0 and in_p=1 then output p_only;
run;
*** Note there are 108 observation on the frame
    that are not on the sample. ***;

proc sort data=post_wt;
by post_st;
run;

title4 'Checking Information';

proc means data=post_wt n sum;
by post_st;
var post_wt;
output out=sumpost sum=sum_post;
run;

proc sort data=groups;
```

```
by post_st;
run;

proc sort data=sumpost;
by post_st;
run;

data fin_chk;
merge sumpost groups;
by post_st;
diff = grp_pop - sum_post;
run;

proc print data=fin_chk;
var post_st grp_pop grp_wrwt grp_resp grpratio sum_post diff;
sum grp_pop grp_wrwt grp_resp sum_post diff;
run;

proc freq data=post_wt;
table post_st*cacsmpl post_st*xbnfgrp / list missing;
weight post_wt;
format _all_;
run;

*** Create the permanent post_wt data set.***;

data out.post_wt;
set post_wt (keep = mprid post_st post_wt);
run;

***************************************************************************
*  PROGRAM:  CONSVAR0.SAS
*  TASK:     1999 DOD HEALTH CARE SURVEY ANALYSIS (8676-100)
*  PURPOSE:  Create XREGION and CONUS
*
*  WRITTEN:  February 11, 2000
*  MODIFIED: 1) February 23, 2000 By Keith Rathbun.  Converted into an include
*               file.  Updated code accordingly.
*            2) February 26, 2001 By Keith Rathbun.  Added recode for CACSMPL
*               weighting purposes.
*
*    NOTES:  1) This file needs to be included in the MERGENRC.SAS program.
*
***************************************************************************
* Recode CACSMPL for weighting purposes
***************************************************************************;



IF SERVAREA IN ('01','02','03','04','05','06','07','08','09','10','11','12') THEN DO;
   CACSMPL = GEOCELL;
   select (GEOCELL);
      when ('6207') CACSMPL = '0029';
      when ('0209','0210','0269','1659','6216') cacsmpl = '0024';
      when ('0256') cacsmpl = '0037';
      when ('0260') cacsmpl = '0038';
      when ('0301','0386','0401') cacsmpl = '0067';
      when ('0372') cacsmpl = '0121';
      when ('0390','6200') cacsmpl = '0123';
      when ('1643') cacsmpl = '0125';
      when ('6214','6221') cacsmpl = '0124';
      otherwise;
   end;
END;
IF GEOCELL IN ('0952', '0961', '0963', '0965', '0978', '0983') THEN CACSMPL = '9914';



***************************************************************************
* Assign XREGION using CACSMPL
***************************************************************************;
```

```
IF      CACSMPL IN ('0035','0036','0037','0066','0067',
                    '0068','0069','0081','0086','0100',
                    '0123','0306','0310','0321','0326',
                    '0330','0385','0413','6201','9901')              THEN PREGION= '01';
ELSE IF CACSMPL IN ('0089','0090','0091','0092','0120',
                    '0121','0122','0124','0335','0378','0387','0432',
                    '0433','0508','7143','7286','7294','9902')       THEN PREGION= '02';
ELSE IF CACSMPL IN ('0039','0041','0045','0046','0047',
                    '0048','0049','0050','0051','0101',
                    '0103','0104','0105','0337','0356',
                    '0422','0511','9903')                            THEN PREGION= '03';
ELSE IF CACSMPL IN ('0001','0002','0003','0004','0038',
                    '0042','0043','0073','0074','0107',
                    '0297','7139','9904')                            THEN PREGION= '04';
ELSE IF CACSMPL IN ('0055','0056','0060','0061','0095',
                    '9905')                                          THEN PREGION= '05';
ELSE IF CACSMPL IN ('0013','0062','0064','0096','0097',
                    '0098','0109','0110','0112','0113',
                    '0114','0117','0118','0338','0363',
                    '0364','0365','0366','1587','1592','7236','9906') THEN PREGION= '06';
ELSE IF CACSMPL IN ('0008','0009','0010','0079','0083',
                    '0084','0085','0108','9907')                     THEN PREGION= '78';
ELSE IF CACSMPL IN ('0031','0032','0033','0053','0057',
                    '0058','0059','0075','0076','0077',
                    '0078','0093','0094','0106','0119',
                    '0129','0252','7200','7293','9908')              THEN PREGION= '78';
ELSE IF CACSMPL IN ('0018','0019','0024','0026','0029','0030',
                    '0131','0213','0248','5205','9909')              THEN PREGION= '09';
ELSE IF CACSMPL IN ('0014','0015','0028','0235','0250',
                    '9910')                                          THEN PREGION= '10';
ELSE IF CACSMPL IN ('0125','0126','0127','0128','0395','1646',
                    '9911')                                          THEN PREGION= '11';
ELSE IF CACSMPL IN ('0052','0280','0287','0534','7043','9912')       THEN PREGION= '12';
ELSE IF CACSMPL IN ('0606','0607','0609','0617','0618',
                    '0623','0624','0629','0633','0635',
                    '0653','0805','0806','0808','0814',
                    '8931','8982','9913')                            THEN PREGION= '13';
ELSE IF CACSMPL IN ('0610','0612','0620','0621','0622',
                    '0637','0638','0639','0640','0802',
                    '0804','0853','0862','9914')                     THEN PREGION= '14';
ELSE IF CACSMPL IN ('0449','0613','0615','0616','9915')              THEN PREGION= '15';
ELSE IF CACSMPL IN ('0005','0006','0203','9916')                     THEN PREGION= '16';
ELSE                                                                 PREGION= 'MS';

*************************************************************************
* Assign indicator of CONUS based on XREGION.  CONUS stands for
* Contential United States it but includes both Alaska and Hawaii.
*************************************************************************;
IF      PREGION IN
('001','002','003','004','005','006','007','008','009','010','011','012','016') THEN
CONUS=1;
ELSE IF PREGION IN ('013','014','015')
THEN CONUS=0;
ELSE IF PREGION = 'MIS'
THEN CONUS=.;

*************************************************************************
*
* PROGRAM: POSTREP.SAS
* TASK:    2000 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE REPLICATE WEIGHTS FOR DOD SURVEY.
*          REQUESTED BY DON JANG.
* WRITTEN: 04/19/2001 by Darryl V. Creel
*
* INPUTS:  POST_WT.SD2 - Poststratification Weights file
*          REPWT.SD2
*          MERGEQ.SD2
*
* OUTPUTS: REPWT.SD2 - Replicate Weights File
*
*************************************************************************
```

```
*;

libname in1 'd:\projects\8687-420\data';
libname in2 "j:\dod\q1_2000\data\afinal";
libname out "j:\dod\q1_2000\data\afinal";
libname library 'j:\dod\q1_2000\data\afinal\fmtlib';


OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=0 NOCENTER mlogic mprint symbolgen;

data post_wt;
set in1.post_wt;
run;

proc contents data=post_wt;
run;

data repwt;
set in2.repwt;
run;

proc contents data=repwt;
run;

data mergeq;
set in2.mergeq (keep = fnstatus mprid);
run;

proc contents data=mergeq;
run;

proc sort data=repwt;
by mprid;
run;

proc sort data=mergeq;
by mprid;
run;

data survey;
merge mergeq(in=in_m) repwt(in=in_r);
by mprid;
if in_m = 1 and in_r = 1 then output survey;
run;

proc sort data=post_wt;
by mprid;
run;

data all_wts;
merge survey post_wt;
by mprid;
run;

proc contents data=all_wts;
run;

data framecnt;
set in1.framecnt;
run;

proc contents data=framecnt;
run;

proc sort data=framecnt;
by post_st;
run;

%macro post (weight, num);

   data work_wt;
```

```
   set all_wts(keep = mprid post_st &weight.);
   run;

   proc sort data=work_wt;
   by post_st;
   run;

   proc means data=work_wt noprint;
   by post_st;
   var &weight.;
   output out=samp_grp sum(&weight.)=grp_samp;
   run;

   proc sort data=samp_grp;
   by post_st;
   run;

   data combine;
   merge framecnt samp_grp;
   by post_st;
   grpratio = grp_pop / grp_samp;
   run;

   proc sort data=combine;
   by post_st;
   run;

   data somereps (keep = mprid pst_wt&num.);
   merge work_wt combine;
   by post_st;
   pst_wt&num. = &weight. * grpratio;
   run;

   proc sort data=all_wts;
   by mprid;
   run;

   proc sort data=somereps;
   by mprid;
   run;

   data all_wts;
   merge all_wts somereps;
   by mprid;
   run;
%mend;

%macro iterate (stop);
   %do loop = 1 %to &stop.;
      %post(wrwt&loop.,&loop.);
   %end;
%mend;

%iterate(60);


data repwt (rename = (post_st  = poststr
                          post_wt  = wrwt
                          pst_wt1  = wrwt1
                          pst_wt2  = wrwt2
                          pst_wt3  = wrwt3
                          pst_wt4  = wrwt4
                          pst_wt5  = wrwt5
                          pst_wt6  = wrwt6
                          pst_wt7  = wrwt7
                          pst_wt8  = wrwt8
                          pst_wt9  = wrwt9
                          pst_wt10 = wrwt10
                          pst_wt11 = wrwt11
                          pst_wt12 = wrwt12
                          pst_wt13 = wrwt13
```

```
                              pst_wt14 = wrwt14
                              pst_wt15 = wrwt15
                              pst_wt16 = wrwt16
                              pst_wt17 = wrwt17
                              pst_wt18 = wrwt18
                              pst_wt19 = wrwt19
                              pst_wt20 = wrwt20
                              pst_wt21 = wrwt21
                              pst_wt22 = wrwt22
                              pst_wt23 = wrwt23
                              pst_wt24 = wrwt24
                              pst_wt25 = wrwt25
                              pst_wt26 = wrwt26
                              pst_wt27 = wrwt27
                              pst_wt28 = wrwt28
                              pst_wt29 = wrwt29
                              pst_wt30 = wrwt30
                              pst_wt31 = wrwt31
                              pst_wt32 = wrwt32
                              pst_wt33 = wrwt33
                              pst_wt34 = wrwt34
                              pst_wt35 = wrwt35
                              pst_wt36 = wrwt36
                              pst_wt37 = wrwt37
                              pst_wt38 = wrwt38
                              pst_wt39 = wrwt39
                              pst_wt40 = wrwt40
                              pst_wt41 = wrwt41
                              pst_wt42 = wrwt42
                              pst_wt43 = wrwt43
                              pst_wt44 = wrwt44
                              pst_wt45 = wrwt45
                              pst_wt46 = wrwt46
                              pst_wt47 = wrwt47
                              pst_wt48 = wrwt48
                              pst_wt49 = wrwt49
                              pst_wt50 = wrwt50
                              pst_wt51 = wrwt51
                              pst_wt52 = wrwt52
                              pst_wt53 = wrwt53
                              pst_wt54 = wrwt54
                              pst_wt55 = wrwt55
                              pst_wt56 = wrwt56
                              pst_wt57 = wrwt57
                              pst_wt58 = wrwt58
                              pst_wt59 = wrwt59
                              pst_wt60 = wrwt60));
set all_wts (keep = mprid adj_cell post_st post_wt pst_wt1 - pst_wt60);
run;

data out.repwt;
set repwt;
LABEL
      MPRID  = 'MPR ID Number'
      POSTSTR = 'POSTSTR - Poststratification Cell'
      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;

proc contents data=out.repwt;
run;

PROC MEANS DATA=out.repwt n min max sum;
VAR  WRWT WRWT1-WRWT60;
output out=sums sum(wrwt wrwt1-wrwt60) = wrwt wrwt1-wrwt60;
RUN;
```

B. SAMPLE SELECTION

```
*************************************************************************
*                                                                       *
* PROGRAM: FRAMEA.SAS                                                   *
* TASK:    2000 DOD Health Care Survey, Quarterly Sampling (8687-420)   *
* PURPOSE: Build Sampling Frame for 2000 Quarterly DOD Survey Form A    *
*                                                                       *
* WRITTEN: 10/20/2000 by Darryl V. Creel                                *
*                                                                       *
* INPUTS:  EXTRACT.SD2 - Extract for 2000 Quarterly DOD Survey          *
*                                                                       *
* OUTPUTS: FRAMEA.SD2 - Sampling Frame for 2000 Quarterly DOD Survey Form A *
*                                                                       *
*                                                                       *
*************************************************************************;
```

```
options ls=132 ps=79 compress=yes nocenter nonumber;


title1 'Construct Sampling Frame, FRAMEA.SD2';
title2 'from the 2000 Quarterly DOD Extract File, EXTRACT.SD2';
title3 'Program: FRAMEA.SAS by Darryl V. Creel';



*** Set up the input and output paths. ***;

libname in  'd:\projects\8687-420\data';
libname out 'd:\projects\8687-420\data';

/*******************************************************************

*** Contents of the input file. ***;

proc contents data=in.extract;
title5 'Contents of the Input File: EXTRACT.SD2';
run;



*** Produce frequencies used in the program ***;

proc freq data=in.extract;
title5 'Frequencies of Variables Used the Program';
table pcm enrid dcatch dageqy tspsite patcat pntypcd pnlcatcd  / missing;
run;

*******************************************************************/

*****************************************************;
*****                                           *****;
***** Start the data step to create the t_frame. *****;
*****                                           *****;
*****************************************************;

data out.t_framea;
set in.extract;

*** These are the missing value codes:
***;
*** a - when dageqy>='065',tspsite missing
***;
*** b - patcat missing
***;
*** c - when patcat='DEPACT', pcm missing
***;
*** d - when patcat='NADD<65', pcm missing
***;
*** e - pntypcd missing
***;
*** f - when patcat='UNKNOWN' and pntypcd='S', dageqy missing
***;
*** g - when patcat='UNKNOWN' and pntypce='S' and dageqy<='064', pcm missing
***;
*** h - when patcat='UNKNOWN' and pntypce='D' and pnlcatcd in ('A','B','J','N','P','V'),
pcm missing ***;
*** i - when patcat='UNKNOWN' and pntypce='D', dageqy missing
***;
*** j - when patcat='UNKNOWN' and pntypce='D', and dageqy<='064', pcm missing
***;


*** Construct the geographic sampling cell variable.                        ***;
***    Call this variable geocell.                                           ***;
```

```
***    If the primary manager code is MTF and enrollment DMISID not it the  ***;
***    the specified codes,                                                 ***;
***    then geocell is the TRICARE Prime & USFHP Enrollment DMIS Code.      ***;
***    Otherwise, geocell is the Derived Location Catchment Area DMIS Code. ***;

if pcm='MTF' and enrid not in ('0000','0998','0999','6501','6507','6511','6512') then
geocell=enrid;
   else geocell=dcatch;


*** Construct the Subvention Demonstration Area variable.            ***;
***    Call this variable subdemo.                                   ***;
***    There are seven original TRICARE Senior Prime Sites.          ***;
***    For observations where age is greater than or equal to 65:    ***;
***      We will combime the Fort Sill and Fort Sam Houston sites.   ***;
***      This produces six categories of subdemo,                    ***;
***       i.e., the combined site and the other original five sites. ***;

if dageqy>='065' and patcat ne 'ACTDTY' then
   do;
      select(tspsite);
         when ('COSPRINGS') subdemo='032';
         when ('DOVER')     subdemo='036';
         when ('KEESLER')   subdemo='073';
         when ('MADIGAN')   subdemo='125';
         when ('REYSHEP','SANANTONIO') subdemo='098';
         when ('SANDIEGO')  subdemo='029';
         otherwise subdemo='a';
      end;
   end;


*** Construct the enrollment crossed with beneficiary category variable.      ***;
***    Call this variable enbgsmpl.  It will have 10 levels.                 ***;
***    '01' - active duty                                                    ***;
***    '02' - active duty family member, prime, civilian pcm                 ***;
***    '03' - active duty family member, prime, military pcm                 ***;
***    '04' - active duty family member, nonenrollee                         ***;
***    '05' - retired or family member of retiree, less than 65, civilian pcm ***;
***    '06' - retired or family member of retiree, less than 65, military pcm ***;
***    '07' - retired or family member of retiree, less than 65, nonenrollee  ***;
***    '08' - retired or family member of retiree, 65 or older, civilian pcm  ***;
***    '09' - retired or family member of retiree, 65 or older, military pcm  ***;
***    '10' - retired or family member of retiree, 65 or older, nonenrollee   ***;

select (patcat);
   when ('ACTDTY') enbgsmpl='01';
   when ('DEPACT')
      do;
         select (pcm);
            when ('CIV') enbgsmpl='02';
            when ('MTF') enbgsmpl='03';
            when (' ')   enbgsmpl='04';
            otherwise enbgsmpl='c';
         end;
      end;
   when('NADD<65')
      do;
         select (pcm);
            when ('CIV') enbgsmpl='05';
            when ('MTF') enbgsmpl='06';
            when (' ')   enbgsmpl='07';
            otherwise enbgsmpl='d';
         end;
      end;
   when('NADD65+') enbgsmpl='10';
   when('UNKNOWN')
      do;
         if pntypcd='S' then
            do;
              if pnlcatcd in ('A','J','N','V') then enbgsmpl='01';
```

```
              else if dageqy = ' ' then enbgsmpl='f';
              else if dageqy <= '064' then
                 do;
                    select (pcm);
                       when ('CIV') enbgsmpl='05';
                       when ('MTF') enbgsmpl='06';
                       when (' ')   enbgsmpl='07';
                       otherwise    enbgsmpl='g';
                    end;
                 end;
              else if dageqy > '064' then enbgsmpl='10';
           end;
        else if pntypcd='D' then
           do;
              if pnlcatcd in ('A','J','N','V') then
                 do;
                    select (pcm);
                       when ('CIV') enbgsmpl='02';
                       when ('MTF') enbgsmpl='03';
                       when (' ')   enbgsmpl='04';
                       otherwise    enbgsmpl='h';
                    end;
                 end;
              else if dageqy = ' ' then enbgsmpl='i';
              else if dageqy <= '064' then
                    do;
                       select (pcm);
                          when ('CIV') enbgsmpl='05';
                          when ('MTF') enbgsmpl='06';
                          when (' ')   enbgsmpl='07';
                          otherwise    enbgsmpl='j';
                       end;
                    end;
              else if dageqy > '064' then enbgsmpl='10';
           end;
        else enbgsmpl='e';
     end;
  otherwise enbgsmpl='b';
end;


run;


************************************************;
*****                                          *****;
***** End the data step to create the frame. *****;
*****                                          *****;
************************************************;

/*****************************************************************************

***** Checks for the constructed variables. *****;

proc freq data=in.t_framea;
title5 'Checks for the Constructed Variables';
table pcm*enrid*dcatch*geocell / list missing;
run;

proc freq data=in.t_framea;
title5 'Checks for the Constructed Variables';
table dageqy*tspsite*subdemo / list missing;
run;

proc freq data=in.t_framea;
title5 'Checks for the Constructed Variables';
table patcat*pcm*pntypcd*pnlcatcd*dageqy*enbgsmpl / list missing;
run;

*****************************************************************************/
```

```
***********************************************;
***                                         ***;
*** Get and modify the downloaded data set. ***;
***                                         ***;
***********************************************;


data out.fy01q1 (keep = geocell d_par d_fac d_instal d_health);
set in.fy2001q1 (rename = (facilit1=d_fac installa=d_instal));

length d_par $4.;
d_par = dmis_par;

length geocell $4.;
geocell = dmis_id;

length d_health $2.;
d_health = health_s;

run;




************************************************************;
***                                                      ***;
*** Merge the downloaded data set to the sampling frame. ***;
***                                                      ***;
************************************************************;

proc sort data=in.fy01q1 out=out.fy01q1;
by geocell;
run;

proc sort data=in.t_framea out=out.t_framea;
by geocell;
run;


data out.framea;
merge in.t_framea (in=infr) in.fy01q1 (in=infy);
by geocell;

select(geocell);
*** First round of collapsing. ***;
   when ('0002','0074')        cacsmpl='0001';
   when ('0203')               cacsmpl='0005';
   when ('0235')               cacsmpl='0014';
   when ('0250')               cacsmpl='0015';
   when ('0248','0213')        cacsmpl='0019';
   when ('0018')               cacsmpl='0026';
   when ('0100','0328','5401') cacsmpl='0035';
   when ('0050')               cacsmpl='0039';
   when ('6203')               cacsmpl='0049';
   when ('0076')               cacsmpl='0058';
   when ('0338')               cacsmpl='0059';
   when ('0068','0413')        cacsmpl='0066';
   when ('5208')               cacsmpl='0067';
   when ('0111')               cacsmpl='0083';
   when ('0335')               cacsmpl='0089';
   when ('0094')               cacsmpl='0093';
   when ('0097')               cacsmpl='0098';
   when ('0363')               cacsmpl='0109';
   when ('0364')               cacsmpl='0112';
   when ('0114')               cacsmpl='0117';
   when ('7200')               cacsmpl='0129';
   when ('0814')               cacsmpl='0633';
   when ('0637')               cacsmpl='0638';
   when ('0610')               cacsmpl='0640';
```

```
   when ('0802')               cacsmpl='0620';
*** Second round of collapsing. ***;
   when ('5208')               cacsmpl='0067';
   when ('0041')               cacsmpl='0045';
   when ('0077')               cacsmpl='0119';
   when ('0106')               cacsmpl='0129';
   when ('0615')               cacsmpl='0616';
   when ('0624','0858')        cacsmpl='0617';
   when ('0639')               cacsmpl='0640';
   when ('0808')               cacsmpl='0609';
   when ('0310')               cacsmpl='0321';
   when ('0085','0111')        cacsmpl='0083';
   when ('0077')               cacsmpl='0125';
   when ('0130','0417','7044','7047') cacsmpl = '0005';
*** Third round of collapsing. ***;
   when('0034')                cacsmpl='0035';
   when('0416')                cacsmpl='0001';
   when('0418','0419')         cacsmpl='0014';
   when('0420')                cacsmpl='0037';
   when('0422')                cacsmpl='0038';
   when('0423')                cacsmpl='0064';
   when('0424')                cacsmpl='0067';
   when('0425','0426')         cacsmpl='0321';
   when('0428')                cacsmpl='0326';
   when('0430')                cacsmpl='0089';
   when('0431','0434')         cacsmpl='0125';
   when('0432','0433')         cacsmpl='0120';
   when('0435')                cacsmpl='0126';
   when('0449')                cacsmpl='9915';
   when('0618','0623','0629','0635','0815','0825','1170') cacsmpl='9913';
   when('3031')                cacsmpl='9903';
   when('5208')                cacsmpl='0067';
   when('7042')                cacsmpl='0616';
   when('7043')                cacsmpl='0052';
   when('0825','0653','1179','8931') cacsmpl='9913';
   when('7045')                cacsmpl='9911';
*** Fourth round of collapsing. ***;
   when('6303')                cacsmpl='0029';
   when('6307')                cacsmpl='0039';
   when('6311')                cacsmpl='0091';
   when('6312')                cacsmpl='0092';
   when('6314')                cacsmpl='0103';
   when('6315')                cacsmpl='0104';
   when('6318')                cacsmpl='0126';
   when('6319')                cacsmpl='0127';
   when('7293','0252','0534','7143','7286','7294','0511','1587','1592',
    '7236','6201','0378','0387','0508','1646') cacsmpl = geocell;
   otherwise cacsmpl=d_par;
end;

if d_fac='NONCAT' then cacsmpl='99'||d_health;

if cacsmpl='9914' then cacsmpl='9915';

if geocell in ('0000','0998','0999') then cacsmpl='9999';

*** Create Service Area ***;

if enbgsmpl in ('04','07','10') then
   do;
      select(cacsmpl);
         when ('0024','0029')               servarea='01';
         when ('0032','0033')               servarea='02';
         when ('0037','0066','0067','0123') servarea='03';
         when ('0038','0042')               servarea='04';
         when ('0049','0103','0104')        servarea='05';
         when ('0091','0092')               servarea='06';
         when ('0098','0113')               servarea='07';
         when ('0101','0105')               servarea='08';
         when ('0109','0117')               servarea='09';
         when ('0120','0121','0124')        servarea='10';
```

```
         when ('0125','0126','0127')        servarea='11';
         otherwise servarea=' ';
      end;
   end;

if servarea in ('01','02','03','04','05','06','07','08','09','10','11','12')
   then cacsmpl=' ';

stratum='0'||cacsmpl||enbgsmpl;

if servarea in ('01','02','03','04','05','06','07','08','09','10','11','12')
   then stratum='200'||servarea||enbgsmpl;

if subdemo in ('032','036','073','125','098','029') then
   do;
      if pcm='CIV' then enbgsmpl='08';
         else if pcm='MTF' then enbgsmpl='09';
      if pcm in ('MTF','CIV') then stratum='10'||subdemo||'09';
         else if pcm=' ' then stratum='10'||subdemo||'10';
   end;
   else if cacsmpl in
('0029','0032','0033','0036','0073','0098','0109','0113','0117','0125')
      and enbgsmpl='10' then stratum='0'||cacsmpl||'07';


*** Add a comment about this section. ***;

array enbgs (11) enbgs01 enbgs02 enbgs03 enbgs04 enbgs05 enbgs06 enbgs07 enbgs08 enbgs09
enbgs10 enbgs11;
do i = 1 to 11;
   enbgs(i)=0;
end;
select (enbgsmpl);
   when ('01') enbgs01=1;
   when ('02') enbgs02=1;
   when ('03') enbgs03=1;
   when ('04') enbgs04=1;
   when ('05') enbgs05=1;
   when ('06') enbgs06=1;
   when ('07') enbgs07=1;
   when ('08') enbgs08=1;
   when ('09') enbgs09=1;
   when ('10') enbgs10=1;
   otherwise enbgs11=1;
end;

strsmpl= substr(stratum,1,5);

if infr=1 and infy=1 then output out.framea;

run;

/*******************************************************************************


***** Check the constructed variables. *****;

proc freq data=in.framea;
title5 'Checks of Constructed Variables';
title6 "where d_fac ne 'NONCAT' or geocell not in ('0000','0998','0999')";
table cacsmpl*d_par / list missing;
where d_fac ne 'NONCAT' or geocell not in ('0000','0998','0999');
run;

proc freq data=in.framea;
title5 'Checks of Constructed Variables';
title6 "where d_fac='NONCAT' ";
table cacsmpl*d_fac*d_health / list missing;
where d_fac='NONCAT';
run;
```

```
proc freq data=in.framea;
title5 'Checks of Constructed Variables';
title6 "where geocell in ('0000','0998','0999')";
table cacsmpl*geocell / list missing;
where geocell in ('0000','0998','0999');
run;

proc freq data=in.framea;
title5 'Checks of Constructed Variables';
table cacsmpl*enbgsmpl*subdemo*pcm*stratum / list missing;
run;


******************************************************************************/

************************************;
***                              ***;
*** Sum the enbgsampl categories. ***;
***                              ***;
************************************;

proc sort data=in.framea out=out.framea;
by strsmpl;
run;

proc means data=in.framea noprint;
by strsmpl;
var enbgs01 enbgs02 enbgs03 enbgs04 enbgs05 enbgs06 enbgs07 enbgs08 enbgs09 enbgs10
enbgs11;
output out=out.s_framea
       sum(enbgs01 enbgs02 enbgs03 enbgs04 enbgs05 enbgs06 enbgs07 enbgs08 enbgs09
enbgs10 enbgs11) =
       s_enbg01 s_enbg02 s_enbg03 s_enbg04 s_enbg05 s_enbg06 s_enbg07 s_enbg08 s_enbg09
s_enbg10 s_enbg11;
run;

data out.s_framea;
set in.s_framea;
str_cnt=s_enbg01+s_enbg02+s_enbg03+s_enbg04+s_enbg05+s_enbg06+s_enbg07+s_enbg08+s_enbg09+
s_enbg10;
run;

proc sort data=in.s_framea out=out.s_framea;
by descending str_cnt;
run;

data out.s_framea (keep=strsmpl str_rnk);
set in.s_framea;
str_rnk=_n_;
run;

proc sort data=in.framea out=in.framea;
by strsmpl d_par geocell;
run;

proc means data=in.framea noprint;
by strsmpl d_par geocell;
var enbgs01 enbgs02 enbgs03 enbgs04 enbgs05 enbgs06 enbgs07 enbgs08 enbgs09 enbgs10
enbgs11;
output out=out.c_framea
       sum(enbgs01 enbgs02 enbgs03 enbgs04 enbgs05 enbgs06 enbgs07 enbgs08 enbgs09
enbgs10 enbgs11) =
       s_enbg01 s_enbg02 s_enbg03 s_enbg04 s_enbg05 s_enbg06 s_enbg07 s_enbg08 s_enbg09
s_enbg10 s_enbg11;
run;

data out.c_framea;
set in.c_framea;
dmis_cnt=s_enbg01+s_enbg02+s_enbg03+s_enbg04+s_enbg05+s_enbg06+s_enbg07+s_enbg08+s_enbg09
+s_enbg10;
run;
```

```
proc sort data=in.s_framea out=out.s_framea;
by strsmpl;
run;

proc sort data=in.c_framea out=out.c_framea;
by strsmpl;
run;

data out.b_framea;
merge in.c_framea in.s_framea;
by strsmpl;
run;

proc sort data=in.b_framea out=out.b_framea;
by strsmpl d_par geocell;
run;




*** Excel spreadsheet for Don. ***;

proc sort data=in.fy01q1 out=out.fy01q1;
by geocell;
run;

proc sort data=in.b_framea;
by geocell;
run;

data out.excel;
merge in.fy01q1 (in=infy) in.b_framea (in=inb);
by geocell;
if infy=1 and inb=1;
run;

proc sort data=in.excel out=out.excel;
by strsmpl d_par geocell;
run;

*****************************************************************************
*
* PROGRAM:  MERGENRC.SAS
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (8687-610)
* PURPOSE:  COMBINE ITEM RESPONSE DATA FROM NRC WITH THE MPR SAMPLING AND
*           DEERS VARIABLES.  ALSO, CONSTRUCT XREGION AND CONUS.
* WRITTEN:  01/31/2001 BY KEITH RATHBUN
*
* INPUTS:   1) RETnnnnn.SD2 - 2000 Quarterly DOD Health Survey Data from NRC
*              where nnnnn = Number of returns
*           2) Q4FLAGFIN.TXT - MPRID/FLAGFIN Text file (entire sample)
*           3) BWT.SD2 - MPR Sampling and DEERS variables
*           4) SAMPLA02.SD2 - DEERS variables
*
* OUTPUTS:  1) MERGENRC.SD2 - 2000 Quarterly DOD Health Survey Data
*              (Combined NRC, MPR, and DEERS variables)
*
* INCLUDES: 1) CONSVAR0.SAS - Construct XREGION and CONUS based on CACSMPL.
*
*****************************************************************************;
LIBNAME  IN       "D:\KEITH\DOD\Q4_2000\DATA";
LIBNAME  OUT      "D:\KEITH\DOD\Q4_2000\DATA";
LIBNAME  LIBRARY  "J:\DOD\Q4_2000\DATA\AFINAL\FMTLIB";
FILENAME FLAG_FIN "D:\KEITH\DOD\Q4_2000\DATA\Q4FLAGFIN.TXT";

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

****************************************************************************
* Define fielding start date so AGE can be recalculated based on DOB.
****************************************************************************;
```

```
%LET FIELDATE = 10012001; * mmddyyyy;
%LET FIELDLBL = October 1st 2001;

*************************************************************************
* Input FLAG_FIN variable for entire sample.
*************************************************************************;
DATA FLAG_FIN;
   INFILE FLAG_FIN LRECL=999 RECFM=V MISSOVER;
   LENGTH FLAG_FIN $2;
   INPUT  @001 MPRID     $CHAR8.
          @017 FLAG_FIN  $
        ;
   N = _N_;
   IF _N_ = 1 THEN DELETE; *Remove Header Record;
RUN;
PROC SORT DATA=FLAG_FIN; BY MPRID; RUN; */

*************************************************************************
* SORT the RETURNS and the original sample (BWT).
*************************************************************************;
PROC SORT DATA=IN.RET15230 OUT=RETURNS; BY MPRID; RUN;

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

*************************************************************************
* Combine the "NO RETURN" FLAG_FIN records with the RETURNS.
*************************************************************************;
DATA NORETURN;
   MERGE RETURNS(IN=IN1) FLAG_FIN(IN=IN2);
   BY MPRID;
   KEEP MPRID FLAG_FIN;
   IF IN2 AND NOT IN1;
RUN;

DATA COMBINED;
   SET RETURNS NORETURN;
   BY MPRID;
RUN;

*************************************************************************
* Attach the original sampling variables to the combined file.
*************************************************************************;
DATA MERGENRC;
   MERGE BWT COMBINED;
   BY MPRID;
   FLAG_FIN = COMPRESS(FLAG_FIN); *Trim off the blanks;
   ************************************************************************
   * DROP variables that are not needed.
   ************************************************************************;
   DROP LITHOCD  SURVTYPE SVCCD BOTHSURV PGCD;
   ************************************************************************
   * Construct XREGION and CONUS.
   ************************************************************************;
   %INCLUDE "D:\KEITH\DOD\Q4_2000\WEIGHTING\CONSVAR0.SAS";

   LENGTH XREGION 3.
          CONUS   3. ;

   LABEL  CACSMPL  = 'CACSMPL - Catchment Area'
          MPCSMPL  = "MPCSMPL - Military Personnel Category"
          XREGION  = 'XREGION - Region'
          CONUS    = 'CONUS - CONUS/OCONUS Indicator'
          BWT      = 'BWT - Basic Sampling Weight'
          ENBGSMPL = 'ENBGSMPL - Beneficiary/Enrollment Status'
          NHFF     = 'NHFF - Stratum Sample Size'
          SERVAREA = 'Service Area'
          SEXSMPL  = 'SEXSMPL - Sex'
          STRATUM  = 'Stratum'
          SUBDEMO  = 'Subvention Area for Over 65'
          SVCSMPL  = 'SVCSMPL - Branch of Service'
          FLAG_FIN = 'Final Disposition'
```

```
         ;
RUN;

*************************************************************************
* Attach DEERS variables to the combined file that were ommited from the
* Q3 BWT file.
*************************************************************************;
PROC SORT DATA=IN.SAMPLA02 OUT=SAMPLA02
         (KEEP=MPRID DAGEQY DBENCAT DMEDELG DSPONSVC LEGDDSCD MBRRELCD
               MEDTYPE MRTLSTAT PATCAT PCM RACEETHN TSPSITE
               PNLCATCD PNBRTHDT E1 E2 E3 E4);
   BY MPRID;
RUN;

DATA OUT.MERGENRC;
    MERGE MERGENRC SAMPLA02;
    BY MPRID;
   ************************************************************************
   * 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 QUARTER $7;
   QUARTER = "Q4 2000";
   LABEL  QUARTER  = 'Survey Quarter';

   DROP FIELDATE DOB BRTHDATE PNBRTHDT;
RUN;

TITLE1 "Quarterly DOD Health Survey - Combine NRC, MPR and DEERS variables (8687-610)";
TITLE2 "Program Name: MERGENRC.SAS By Keith Rathbun";
TITLE3 "Program Inputs: RETnnnnn.SD2, FLAG_FIN text file, BWT.SD2, SAMPLA02.SD2 --
Program Output: MERGENRC.SD2";

PROC CONTENTS; RUN;

PROC FREQ DATA=OUT.MERGENRC(DROP=MPRID);
TABLES DAGEQY*FIELDAGE XREGION*CACSMPL XREGION*CONUS _ALL_ /MISSING LIST;
RUN;


options ls=132 ps=79 nocenter compress=yes;

libname in  'd:\keith\dod-9999\data';
libname out 'd:\keith\dod-9999\data';


proc sort data=in.framea out=out.framea;
by stratum;
run;

proc sort data=in.samsizea out=out.samsizea;
by stratum;
run;

*** Keep this in to check the match. ***;

data out.f_framea out.fr_only out.s_only;
merge in.framea (in=infr) in.samsizea (in=ins);
by stratum;
if infr=1 and ins=1 then output out.f_framea;
else if infr=1 and ins=0 then output out.fr_only;
else if infr=0 and ins=1 then output out.s_only;
run;
```

```
proc sort data=in.f_framea out=out.f_framea;
by stratum prn;
run;

data out.sample;
set in.f_framea;
by stratum;
retain count;
if first.stratum=1 then count=1;
else count=count+1;
if count <= nhff then output out.sample;
run;

***** Check the distribution of permanent random numbers. *****;

data out.sample;
set in.sample;
array zone(5) zone1 zone2 zone3 zone4 zone5;
do j = 1 to 5;
   zone(j)=0;
end;
select;
   when (0.00 <= prn <= 0.25) zone1=1;
   when (0.25 <  prn <= 0.50) zone2=1;
   when (0.50 <  prn <= 0.75) zone3=1;
   when (0.75 <  prn <= 1.00) zone4=1;
   otherwise zone5=1;
end;
run;

proc sort data=in.sample out=out.sample;
by stratum;
run;

proc means data=in.sample noprint;
by stratum;
var prn;
output out=m_prn max=max_prn;
run;

data m_prn;
set m_prn (keep=stratum max_prn);
run;

proc means data=in.sample noprint;
by stratum;
id popsize nhff;
var zone1 zone2 zone3 zone4 zone5;
output out=sampdiag
       sum(zone1 zone2 zone3 zone4 zone5)=
       s_zone1 s_zone2 s_zone3 s_zone4 s_zone5;
run;

data sampdiag;
set sampdiag (drop=_type_ _freq_);
run;

proc sort data=m_prn out=m_prn;
by stratum;
run;

proc sort data=sampdiag out=sampdiag;
by stratum;
run;

data out.zone_tab;
merge sampdiag m_prn;
by stratum;
run;

proc freq data=in.framea;
```

```
table enbgsmpl / list missing out=denom;
run;

data denom (rename=(count=denom));
set denom (drop=percent);
run;

proc freq data=in.sample;
table enbgsmpl / list missing out=numer;
run;

data numer (rename=(count=numer));
set numer (drop=percent);
run;

proc sort data=denom;
by enbgsmpl;
run;

proc sort data=numer;
by enbgsmpl;
run;

data out.rat_enbg;
merge numer denom;
by enbgsmpl;
sam_rat=numer/denom;
run;



***** Create the client sampling file. *****;

data out.sampla01
   (drop = bwt
           count
           d_fac
           d_health
           d_instal
           d_par
           dhsrgn
           dmedelg
           enbgs01-enbgs11
           geocell
           i
           j
           mdcabrsn
           mdcaefdt
           mdcaexdt
           medtype
           pnarsncd
           popsize
           prn
           rankcd
           strsmpl
           zone1-zone5);
set in.sample (rename=(bwt00=bwt));
label bwt      = 'Sampling Weight'
      cacsmpl  = 'Catchment Area'
      enbgsmpl = 'Enrollee/Beneficiary Group'
      nhff     = 'Stratum Sample Size'
      servarea = 'Service Area'
      stratum  = 'Stratum'
      subdemo  = 'Subvention Demonstration Area';
run;

*****************************************************************************
*
* PROGRAM: SAMPLA02.SAS
* TASK:    2000 DOD Health Care Survey (8687-420)
* PURPOSE: Attach DEERS variables to FORM A Sample, Step 2
```

```
*
* WRITTEN: 10/23/2000 BY KEITH RATHBUN
*
* INPUTS:
* 1) SAMPLA01.SD2 - 2000 Q1 DOD FORM A Sample
* 2) XWALK.SD2 - 2000 Q1 DEERS XWALK File
* 3) DOD 2000 Q1 DEERS Extract File
*    a) STI001.SD2 - 2000 Q1 DEERS Population Extract File (Part 1)
*    b) STI002.SD2 - 2000 Q1 DEERS Population Extract File (Part 2)
*    c) STI003.SD2 - 2000 Q1 DEERS Population Extract File (Part 3)
*    d) STI004.SD2 - 2000 Q1 DEERS Population Extract File (Part 4)
*
* OUTPUTS:
* 1) SAMPLA02.SD2 - 2000 Q1 DOD FORM A Sample combined with DEERS extract
*
* INCLUDES: None
*
*************************************************************************;
LIBNAME  IN  "D:\KEITH\DOD-9999\DATA";
LIBNAME  OUT "D:\KEITH\DOD-9999\DATA";
OPTIONS LS=132 PS=79 NOCENTER COMPRESS=YES;

************************************************************************
* Attach SSNSMPL variable and keep only the sampled records.
*************************************************************************;
PROC SORT DATA=IN.XWALK    OUT=XWALK;    BY MPRID; RUN;
PROC SORT DATA=IN.SAMPLA01 OUT=SAMPLA01; BY MPRID; RUN;

DATA SAMPLA02;
   MERGE XWALK(IN=IN1) SAMPLA01(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

PROC SORT DATA=SAMPLA02; BY SSNSMPL; RUN;

%MACRO PROCESS(DSN=);
************************************************************************
* COMBINE each part (1-4) of the address/extract information file with
* sample file information.  DROP sampling variables (already on the file).
*************************************************************************;
PROC SORT DATA=IN.&DSN
    (DROP=    PNTYPCD  MRTLSTAT  PNSEXCD
     PNARSNCD MDCABRSN MDCAEFDT  MDCAEXDT
     LEGDDSCD PNLCATCD SVCCD     PAYPLNCD
     PGCD     MBRRELCD RANKCD    ULOCGRN
     ULOCDMIS RACEETHN DCATCH    DMEDELG
     DAGEQY   DBENCAT  DPRISM    DHSRGN
     DSPONSVC MEDTYPE  ENRID     ACV
     PCM      TSPSITE  PATCAT)
    OUT=TEMP;
    BY SSNSMPL;
RUN;

************************************************************************
* MERGE the DEERS extract file information with the Form A Sample by SSNSMPL.
*************************************************************************;
DATA &DSN;
   MERGE TEMP(IN=IN1) SAMPLA02(IN=IN2);
   BY SSNSMPL;
   IF IN1 AND IN2;
RUN;

************************************************************************
* DELETE temporary dataset to conserve disk space.
*************************************************************************;
PROC DATASETS; DELETE TEMP; RUN;

%MEND PROCESS;

%PROCESS(DSN=STI001);
```

```
%PROCESS(DSN=STI002);
%PROCESS(DSN=STI003);
%PROCESS(DSN=STI004);

*****************************************************************************
* STACK the combined DEERS extract/sample file information into one dataset.
*****************************************************************************;
DATA SAMPLA02;
   SET STI001 STI002 STI003 STI004;
   BY SSNSMPL;
   ***********************************************************************
   * STI sent duplicates SSNSMPLs.  So, we let SAS remove them here.
   ***********************************************************************;
   IF FIRST.SSNSMPL;
RUN;

*****************************************************************************
* SORT the combined DEERS extract/sample file information by MPRID.
*****************************************************************************;
PROC SORT DATA=SAMPLA02 OUT=OUT.SAMPLA02; BY MPRID; RUN;

TITLE1 "2000 Q1 DOD Health Care Survey Sampling (8687-420)";
TITLE2 "PROGRAM: SAMPLA02.SAS, OUTPUT: SAMPLA02.SD2";
TITLE3 "WRITTEN BY: KEITH RATHBUN, October 2000";

PROC CONTENTS; RUN;
```

2. IMPLEMENT CODING SCHEME AND CODING TABLES

A. QUARTER I

```
      ****************************************************************************;
* PROGRAM:  CSCHM00Q.SAS
* PURPOSE:  APPLY CODING SCHEME TO DATA.
* WRITTEN:  01/16/2001 Rankin
* DERIVED FROM:  Cschem99.sas
* NOTE:
*
* INPUT:  MERGENRC.SD2 - Merged MPR Sampling, DEERS, and NRC Response Data
* OUTPUT: CSCHM00Q.SD2 - Coding scheme file
*
* INCLUDES: CSCHM00Q.FMT - Coding scheme format statements and labels
*
* MODIFICATIONS:
* 1) 3/01/2001, Chris Rankin - added recodes for inaccurate responses
*    to correct an NRC data-scanner problem.
* 2) Recoded selected questions to be 1=Marked, 2=Unmarked
*    also reuired new formats to be used
*****************************************************************************;

OPTIONS PS=67 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;

LIBNAME LIBRARY "...\DATA\AFINAL\FMTLIB";
LIBNAME IN      "...\DATA\AFINAL";
LIBNAME OUT     "...\DATA\AFINAL";

%LET INDATA=MERGENRC;
%LET OUTDATA=CSCHM00Q;
%LET PERIOD=January, 2000 to December, 2000;

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

%Let varlist1 =

S00C01   S00C02   S00C03   S00C04   S00C05   S00C06   S00C07   S00C08
S00C09   S00C10   S00C11   S00C12   S00C13   S00C14   S00C15   S00C16
S00C17   S00C18   S00C19   S00C20   S00C21   S00C22   H00001   H00002
H00003A  H00003B  H00003C  H00003D  H00003E  H00003F  H00003G  H00003H
H00003I  H00003J  H00003K  H00003L  H00004   H00005   H00006   H00007
H00008   H00009   H00010   H00011   H00012   H00013   H00014   H00015
H00016   H00017   H00018   H00019   H00020   H00021   H00022   H00023
H00024   H00025   H00026   H00027   H00028   H00029   H00030   H00031
H00032   H00033   H00034   H00035   H00036   H00037   H00038   H00039
```

```
H00040   H00041   H00042   H00043   H00044   H00045   H00046   H00047
H00048   H00049   H00050   H00051   H00052   H00053   H00054   H00055
H00056   H00057   H00058   H00059   H00060   H00061   H00062   H00063
H00064   H00065   H00066   H00067   H00068   H00069   H00070   H00071
H00072   H00073A  H00073B  H00074   H00075   H00076A  H00076B  H00077
SREDA    H00079   SRAGE    H00082A  H00082B  H00083A  H00083B  H00083C
H00083D  H00083E  H00083F  H00083G  H00083H  H00083I  H00084   H00085A
H00085B  H00085C  H00085D  H00085E  H00085F  H00085G  H00085H  H00085I
H00085J  SRRACEA  SRRACEB  SRRACEC  SRRACED  SRRACEE;

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

%Let varlist2 =

S00C01_O S00C02_O S00C03_O S00C04_O S00C05_O S00C06_O S00C07_O S00C08_O
S00C09_O S00C10_O S00C11_O S00C12_O S00C13_O S00C14_O S00C15_O S00C16_O
S00C17_O S00C18_O S00C19_O S00C20_O S00C21_O S00C22_O H00001_O H00002_O
H00003AO H00003BO H00003CO H00003DO H00003EO H00003FO H00003GO H00003HO
H00003IO H00003JO H00003KO H00003LO H00004_O H00005_O H00006_O H00007_O
H00008_O H00009_O H00010_O H00011_O H00012_O H00013_O H00014_O H00015_O
H00016_O H00017_O H00018_O H00019_O H00020_O H00021_O H00022_O H00023_O
H00024_O H00025_O H00026_O H00027_O H00028_O H00029_O H00030_O H00031_O
H00032_O H00033_O H00034_O H00035_O H00036_O H00037_O H00038_O H00039_O
H00040_O H00041_O H00042_O H00043_O H00044_O H00045_O H00046_O H00047_O
H00048_O H00049_O H00050_O H00051_O H00052_O H00053_O H00054_O H00055_O
H00056_O H00057_O H00058_O H00059_O H00060_O H00061_O H00062_O H00063_O
H00064_O H00065_O H00066_O H00067_O H00068_O H00069_O H00070_O H00071_O
H00072_O H00073AO H00073BO H00074_O H00075_O H00076AO H00076BO H00077_O
SREDA_O  H00079_O SRAGE_O  H00082AO H00082BO H00083AO H00083BO H00083CO
H00083DO H00083EO H00083FO H00083GO H00083HO H00083IO H00084_O H00085AO
H00085BO H00085CO H00085DO H00085EO H00085FO H00085GO H00085HO H00085IO
H00085JO SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO;


TITLE  "DoD 2000 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";

DATA OUT.&OUTDATA;
  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;

 /* if _n_ le 100;*/

  %INCLUDE "CSCHM00Q.FMT";

/* label and format statements for original variables */

  SET IN.&INDATA;

/*****************************************************************/
/*****************************************************************/
/** First, recode inaccurate response data provided by NRC    **/
/*****************************************************************/
/*****************************************************************/

  %INCLUDE "RECODE.TXT";

/* This is a version of the coding scheme and coding tables for the
   2000 HCSDB Form A.
   The following tables outline the coding of screening questions (skip),
   and subsequent items to be answered (or not answered in a series
   following a skip question.) */

/* First set up new variables that capture the original values */
/* recode the initial numeric values to the SAS numeric values */
/* specified in the coding scheme                              */

  SEX=PNSEXCD;
  AGE=DAGEQY;
  DROP SEX AGE;
```

```
  ARRAY RECODE(*) &VARLIST1;
  ARRAY   ORIG(*) &VARLIST2;

  DO I = 1 to DIM(ORIG);
      ORIG(I) = RECODE(I);
      IF ORIG(I) < 0 THEN DO;
              IF ORIG(I)= -9 THEN RECODE(I)=.;
         ELSE IF ORIG(I)= -8 THEN RECODE(I)=.A;
         ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
         ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
         ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
         ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
         ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
         ELSE RECODE(I)=RECODE(I);
      END;
  END;
  DROP I;

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

  ARRAY   MARKED(*) H00003A H00003B H00003C H00003D H00003E H00003F
                    H00003G H00003H H00003I H00003J H00003K H00003L
                    SRRACEA SRRACEB SRRACEC SRRACED SRRACEE H00083A
                    H00083B H00083C H00083D H00083E H00083F H00083G
                    H00083H H00083I H00085A H00085B H00085C H00085D
                    H00085E H00085F H00085G H00085H H00085I H00085J;

  ARRAY INFORMAT(*) H00003AO H00003BO H00003CO H00003DO H00003EO H00003FO
                    H00003GO H00003HO H00003IO H00003JO H00003KO H00003LO
                    SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO H00083AO
                    H00083BO H00083CO H00083DO H00083EO H00083FO H00083GO
                    H00083HO H00083IO H00085AO H00085BO H00085CO H00085DO
                    H00085EO H00085FO H00085GO H00085HO H00085IO H00085JO;


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

  FORMAT H00003A H00003B H00003C H00003D H00003E H00003F
         H00003G H00003H H00003I H00003J H00003K H00003L
         SRRACEA SRRACEB SRRACEC SRRACED SRRACEE H00083A
         H00083B H00083C H00083D H00083E H00083F H00083G
         H00083H H00083I H00085A H00085B H00085C H00085D
         H00085E H00085F H00085G H00085H H00085I H00085J
         MARKED.;

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

  IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;

/* 1/25/2001 -- Recode responses from NRC to conform to final questionnaire */

  IF H00004_O=4  THEN H00004=.D;          /* Question  4 */
  IF H00011_O=4  THEN H00011=.N;          /* Question 15 */
  IF S00C05_O>=0 THEN S00C05=S00C05_O+1;  /* Question 20 */
  IF H00017_O=3  THEN H00017=.N;          /* Question 22 */
  IF H00043_O=3  THEN H00043=.D;          /* Question 57 */
  IF H00066_O=3  THEN H00066=.D;          /* Question 80 */

  ARRAY RESCALE1(*) H00061_O H00064_O H00071_O H00072_O H00073BO
                    H00074_O H00077_O;
  ARRAY  RECODE1(*) H00061 H00064 H00071 H00072 H00073B
                    H00074 H00077;
  DO J=1 TO DIM(RESCALE1);
     IF RESCALE1(J)>0 THEN DO;
        IF RESCALE1(J)=1 THEN RECODE1(J)=5;
        IF RESCALE1(J)=2 THEN RECODE1(J)=4;
        IF RESCALE1(J)=4 THEN RECODE1(J)=2;
```

```
        IF RESCALE1(J)=5 THEN RECODE1(J)=1;
     END;
  END;
  DROP J;

  IF H00062_O>0 THEN DO;                /* Question 76 */
     IF H00062_O=3 THEN H00062=1;
     IF H00062_O=1 THEN H00062=3;
  END;

  ARRAY RESCALE2(*) H00065_O H00076BO;
  ARRAY  RECODE2(*) H00065   H00076B;
  DO K=1 TO DIM(RESCALE2);
     IF RESCALE2(K)>0 THEN DO;
         IF RESCALE2(K)=1 THEN RECODE2(K)=4;
         IF RESCALE2(K)=2 THEN RECODE2(K)=3;
         IF RESCALE2(K)=3 THEN RECODE2(K)=2;
         IF RESCALE2(K)=4 THEN RECODE2(K)=1;
     END;
  END;
  DROP K;

  IF H00067_O>0 THEN DO;                /* Question 81 */
          IF H00067_O=1 THEN H00067=4;
     ELSE IF H00067_O=2 THEN H00067=3;
     ELSE IF H00067_O=3 THEN H00067=2;
     ELSE IF H00067_O=4 THEN H00067=.D;
  END;

  IF H00068_O>0 THEN DO;                /* Question 82 */
     IF H00068_O=1 THEN H00068=3;
     IF H00068_O=3 THEN H00068=.D;
  END;

/** Note 1 -- health plan usage  **/

  IF H00001 > 0 OR H00001 =.D THEN N1=1;
  ELSE IF H00001=.N  THEN DO;
     IF H00002 NOT=. THEN DO;
        N1=2;
        H00002=.C;
     END;
     ELSE DO;
        N1=3;
        H00002=.N;
     END;
  END;
  ELSE IF H00001=.   THEN N1=4;
  ELSE IF H00001=.A  THEN DO;
     IF H00002 NOT=. THEN N1=5;
     ELSE DO;
         H00001=.N;
         H00002=.N;
         N1=6;
     END;
  END;

/** Note2  -- H00006, H00007: Personal doctor or nurse **/

  IF H00006=1 AND H00007 IN (1,2,3,.,.A) THEN N2=1;
  ELSE IF H00006 IN (1,.,.A) AND H00007=.N THEN DO;
     H00006=2;
     H00007=.C;
     N2=2;
  END;
  ELSE IF H00006 IN (2,.,.A) AND H00007>0 THEN DO;
     H00006=1;
     N2=3;
  END;
  ELSE IF H00006=2 AND H00007 IN (.N,.,.A) THEN DO;
     IF H00007=. THEN H00007=.N;
```

```
      ELSE H00007=.C;
      N2=4;
   END;
   ELSE IF H00006=. AND H00007=.A THEN DO;
      H00006=1;
      N2=5;
   END;
   ELSE IF H00006=. AND H00007=. THEN N2=6;
   ELSE IF H00006=.A AND H00007=. THEN DO;
      H00006=2;
      H00007=.N;
      N2=7;
   END;
   ELSE IF H00006=.A AND H00007=.A THEN N2=8;


/** Note 3 -- H00008, S00C01-S00C04, H00009:  Personal doctor or nurse **/

   ARRAY NOTE3  H00009 S00C01-S00C04;
   ARRAY NOTE3B H00009 S00C01 S00C02 S00C04;
   N3NMISS=0;
   N3MARK=0;

   DO OVER NOTE3;
      IF NOTE3 NOT=. THEN N3NMISS+1 ;
   END;
   DO OVER NOTE3B;
      IF NOTE3B NOT IN (.,.N) THEN N3MARK+1;
   END;

   IF S00C03 NOT IN (2, .) THEN N3MARK+1;
   IF H00008 = 1 AND (N3NMISS=0 OR N3MARK>0) THEN N3=1;
   ELSE IF H00008 IN (1,.,.A) AND N3NMISS>0 AND N3MARK=0 THEN DO;
      H00008=2;
      N3=2;
      DO OVER NOTE3;
         IF NOTE3=. THEN NOTE3=.N;
         ELSE NOTE3=.C;
      END;
   END;
   ELSE IF H00008 IN (2,.,.A) AND N3MARK>0 THEN DO;
      H00008=1;
      N3=3;
   END;
   ELSE IF H00008=2 AND (N3NMISS=0 OR (N3NMISS>0 AND N3MARK=0)) THEN DO;
      N3=4;
      DO OVER NOTE3;
         IF NOTE3=. THEN NOTE3=.N;
         ELSE NOTE3=.C;
      END;
   END;
   ELSE IF H00008=. AND  N3NMISS=0 THEN N3=5;
   ELSE IF H00008=.A AND N3NMISS=0 THEN DO;
      H00008=2;
      N3=6;
      DO OVER NOTE3;
         NOTE3=.N;
      END;
   END;

   DROP N3NMISS N3MARK;

/** Note 4 -- S00C03,S00C04: ability to work **/

   IF S00C03 IN (.N, .C) AND S00C04 IN (.N,.C) THEN N4=1;
   ELSE IF S00C03=1 AND S00C04 IN (1,2,.,.A) THEN N4=2;
   ELSE IF S00C03 IN (1,.,.A) AND S00C04=.N THEN DO;
      S00C03=2;
      S00C04=.C;
      N4=3;
   END;
```

```
  ELSE IF S00C03 =2 THEN DO;
     IF S00C04=. THEN S00C04=.N;
     ELSE S00C04=.C;
     N4=4;
  END;
  ELSE IF S00C03=.A AND S00C04 IN (1,2) THEN DO;
     S00C03=1;
     N4=5;
  END;
  ELSE IF S00C03=. AND S00C04 IN (1,2) THEN DO;
     S00C04=.C;
     N4=6;
  END;
  ELSE IF S00C03=. AND S00C04 IN (.,.A) THEN N4=7;
  ELSE IF S00C03=.A AND S00C04=.A THEN  N4=8;
  ELSE IF S00C03=.A AND S00C04=. THEN DO;
     S00C03=2;
     S00C04=.N;
     N4=9;
  END;



/** Note 5 -- H00010-H00012:  currently enrolled in Tricare Prime  **/

  ARRAY NOTE5 H00011 H00012;
  N5NMISS=0;
  N5MARK=0;
  DO OVER NOTE5;
     IF NOTE5 NE . THEN N5NMISS+1;          /* check for all missing */
     IF NOTE5 NOT IN (.,.N) THEN N5MARK+1; /* not missing or NA */
  END;

  IF H00010=1 AND (N5NMISS=0 OR N5MARK>0) THEN N5=1;
  ELSE IF H00010 IN (1,.,.A) AND H00011=.N AND H00012=. THEN DO;
     H00010=2;
     N5=2;
     DO OVER NOTE5;
        IF NOTE5=. THEN NOTE5=.N;
        ELSE NOTE5=.C;
     END;
  END;
  ELSE IF H00010 IN (2,.,.A) AND N5MARK>0 THEN DO;
     H00010=1;
     N5=3;
  END;
  ELSE IF H00010=2 AND ((N5NMISS=0) OR (H00011=.N AND H00012=.))THEN DO;
     N5=4;
     DO OVER NOTE5;
        IF NOTE5=. THEN NOTE5=.N;
        ELSE NOTE5=.C;
     END;
  END;
  ELSE IF H00010=. AND N5NMISS=0 THEN N5=5;
  ELSE IF H00010=.A AND N5NMISS=0 THEN DO;
     H00010=2;
     N5=6;
     DO OVER NOTE5;
        NOTE5=.N;
     END;
  END;

  DROP N5MARK N5NMISS;

/** Note 6 -- H00013, H00014:  needed to see a specialist in last 12 months **/

  IF H00013=1 AND H00014 IN (1,2,3,.,.A) THEN N6=1;
  ELSE IF H00013 IN (1,.,.A) AND H00014=.N THEN DO;
     H00013=2;
     H00014=.C;
     N6=2;
```

```
  END;
  ELSE IF H00013 IN (2,.,.A) AND H00014 IN (1,2,3) THEN DO;
     H00013=1;
     N6=3;
  END;
  ELSE IF H00013=2 AND H00014 IN (.,.A,.N) THEN DO;
     IF H00014=. THEN H00014=.N;
     ELSE H00014=.C;
     N6=4;
  END;
  ELSE IF H00013=. AND H00014=.A THEN DO;
     H00013=1;
     N6=5;
  END;
  ELSE IF H00013=.  AND H00014=. THEN N6=6;
  ELSE IF H00013=.A AND H00014=. THEN DO;
     H00013=2;
     H00014=.N;
     N6=7;
  END;

/** Note 7 -- H00015,S00C05,H00016,H00017: saw a specialist in last 12 months **/

  ARRAY NOTE7  H00016 H00017 S00C05;
  ARRAY NOTE7B H00016 H00017;
  N7MARK=0;
  N7NMISS=0;

  DO OVER NOTE7;
     IF NOTE7 NE . THEN N7NMISS+1;
  END;

  DO OVER NOTE7B;
     IF NOTE7B NOT IN (.N,.) THEN N7MARK+1;
  END;

  IF S00C05 NOT IN (1, .) THEN N7MARK+1;
  IF H00015=1 AND (N7NMISS=0 OR N7MARK>0) THEN N7=1;
  ELSE IF H00015 IN (1,.,.A) AND N7NMISS>0 AND N7MARK=0 THEN DO;
     H00015=2;
     N7=2;
     DO OVER NOTE7;
        IF NOTE7=. THEN NOTE7=.N;
        ELSE NOTE7=.C;
     END;
  END;
  ELSE IF H00015 IN (2,.,.A) AND N7MARK>0 THEN DO;
     H00015=1;
     N7=3;
  END;
  ELSE IF H00015=2 AND N7NMISS=0 OR (N7NMISS>0 AND N7MARK=0) THEN DO;
     N7=4;
     DO OVER NOTE7;
        IF NOTE7=. THEN NOTE7=.N;
        ELSE NOTE7=.C;
     END;
  END;
  ELSE IF H00015=. AND  N7NMISS=0 THEN N7=5;
  ELSE IF H00015=.A AND N7NMISS=0 THEN DO;
     H00015=2;
     N7=6;
     DO OVER NOTE7;
        NOTE7=.N;
     END;
  END;

  DROP N7NMISS N7MARK;

/** Note 8 -- S00C05,H00016,H00017:  saw a specialist in last 12 months **/

  ARRAY NOTE8 H00016 H00017;
```

```
  N8MARK=0;
  N8NMISS=0;

  DO OVER NOTE8;
     IF NOTE8 NE . THEN N8NMISS+1;
  END;

  DO OVER NOTE8;
     IF NOTE8 NOT IN (.N,.) THEN N8MARK+1;
  END;
  IF S00C05 IN (.N,.C) THEN N8=1;
  ELSE IF S00C05=1 AND (N8NMISS=0 OR (N8NMISS>0 AND N8MARK=0)) THEN DO;
     N8=2;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF S00C05 IN (1,.,.A) AND N8MARK>0 THEN N8=3;
  ELSE IF S00C05 IN (2,3,4,5,6,7,.,.A) AND (N8NMISS>0 AND N8MARK=0) THEN DO;
     S00C05=1;
     N8=4;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF S00C05 IN (2,3,4,5,6,7) AND (N8NMISS=0 OR N8MARK>0) THEN N8=5;
  ELSE IF S00C05=.  AND N8NMISS=0 THEN N8=6;
  ELSE IF S00C05=.A AND N8NMISS=0 THEN DO;
     S00C05=1;
     N8=7;
     DO OVER NOTE8;
        NOTE8=.N;
     END;
  END;

  DROP N8NMISS N8MARK;

/** Note 9 -- called a doctor's office:  H00018, H00019 **/

  IF H00018=1 AND H00019 IN (1,2,3,4,.,.A) THEN N9=1;
  ELSE IF H00018 IN (1,.,.A) AND H00019=.N THEN DO;
     H00018=2;
     H00019=.C;
     N9=2;
  END;
  ELSE IF H00018 IN (2,.,.A) AND H00019 IN (1,2,3,4) THEN DO;
     H00018=1;
     N9=3;
  END;

  ELSE IF H00018=2 AND H00019 IN (.,.A,.N) THEN DO;
     IF H00019=. THEN H00019=.N;
     ELSE H00019=.C;
     N9=4;
  END;
  ELSE IF H00018=.  AND H00019=.A THEN DO;
     H00018=1;
     N9=5;
  END;
  ELSE IF H00018=.  AND H00019=.  THEN N9=6;
  ELSE IF H00018=.A AND H00019=.A THEN N9=7;
  ELSE IF H00018=.A AND H00019=.  THEN DO;
     H00018=2;
     N9=8;
  END;

/** Note 10 -- H00020,H00021,H00022:  regular or routine healthcare **/

  ARRAY NOTE10 H00021 H00022;
```

```
  N10MARK=0;
  N10NMISS=0;

  DO OVER NOTE10;
     IF NOTE10 NE . THEN N10NMISS+1;
  END;

  DO OVER NOTE10;
     IF NOTE10 NOT IN (.N,.) THEN N10MARK+1;
  END;
  IF H00020=1 AND (N10NMISS=0 OR N10MARK>0) THEN N10=1;
  ELSE IF H00020 IN (1,.,.A) AND N10NMISS>0 AND N10MARK=0 THEN DO;
     H00020=2;
     N10=2;
     DO OVER NOTE10;
        IF NOTE10=. THEN NOTE10=.N;
        ELSE NOTE10=.C;
     END;
  END;
  ELSE IF H00020 IN (2,.,.A) AND N10MARK>0 THEN DO;
     H00020=1;
     N10=3;
  END;
  ELSE IF H00020=2 AND (N10NMISS=0 OR (N10NMISS>0 AND N10MARK=0)) THEN DO;
     N10=4;
     DO OVER NOTE10;
        IF NOTE10=. THEN NOTE10=.N;
        ELSE NOTE10=.C;
     END;
  END;
  ELSE IF H00020=.  AND  N10NMISS=0 THEN N10=5;
  ELSE IF H00020=.A AND N10NMISS=0 THEN DO;
     H00020=2;
     N10=6;
     DO OVER NOTE10;
        NOTE10=.N;
     END;
  END;

  DROP N10NMISS N10MARK;

/** Note 11 -- H00023,H00024,H00025:  illness or injury **/

  ARRAY NOTE11 H00024 H00025;
  N11MARK=0;
  N11NMISS=0;

  DO OVER NOTE11;
     IF NOTE11 NE . THEN N11NMISS+1;
  END;

  DO OVER NOTE11;
     IF NOTE11 NOT IN (.N,.) THEN N11MARK+1;
  END;

  IF H00023=1 AND (N11NMISS=0 OR N11MARK>0) THEN N11=1;
  ELSE IF H00023 IN (1,.,.A) AND N11NMISS>0 AND N11MARK=0 THEN DO;
     H00023=2;
     N11=2;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H00023 IN (2,.,.A) AND N11MARK>0 THEN DO;
     H00023=1;
     N11=3;
  END;
  ELSE IF H00023=2 AND (N11NMISS=0 OR (N11NMISS>0 AND N11MARK=0)) THEN DO;
     N11=4;
     DO OVER NOTE11;
```

```
         IF NOTE11=. THEN NOTE11=.N;
         ELSE NOTE11=.C;
      END;
   END;
   ELSE IF H00023=.  AND N11NMISS=0 THEN N11=5;
   ELSE IF H00023=.A AND N11NMISS=0 THEN DO;
      H00023=2;
      N11=6;
      DO OVER NOTE11;
         NOTE11=.N;
      END;
   END;

   DROP N11NMISS N11MARK;

/** Note 12 -- H00027,S00C06-S00C08,H00028-H00038: doctor's office or clinic **/

   ARRAY NOTE12  S00C06-S00C08 H00028-H00038;
   ARRAY NOTE12B S00C07 S00C08 H00028-H00038;
   N12MARK=0;
   N12NMISS=0;

   DO OVER NOTE12;
      IF NOTE12 NE . THEN N12NMISS+1;
   END;

   DO OVER NOTE12B;
      IF NOTE12B NOT IN (.N,.) THEN N12MARK+1;
   END;

   IF S00C06 NOT IN (2, .) THEN N12MARK+1;
   IF H00027=1 AND (N12NMISS=0 OR (N12NMISS>0 AND N12MARK=0)) THEN DO;
      N12=1;
      DO OVER NOTE12;
         IF NOTE12=. THEN NOTE12=.N;
         ELSE NOTE12=.C;
      END;
   END;
   ELSE IF H00027 IN (1,.,.A) AND N12MARK>0 THEN N12=2;
   ELSE IF H00027 IN (2,3,4,5,6,7,.,.A) AND (N12NMISS>0 AND N12MARK=0) THEN DO;
      H00027=1;
      N12=3;
      DO OVER NOTE12;
         IF NOTE12=. THEN NOTE12=.N;
         ELSE NOTE12=.C;
      END;
   END;
   ELSE IF H00027 IN (2,3,4,5,6,7) AND (N12NMISS=0 OR N12MARK>0) THEN N12=4;
   ELSE IF H00027=.  AND N12NMISS=0 THEN N12=5;
   ELSE IF H00027=.A AND N12NMISS=0 THEN DO;
      H00027=1;
      N12=6;
      DO OVER NOTE12;
         NOTE12=.N;
      END;
   END;

   DROP N12NMISS N12MARK;

/** Note 13 -- S00C06,S00C07,S00C08: decisions about healthcare **/

   ARRAY NOTE13 S00C07 S00C08;
   N13MARK=0;
   N13NMISS=0;

   DO OVER NOTE13;
      IF NOTE13 NE . THEN N13NMISS+1;
   END;

   DO OVER NOTE13;
      IF NOTE13 NOT IN (.N,.) THEN N13MARK+1;
```

```
  END;

  IF S00C06 IN (.N,.C) THEN N13=1;
  ELSE IF S00C06=1 AND (N13NMISS=0 OR N13MARK>0) THEN N13=2;
  ELSE IF S00C06 IN (1,.,.A) AND N13NMISS>0 AND N13MARK=0 THEN DO;
     S00C06=2;
     N13=3;
     DO OVER NOTE13;
        IF NOTE13=. THEN NOTE13=.N;
        ELSE NOTE13=.C;
     END;
  END;
  ELSE IF S00C06 IN (2,.,.A) AND N13MARK>0 THEN DO;
     S00C06=1;
     N13=4;
  END;
  ELSE IF S00C06=2 AND (N13NMISS=0 OR (N13NMISS>0 AND N13MARK=0)) THEN DO;
     N13=5;
     DO OVER NOTE13;
        IF NOTE13=. THEN NOTE13=.N;
        ELSE NOTE13=.C;
     END;
  END;
  ELSE IF S00C06=.  AND N13NMISS=0 THEN N13=6;
  ELSE IF S00C06=.A AND N13NMISS=0 THEN DO;
     S00C06=2;
     N13=7;
     DO OVER NOTE13;
        NOTE13=.N;
     END;
  END;

  DROP N13NMISS N13MARK;

/** Note14  -- S00C09, S00C10: special medical equipment **/

  IF S00C09=1 AND S00C10 IN (1,2,3,.,.A) THEN N14=1;
  ELSE IF S00C09 IN (1,.,.A) AND S00C10=.N THEN DO;
     S00C09=2;
     S00C10=.C;
     N14=2;
  END;
  ELSE IF S00C09 IN (2,.,.A) AND S00C10>0 THEN DO;
     S00C09=1;
     N14=3;
  END;
  ELSE IF S00C09=2 AND S00C10 IN (.N,.,.A) THEN DO;
     IF S00C10=. THEN S00C10=.N;
     ELSE S00C10=.C;
     N14=4;
  END;
  ELSE IF S00C09=. AND S00C10=.A THEN DO;
     S00C09=1;
     N14=5;
  END;
  ELSE IF S00C09=. AND S00C10=. THEN N14=6;
  ELSE IF S00C09=.A AND S00C10=. THEN DO;
     S00C09=2;
     S00C10=.N;
     N14=7;
  END;

/** Note15  -- S00C11, S00C12: special therapy **/

  IF S00C11=1 AND S00C12 IN (1,2,3,.,.A) THEN N15=1;
  ELSE IF S00C11 IN (1,.,.A) AND S00C12=.N THEN DO;
     S00C11=2;
     S00C12=.C;
     N15=2;
  END;
  ELSE IF S00C11 IN (2,.,.A) AND S00C12>0 THEN DO;
```

```
      S00C11=1;
      N15=3;
   END;
   ELSE IF S00C11=2 AND S00C12 IN (.N,.,.A) THEN DO;
      IF S00C12=. THEN S00C12=.N;
      ELSE S00C12=.C;
      N15=4;
   END;
   ELSE IF S00C11=. AND S00C12=.A THEN DO;
      S00C11=1;
      N15=5;
   END;
   ELSE IF S00C11=. AND S00C12=. THEN N15=6;
   ELSE IF S00C11=.A AND S00C12=. THEN DO;
      S00C11=2;
      S00C12=.N;
      N15=7;
   END;


/** Note16  -- S00C13, S00C14: home health care or assistance **/

   IF S00C13=1 AND S00C14 IN (1,2,3,.,.A) THEN N16=1;
   ELSE IF S00C13 IN (1,.,.A) AND S00C14=.N THEN DO;
      S00C13=2;
      S00C14=.C;
      N16=2;
   END;
   ELSE IF S00C13=2 THEN DO;
      IF S00C14=. THEN S00C14=.N;
      ELSE S00C14=.C;
      N16=3;
   END;
   ELSE IF S00C13=. AND S00C14 IN (1,2,3) THEN DO;
      IF S00C14=. THEN S00C14=.N;
      ELSE S00C14=.C;
      N16=4;
   END;
   ELSE IF S00C13=.A AND S00C14 IN (1,2,3) THEN DO;
      S00C13=1;
      N16=5;
   END;
   ELSE IF S00C13=.  AND S00C14 IN (.,.A) THEN N16=6;
   ELSE IF S00C13=.A AND S00C14=.A        THEN N16=7;
   ELSE IF S00C13=.A AND S00C14=.         THEN DO;
      S00C13=2;
      S00C14=.N;
      N16=8;
   END;

/** Note 17 -- H00043, H00044-H00046: claims to health plan **/

   ARRAY NOTE17 H00044-H00046;
   N17MARK=0;
   N17NMISS=0;

   DO OVER NOTE17;
      IF NOTE17 NE . THEN N17NMISS+1;
   END;

   DO OVER NOTE17;
      IF NOTE17 NOT IN (.N,.) THEN N17MARK+1;
   END;

   IF H00043 IN (1,.D) AND (N17NMISS=0 OR N17MARK>0) THEN N17=1;
   ELSE IF H00043 IN (1,.D,.,.A) AND N17NMISS>0 AND N17MARK=0 THEN DO;
      H00043=2;
      N17=2;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
         ELSE NOTE17=.C;
```

```
      END;
   END;
   ELSE IF H00043 IN (2,.,.A) AND N17MARK>0 THEN DO;
      H00043=1;
      N17=3;
   END;
   ELSE IF H00043=2 AND (N17NMISS=0 OR (N17NMISS>0 AND N17MARK=0)) THEN DO;
      N17=4;
      DO OVER NOTE17;
         IF NOTE17=. THEN NOTE17=.N;
         ELSE NOTE17=.C;
      END;
   END;
   ELSE IF H00043=.  AND N17NMISS=0 THEN N17=5;
   ELSE IF H00043=.A AND N17NMISS=0 THEN DO;
      H00043=2;
      N17=6;
      DO OVER NOTE17;
         NOTE17=.N;
      END;
   END;

   DROP N17NMISS N17MARK;

 /** Note18  -- H00047, H00048: **/

   IF H00047=1 AND H00048 IN (1,2,3,.,.A) THEN N18=1;
   ELSE IF H00047 IN (1,.,.A) AND H00048=.N THEN DO;
      H00047=2;
      H00048=.C;
      N18=2;
   END;
   ELSE IF H00047 IN (2,3,.,.A) AND H00048 IN (1,2,3) THEN DO;
      H00047=1;
      N18=3;
   END;
   ELSE IF H00047 IN (2,3) AND H00048 IN (.N,.,.A) THEN DO;
      IF H00048=. THEN H00048=.N;
      ELSE H00048=.C;
      N18=4;
   END;
   ELSE IF H00047=. AND H00048=.A THEN DO;
      H00047=1;
      N18=5;
   END;
   ELSE IF H00047=. AND H00048=. THEN N18=6;
   ELSE IF H00047=.A AND H00048=. THEN DO;
      H00047=2;
      H00048=.N;
      N18=7;
   END;

 /** Note19  -- H00049, H00050: **/

   IF H00049=1 AND H00050 IN (1,2,3,.,.A) THEN N19=1;
   ELSE IF H00049 IN (1,.,.A) AND H00050=.N THEN DO;
      H00049=2;
      H00050=.C;
      N19=2;
   END;
   ELSE IF H00049 IN (2,.,.A) AND H00050 IN (1,2,3) THEN DO;
      H00049=1;
      N19=3;
   END;
   ELSE IF H00049=2 AND H00050 IN (.N,.,.A) THEN DO;
      IF H00050=. THEN H00050=.N;
      ELSE H00050=.C;
      N19=4;
   END;
   ELSE IF H00049=. AND H00050=.A THEN DO;
      H00049=1;
```

```
      N19=5;
   END;
   ELSE IF H00049=. AND H00050=. THEN N19=6;
   ELSE IF H00049=.A AND H00050=. THEN DO;
      H00049=2;
      H00050=.N;
      N19=7;
   END;

/** Note 20 -- H00051, H00052, H00053:  **/

   ARRAY NOTE20 H00052 H00053;
   N20MARK=0;
   N20NMISS=0;

   DO OVER NOTE20;
      IF NOTE20 NE . THEN N20NMISS+1;
   END;

   DO OVER NOTE20;
      IF NOTE20 NOT IN (.N,.) THEN N20MARK+1;
   END;

   IF H00051=1 AND (N20NMISS=0 OR N20MARK>0) THEN N20=1;
   ELSE IF H00051 IN (1,3,.,.A) AND N20NMISS>0 AND N20MARK=0 THEN DO;
      H00051=2;
      N20=2;
      DO OVER NOTE20;
         IF NOTE20=. THEN NOTE20=.N;
         ELSE NOTE20=.C;
      END;
   END;
   ELSE IF H00051 IN (2,3,.,.A) AND N20MARK>0 THEN DO;
      H00051=1;
      N20=3;
   END;
   ELSE IF H00051=2 AND (N20NMISS=0 OR (N20NMISS>0 AND N20MARK=0)) THEN DO;
      N20=4;
      DO OVER NOTE20;
         IF NOTE20=. THEN NOTE20=.N;
         ELSE NOTE20=.C;
      END;
   END;
   ELSE IF H00051=.  AND N20NMISS=0 THEN N20=5;
   ELSE IF H00051=.A AND N20NMISS=0 THEN DO;
      H00051=2;
      N20=6;
      DO OVER NOTE20;
         NOTE20=.N;
      END;
   END;

   DROP N20NMISS N20MARK;

/** Note21  -- H00054, H00055: **/

   IF H00054=1 AND H00055 IN (1,2,3,.,.A) THEN N21=1;
   ELSE IF H00054 IN (1,.,.A) AND H00055=.N THEN DO;
      H00054=2;
      H00055=.C;
      N21=2;
   END;
   ELSE IF H00054 IN (2,.,.A) AND H00055 IN (1,2,3,.A) THEN DO;
      H00054=1;
      N21=3;
   END;
   ELSE IF H00054=2 AND H00055 IN (.N,.)THEN DO;
      IF H00055=. THEN  H00055=.N;
      ELSE H00055=.C;
      N21=4;
   END;
```

```
  ELSE IF H00054=.  AND H00055=. THEN N21=5;
  ELSE IF H00054=.A AND H00055=. THEN DO;
     H00054=2;
     H00055=.N;
     N21=6;
  END;

/** Note 22 -- smoking:  H00066 - H00069  **/

  IF H00066=1 and H00067 IN (3,4) THEN DO;  /* still smoke */
     IF H00068 NE . THEN DO;
        H00068=.C;
        N22=1;
     END;
     ELSE IF H00068=. THEN DO;
        H00068=.N;
        N22=2;
     END;
  END;
  ELSE IF H00066=1 AND H00067=2 THEN DO;         /* quit */
     IF H00068 IN (2,.D) AND H00069 NE . THEN DO;   /* > 1 year ago */
        H00069 =.C;
        N22=3;
     END;
     ELSE IF H00068 IN (2,.D) AND H00069=. THEN DO;
        H00069 =.N;
        N22=4;
     END;
     ELSE IF H00068 IN (3,.,.A) THEN N22=5;      /* < 1 year ago */
  END;
  ELSE IF H00066=1 AND H00067 IN (.D,.,.A) THEN DO;  /* don't know */
     IF H00068=2 AND H00069 NE . THEN DO;        /* > 1 year ago */
        H00067=2;
        H00069=.C;
        N22=6;
     END;
     ELSE IF H00068=2 AND H00069 = . THEN DO;
        H00067=2;
        H00069=.N;
        N22=7;
     END;
     ELSE IF H00068=3 THEN DO;            /* < 1 year ago */
        H00067=2;
        N22=8;
     END;
     ELSE IF H00068 IN (.D,.,.A) THEN N22=9;  /* don't know */
  END;
  ELSE IF H00066 IN (2,.D,.,.A) AND H00067 IN (3,4) THEN DO; /*never smoke*/
     IF H00068 NE . THEN DO;
        H00066=1;
        H00068=.C;
        N22=10;
     END;
     ELSE IF H00068=. THEN DO;
        H00066=1;
        H00068=.N;
        N22=11;
     END;
  END;
  ELSE IF H00066 IN (2,.D) AND H00067 IN (2,.D,.A) THEN DO; /*never smoke*/
     IF H00068 NE . AND H00069 NE . THEN DO;
        H00067 =.C;
        H00068 =.C;
        H00069 =.C;
        N22=12;
     END;
     ELSE IF H00068 NE . AND H00069=. THEN DO;
        H00067=.C;
        H00068=.C;
        H00069=.N;
        N22=13;
```

```
   END;
   ELSE IF H00068=. AND H00069 NE . THEN DO;
      H00067=.C;
      H00068=.N;
      H00069=.C;
      N22=14;
   END;
   ELSE IF H00068=. AND H00069=. THEN DO;
      H00067=.C;
      H00068=.N;
      H00069=.N;
      N22=15;
   END;
END;
ELSE IF H00066 IN (2,.D) AND H00067= . THEN DO; /*never smoke*/
   IF H00068 NE . AND H00069 NE . THEN DO;
      H00067=.N;
      H00068=.C;
      H00069=.C;
      N22=16;
   END;
   ELSE IF H00068 NE . AND H00069=. THEN DO;
      H00067=.N;
      H00068=.C;
      H00069=.N;
      N22=17;
   END;
   ELSE IF H00068=. AND H00069 NE . THEN DO;
      H00067=.N;
      H00068=.N;
      H00069=.C;
      N22=18;
   END;
   ELSE IF H00068=. AND H00069=. THEN DO;
      H00067=.N;
      H00068=.N;
      H00069=.N;
      N22=19;
   END;
END;
ELSE IF H00066 IN (.A, .) AND H00067 IN (2,.,.A) THEN DO; /*MRE/blank*/
   IF H00068=3 THEN DO;
      H00066=1;
      N22=20;
   END;
   ELSE IF H00068=2 AND H00069 NE . THEN DO;
      H00066 =1;
      H00069 =.C;
      N22=21;
   END;
   ELSE IF H00068=2 AND H00069=. THEN DO;
      H00066=1;
      H00069=.N;
      N22=22;
   END;
   ELSE IF H00068=.D AND H00069=. THEN DO;
      H00069=.N;
      N22=23;
   END;
   ELSE IF H00068=.D AND H00069 NE . THEN DO;
      H00069=.C;
      N22=24;
   END;
   ELSE IF H00068 IN (.,.A) AND H00069 IN (2,3,4,5) THEN DO;
      H00066=1;
      N22=25;
   END;
   ELSE IF H00068 IN (.,.A) AND H00069 IN (1,.,.A) THEN N22=26;
END;
ELSE IF H00066 IN (.A,.) AND H00067=.D THEN DO; /*MRE/blank*/
   IF H00068 NE . AND H00069 NE .  THEN DO;
```

```
         H00068=.C;
         H00069=.C;
         N22=27;
      END;
      ELSE IF H00068 NE . AND H00069=.  THEN DO;
         H00068=.C;
         H00069=.N;
         N22=28;
      END;
      IF H00068=. AND H00069=.  THEN DO;
         H00068=.N;
         H00069=.N;
         N22=29;
      END;
      ELSE IF H00068=. AND H00069 NE .  THEN DO;
         H00068=.N;
         H00069=.C;
         N22=30;
      END;
   END;

/** Note 23 - gender H00070, SEX, H00071, H00072--H00076B, XSEXA */

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


   IF H00071 > 0 THEN MALE=1;     /* prostate */
   ELSE MALE = 0;
   IF H00072>0 OR H00073A>0 OR H00073B>0 OR H00074>0 OR H00075>0
      OR H00076A>0 OR H00076B>0  THEN FMALE=1; /* mammogram/pap smear/PREGNANT*/
   ELSE FMALE = 0;
   IF H00070=. OR H00070=.A THEN DO;
      IF (SEX='F' AND MALE AND FMALE) THEN DO;
         N23A=1;
         XSEXA=2;
      END;
      ELSE IF (SEX='F' AND MALE=0 AND FMALE=0) THEN DO;
         N23A=2;
         XSEXA=2;
      END;
      ELSE IF (SEX='M' AND MALE AND FMALE) THEN DO;
         N23A=3;
         XSEXA=1;
      END;
      ELSE IF (SEX='M' AND MALE=0 AND FMALE=0) THEN DO;
         N23A=4;
         XSEXA=1;
      END;
      ELSE IF MALE AND NOT FMALE THEN DO;
         N23A=5;
         XSEXA=1;
      END;
      ELSE IF FMALE AND NOT MALE THEN DO;
         N23A=6;
         XSEXA=2;
      END;
      ELSE IF (SEX='Z' AND MALE AND FMALE) THEN DO;
         N23A=7;
         XSEXA=.;
      END;
      ELSE IF (SEX='Z' AND MALE=0 AND FMALE=0) THEN DO;
         N23A=8;
         XSEXA=.;
      END;
   END;
   ELSE IF (H00070=1) THEN DO;
      IF MALE AND NOT FMALE THEN DO;
         N23A=9;
         XSEXA=1;
```

```
      END;
      ELSE IF NOT MALE AND FMALE THEN DO;
         IF SEX='F' THEN DO;
            N23A=10;
            XSEXA=2;
         END;
         ELSE DO;
            N23A=11;
            XSEXA=1;
         END;
      END;
      ELSE IF MALE AND FMALE THEN DO;
         N23A=12;
         XSEXA=1;
      END;
      ELSE IF MALE=0 AND FMALE=0 THEN DO;
         N23A=13;
         XSEXA=1;
      END;
   END;
   ELSE IF (H00070=2) THEN DO;
      IF NOT MALE AND FMALE THEN DO;
        N23A=14;
        XSEXA=2;
      END;
      ELSE IF MALE AND NOT FMALE THEN DO;
         IF SEX='M' THEN DO;
           N23A=15;
           XSEXA=1;
         END;
         ELSE DO;
            N23A=16;
            XSEXA=2;
         END;
      END;
      ELSE IF MALE AND FMALE THEN DO;
         N23A=17;
         XSEXA=2;
      END;
      ELSE IF MALE=0 AND FMALE=0 THEN DO;
         N23A=18;
         XSEXA=2;
      END;
   END;

/* Note 23b - gender vs prostate */

   IF XSEXA=1 THEN N23B=1;     /* male */
   ELSE IF XSEXA=2 THEN DO;    /* female */
      IF H00071 NE . THEN DO;
         N23B=2;
         H00071=.C;
      END; /*inconsistent resp*/
      ELSE DO;
         N23B=3;
         H00071=.N;
      END;      /* valid skip */
   END;
   ELSE IF XSEXA=. THEN DO;   /*  missing sex  */
      N23B=4;
      H00071=.;
   END;

/* Note 23c - gender vs mammogram/paps */
/*   REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM OR PAP SMEAR ENTRIES  */

   ARRAY NOT23C H00072 H00073A H00073B H00074 H00075 H00076A H00076B;

   IF H00072 NE . OR H00073A NE . OR H00073B NE . OR H00074 NE . OR
      H00075 NE . OR H00076A NE . OR H00076B NE . THEN FMALE=1; /* mammogram or pap smear
*/
```

```
  ELSE FMALE = 0;
  IF XSEXA=1 THEN DO;   /* male */
     IF FMALE=0 THEN DO;
        N23C=1;
        DO OVER NOT23C;
           IF NOT23C=. THEN NOT23C = .N;
           ELSE NOT23C=.C;
        END;
     END; /* inconsistent response */
     ELSE IF FMALE=1 THEN DO;
        N23C=2;
        DO OVER NOT23C;
           NOT23C=.N;
        END;
     END;   /* valid skip */
  END;
  ELSE IF XSEXA=2 THEN  N23C=3; /* female */
  ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
     N23C=4;
     DO OVER NOT23C;
        NOT23C=.;
     END;
  END;

  DROP MALE FMALE;

/* Note 24 - breast exam for female 40 or over  */
/* Note 1999 -- no self reported age variable  */
/* Note no dob variable  -- macro not used     */

/***** review age variable  *******/

  IF XSEXA=1 THEN DO;  /* male */
     IF  (H00073A=.C OR H00073A=.N) AND (H00073B=.C OR H00073B=.N)
     AND (H00074=.C OR H00074=.N)  THEN N24 = 1;
  END;
  ELSE IF XSEXA=2 THEN DO;
     IF H00073A=2 THEN N24=2;         /* female 40 or over */
     ELSE IF H00073A=1 THEN DO;   /* female < 40 */
        IF H00073B NE . THEN H00073B=.C;
        ELSE H00073B=.N;
        IF H00074 NE . THEN H00074=.C;
        ELSE H00074=.N;
        N24=3;
     END;
     ELSE IF H00073A=.A THEN DO;
        IF H00073B NE . OR H00074 NE . THEN DO;
           H00073A=2;
           N24=4;
        END;
        ELSE IF H00073B=. AND H00074=. THEN DO;
           H00073A=1;
           IF H00073B NE . THEN H00073B=.C;
           ELSE H00074=.N;
           IF H00074 NE . THEN H00074=.C;
           ELSE H00074=.N;
           N24=5;
        END;
     END;
     ELSE IF H00073A=. THEN DO;
        IF H00073B NE . OR H00074 NE . THEN DO;
           H00073A=2;
           N24=6;
        END;
        ELSE IF H00073B=. AND H00074=. THEN DO;
           IF AGE<40 THEN DO;
              H00073A = 1;
              H00073B=.N;
              H00074=.N;
              N24=7;
           END;
```

```
            ELSE IF AGE >= 40 THEN DO;
               H00073A=1;
               H00073B=.N;
               H00074=.N;
               N24=8;
            END;
            ELSE IF AGE=. THEN N24=9;
         END;
      END;
   END;
   ELSE IF XSEXA=. THEN N24=10;

/* Note 25 - gender vs Pregnancy */

   IF XSEXA=1 THEN N25=1;          /* male */
   ELSE IF XSEXA=2 THEN DO;        /* female */
      IF H00075=1 THEN N25=2;      /* pregnant */
      ELSE IF H00075=2 THEN DO;
         IF H00076A=. THEN H00076A = .N;
         ELSE H00076A=.C;
         N25=3;
      END;
      ELSE IF H00075=3 THEN DO;
         IF H00076A=. THEN H00076A = .N;
         ELSE H00076A=.C;
         IF H00076B=. THEN H00076B=.N;
         ELSE H00076B=.C;
         N25=4;
      END;
      ELSE IF H00075 IN (., .A) THEN DO;
         IF H00076A NE . THEN DO;
            H00075=1;
            N25=5;
         END;
         ELSE IF H00076A=. THEN DO;
            IF H00075=. THEN N25=6;
            ELSE IF H00075=.A THEN DO;
               H00075=3;
               H00076A=.N;
               IF H00076B=. THEN H00076B=.N;
               ELSE H00076B=.C;
               N25=7;
            END;
         END;

      END;
   END;
   ELSE IF XSEXA=. AND H00075 IN (.,.A) THEN N25=8;

/** Note 26 -- S00C20, S00C21, S00C22:  **/

   ARRAY NOTE26 S00C21 S00C22;
   N26MARK=0;
   N26NMISS=0;

   DO OVER NOTE26;
      IF NOTE26 NE . THEN N26NMISS+1;
   END;

   DO OVER NOTE26;
      IF NOTE26 NOT IN (.N,.) THEN N26MARK+1;
   END;

   IF S00C20=1 AND (N26NMISS=0 OR N26MARK>0) THEN N26=1;
   ELSE IF S00C20 IN (1,.,.A) AND N26NMISS>0 AND N26MARK=0 THEN DO;
      S00C20=2;
      N26=2;
      DO OVER NOTE26;
         IF NOTE26=. THEN NOTE26=.N;
         ELSE NOTE26=.C;
      END;
```

```
  END;
  ELSE IF S00C20 IN (2,.,.A) AND N26MARK>0 THEN DO;
     S00C20=1;
     N26=3;
  END;
  ELSE IF S00C20=2 AND (N26NMISS=0 OR (N26NMISS>0 AND N26MARK=0)) THEN DO;
     N26=4;
     DO OVER NOTE26;
        IF NOTE26=. THEN NOTE26=.N;
        ELSE NOTE26=.C;
     END;
  END;
  ELSE IF S00C20=.  AND N26NMISS=0 THEN N26=5;
  ELSE IF S00C20=.A AND N26NMISS=0 THEN DO;
     S00C20=2;
     N26=6;
     DO OVER NOTE26;
        NOTE26=.N;
     END;
  END;

  DROP N26NMISS N26MARK;

/** Note 28 -- SRAGE, H00082A, H00082B: age  **/

  ARRAY NOTE28 H00082A H00082B;

  IF 1 <= SRAGE <=5 THEN DO;
     N28=1;
     DO OVER NOTE28;
        IF NOTE28=. THEN NOTE28=.N;
        ELSE NOTE28=.C;
     END;
  END;
  ELSE IF SRAGE IN (.,.A) THEN N28=2;
  ELSE IF SRAGE IN (6,7)  THEN N28=3;


NOSURVEY:

/* missing values */
  ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
  MISS_TOT=0;
  DO OVER MISS;
     MISS = 0;
  END;
  ARRAY MISSARAY &VARLIST1.;

  DO OVER MISSARAY;
     IF (MISSARAY EQ . ) THEN MISS_9 = MISS_9 + 1;
     ELSE IF (MISSARAY EQ .A) THEN MISS_8 = MISS_8 + 1;
     ELSE IF (MISSARAY EQ .O) THEN MISS_7 = MISS_7 + 1;
     ELSE IF (MISSARAY EQ .N) THEN MISS_6 = MISS_6 + 1;
     ELSE IF (MISSARAY EQ .D) THEN MISS_5 = MISS_5 + 1;
     ELSE IF (MISSARAY EQ .I) THEN MISS_4 = MISS_4 + 1;
     ELSE IF (MISSARAY EQ .C) THEN MISS_1 = MISS_1 + 1;
  END;
  DO OVER MISS;
     MISS_TOT=MISS_TOT + MISS;
  END;
*****************************************;
 OUTPUT;

RUN;


PROC FORMAT;
   VALUE GRID
     0='0'
     1-9999='>=1' ;
   VALUE $GRIDB
```

```
     1-5 = '1-5' ;
   VALUE $AGE
     018-039='<40'
     040-120='>=40';
   VALUE SCALE
     0-10='0-10';
   VALUE MARK
     1-6='Marked' ;
   VALUE MARKB
     2-7='Marked';
RUN;

PROC CONTENTS DATA=OUT.&OUTDATA;
RUN;

** first, examine initial recodes ;

PROC FREQ DATA=OUT.&OUTDATA;
   TABLES H00004_O*H00004
          H00011_O*H00011
          S00C05_O*S00C05
          H00017_O*H00017
          H00061_O*H00061
          H00064_O*H00064
          H00071_O*H00071
          H00072_O*H00072
          H00073BO*H00073B
          H00074_O*H00074
          H00077_O*H00077
          H00062_O*H00062
          H00065_O*H00065
          H00076BO*H00076B
          H00067_O*H00067
          H00068_O*H00068/MISSING LIST;
   FORMAT _ALL_ ;
RUN;

PROC FREQ DATA=OUT.&OUTDATA;
   where flag_fin="1";
   TABLES N1-N22 N23A N23B N23C N24-N26 N28/MISSING LIST;
RUN;

PROC MEANS DATA=OUT.&OUTDATA N NMISS MIN MAX SUM MEAN;
   TITLE3 'Frequency Checks - Missing Value Totals';
   VAR MISS_TOT MISS_1 MISS_4 MISS_5 MISS_6-MISS_9;
RUN;

%MACRO GETFREQS (NOTE,TABLES,FORMAT);

  PROC FREQ DATA=OUT.&OUTDATA;
      where flag_fin="1";
      TITLE3 "Freqency Checks - Note &NOTE.";
      TABLES &TABLES./MISSING LIST;
      FORMAT _ALL_;
      FORMAT &FORMAT.;
  RUN;

%MEND GETFREQS;

%GETFREQS(1,N1*H00001_O*H00002_O*H00004*H00005,H00001_O H00001 GRID.);
%GETFREQS(2,N2*H00006_O*H00007_O*H00006*H00007,H00007_O H00007 MARK.);
%GETFREQS(3,N3*H00008_O*S00C01_O*S00C02_O*S00C03_O*S00C04_O*H00008,
               S00C01_O S00C02_O S00C03_O S00C04_O H00009_O MARK.);
%GETFREQS(4,N4*S00C03_O*S00C04_O*S00C03*S00C04,
               S00C03_O S00C04_O S00C03 S00C04 MARK.);
%GETFREQS(5,N5*H00010_O*H00011_O*H00012_O*H00010*H00011*H00012,
               H00011_O H00012_O H00011 H00012 MARK.);
%GETFREQS(6,N6*H00013_O*H00014_O*H00013*H00014,H00014_O H00014 MARK.);
%GETFREQS(7,N7*H00015_O*S00C05_O*H00016_O*H00017_O*H00015*S00C05*H00016*H00017,
               S00C05_O H00016_O H00017_O S00C05 H00016 H00017 MARK.);
%GETFREQS(8,N8*S00C05_O*H00016_O*H00017_O*S00C05*H00016*H00017,
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```
               H00016_O H00017_O H00016 H00017 MARK.);
%GETFREQS(9,N9*H00018_O*H00019_O*H00018*H00019,H00019_O H00019 MARK.);

%GETFREQS(10,N10*H00020_O*H00021_O*H00022_O*H00020*H00021*H00022,
                 H00021_O H00022_O H00021 H00022 MARK.);
%GETFREQS(11,N11*H00023_O*H00024_O*H00025_O*H00023*H00024*H00025,
                 H00024_O H00025_O H00024 H00025  MARK.);
%GETFREQS(12,N12*H00027_O*H00028_O*H00029_O*H00030_O*H00031_O*H00032_O*H00033_O*
                 H00034_O*H00035_O*H00036_O*H00037_O*H00038_O,H00028_O H00029_O
                 H00030_O H00031_O H00032_O H00033_O H00034_O H00035_O H00036_O
                 H00037_O H00038_O MARK. H00027_O MARKB.);
%GETFREQS(13,N13*S00C06_O*S00C07_O*S00C08_O*S00C06*S00C07*S00C08,
                 S00C07_O S00C08_O S00C07 S00C08 MARK.);
%GETFREQS(14,N14*S00C09_O*S00C10_O*S00C09*S00C10,
                 S00C10_O S00C10 MARK.);
%GETFREQS(15,N15*S00C11_O*S00C12_O*S00C11*S00C12,
                 S00C12_O S00C12 MARK.);
%GETFREQS(16,N16*S00C13_O*S00C14_O*S00C13*S00C14,
                 S00C14_O S00C14 MARK.);
%GETFREQS(17,N17*H00043_O*H00044_O*H00045_O*H00046_O*H00043*H00044*H00045*H00046,
                 H00044_O H00045_O H00046_O H00044 H00045 H00046 MARK.);
%GETFREQS(18,N18*H00047_O*H00048_O*H00047*H00048,H00048_O H00048 MARK.);
%GETFREQS(19,N19*H00049_O*H00050_O*H00049*H00050,H00050_O H00050 MARK.);
%GETFREQS(20,N20*H00051_O*H00052_O*H00053_O*H00051*H00052*H00053,
                 H00052_O H00053_O H00052 H00053 MARK.);
%GETFREQS(21,N21*H00054_O*H00055_O*H00054*H00055,H00055_O H00055 MARK.);
%GETFREQS(22,N22*H00066_O*H00067_O*H00068_O*H00069_O*H00066*H00067*H00068*H00069,
                 _all_ );

%GETFREQS(23A,N23A*H00070_O*H00070*PNSEXCD*XSEXA*H00072_O*H00073AO*H00073BO*H00074_O*
                   H00075_O*H00076AO*H00076BO,H00072_O H00073AO H00073BO H00074_O
                   H00075_O H00076AO H00076BO MARK. );
%GETFREQS(23B,N23B*H00071_O*H00071*XSEXA,H00071 H00071_O MARK.);
%GETFREQS(23C,N23C*XSEXA*H00072_O*H00073AO*H00073BO*H00074_O*H00075_O*H00076AO*
                   H00076BO,H00072_O H00073AO H00073BO H00074_O H00075_O H00076AO
                   H00076BO MARK.);

%GETFREQS(24,N24*XSEXA*DAGEQY*H00073AO*H00073BO*H00074_O*H00073A*H00073B*H00074,
                 H00073BO H00074_O H00073B H00074 MARK.);
%GETFREQS(25,N25*XSEXA*H00075_O*H00076AO*H00076BO*H00075*H00076A*H00076B,
                 H00076AO H00076BO H00076A H00076B MARK.);
%GETFREQS(26,N26*S00C20_O*S00C21_O*S00C22_O*S00C20*S00C21*S00C22,
                 S00C21_O S00C22_O S00C21 S00C22 MARK.);
%GETFREQS(28,N28*SRAGE_O*H00082AO*H00082BO*SRAGE*H00082A*H00082B,
                 H00082AO H00082BO H00082A H00082B MARK.);


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

        FORMAT H00001  H00001_O HPLAN1_.
               H00002  H00002_O HPTIME.
               H00003AO H00003BO H00003CO
               H00003DO H00003EO H00003FO H00003GO H00003HO
               H00003IO H00003JO H00003KO H00003LO HPLAN2_.
               H00004  H00004_O COST1_.
               H00005  H00005_O H00006 H00006_O H00008 H00008_O
               S00C03  S00C03_O H00010 H00010_O H00012 H00012_O
               H00013  H00013_O H00015 H00015_O H00018 H00018_O
               H00020  H00020_O H00023 H00023_O S00C06 S00C06_O
               H00038  H00038_O S00C09 S00C09_O S00C11 S00C11_O
               S00C13  S00C13_O H00049 H00049_O H00051 H00051_O
               H00054  H00054_O H00063 H00063_O H00073A H00073AO
               S00C15  S00C15_O S00C16 S00C16_O S00C17 S00C17_O
               S00C19  S00C19_O S00C20 S00C20_O H00082B H00082BO YN.
               H00007  H00007_O PROB1_.
               S00C01  S00C01_O DOCTOR.
               S00C02  S00C02_O TIME1A_.
               S00C04  S00C04_O YNPROB.
               H00009  H00009_O RATE1_.
               H00011  H00011_O PCMBASE.
```

```
      H00014  H00014_O PROB2_.
      S00C05  S00C05_O OFTEN1_.
      H00016  H00016_O RATE2_.
      H00017  H00017_O YNOFT.
      H00019  H00019_O OFTEN2_.
      H00021  H00021_O OFTEN3_.
      H00022  H00022_O TIME1B_.
      H00024  H00024_O OFTEN4_.
H00025  H00025_O TIME2_.
      H00026  H00026_O OFTEN5_.
      H00027  H00027_O OFTEN6_.
      H00028  H00028_O
      H00029  H00029_O PROB3_.
      H00030-H00036 H00030_O--H00036_O  OFTEN7_.
      S00C07  S00C07_O OFTEN8_.
      S00C08  S00C08_O PROB4_.
      H00037  H00037_O RATE3_.
      H00039  H00039_O MTFREC.
      H00040  H00040_O PXFILL.
      H00041  H00041_O OFTENPX.
      H00042  H00042_O PLACE.
      S00C10  S00C10_O PROB5_.
      S00C12  S00C12_O PROB6_.
      S00C14  S00C14_O PROB7_.
      H00043  H00043_O YNDNK.
      H00044-H00046  H00044_O--H00046_O OFTEN9_.
      H00047  H00047_O YNINFO.
      H00048  H00048_O PROB8_.
      H00050  H00050_O PROB9_.
      H00052  H00052_O TIME4_.
      H00053  H00053_O SETTLED.
      H00055  H00055_O PROB10_.
      H00056  H00056_O RATE4_.
      H00057  H00057_O
      H00058  H00058_O LIKELY.
      H00059  H00059_O COST2_.
      H00060  H00060_O OFTEN10_.
      H00061  H00061_O TIME5_.
      H00062  H00062_O TIME6_.
      H00064  H00064_O TIME7_.
      H00065  H00065_O TIME8_.
      H00066  H00066_O SMOKE.
      H00067  H00067_O TIME9_.
      H00068  H00068_O TIME10_.
      H00069  H00069_O OFTEN11_.
      H00070  H00070_O SEX.
      H00071  H00071_O TIME11_.
      H00072  H00072_O TIME12_.
      H00073B H00073BO TIME13_.
      H00074  H00074_O TIME14_.
      H00075  H00075_O YNPREG.
      H00076A H00076AO PREG1_.
H00076B H00076BO PREG2_.
      H00077  H00077_O HEALTH.
      S00C18  S00C18_O RATE5_.
      S00C21  S00C21_O
      S00C22  S00C22_O YNCOND.
      SREDA   SREDA_O  EDUC.
      H00079  H00079_O HISP.
      SRRACEAO  SRRACEBO  SRRACECO
      SRRACEDO  SRRACEEO RACE.
      SRAGE   SRAGE_O  AGEGRP.
      H00082A H00082AO MTFOFFER.
      H00083AO--H00083IO REASON1_.
      H00084  H00084_O REASON2_.
      H00085AO--H00085JO SOURCE.
      N1-N22 N23A N23B N23C N24-N26 N28
      MISS_1 MISS_4-MISS_9 MISS_TOT 4.
       ;

LABEL H00001_O='Which health plan did you use most'
```

```
      H00001  ='Which health plan did you use most'
      H00002_O='Years in a row w/health plan'
      H00002  ='Years in a row w/health plan'
      H00003AO='Health plan(s) covered: TRICARE Prime'
      H00003A ='Health plan(s) covered: TRICARE Prime'
      H00003BO='Health plan(s) covered: TRICARE Sr Prime'
      H00003B ='Health plan(s) covered: TRICARE Sr Prime'
      H00003CO='Health plan(s) covered: TRICARE Ext/Stnd'
      H00003C ='Health plan(s) covered: TRICARE Ext/Stnd'
      H00003DO='Health plan(s) covered: Medicare Part A'
      H00003D ='Health plan(s) covered: Medicare Part A'
      H00003EO='Health plan(s) covered: Medicare Part B'
      H00003E ='Health plan(s) covered: Medicare Part B'
      H00003FO='Health plan(s) covered: Medigap'
      H00003F ='Health plan(s) covered: Medigap'
      H00003GO='Health plan(s) covered: FEHBP'
      H00003G ='Health plan(s) covered: FEHBP'
      H00003HO='Health plan(s) covered: Medicaid'
      H00003H ='Health plan(s) covered: Medicaid'
      H00003IO='Health plan(s) covered: Civilian HMO'
      H00003I ='Health plan(s) covered: Civilian HMO'
      H00003JO='Health plan(s) covered: Other civilian'
      H00003J ='Health plan(s) covered: Other civilian'
      H00003KO='Health plan(s) covered: USFHP'
      H00003K ='Health plan(s) covered: USFHP'
      H00003LO='Health plan(s) covered: Not sure'
      H00003L ='Health plan(s) covered: Not sure'
      H00004_O='How is enrllmnt fee paid'
      H00004  ='How is enrllmnt fee paid'
      H00005_O='Lst 3 mos, used MTF'
      H00005  ='Lst 3 mos, used MTF'
      H00006_O='When joined hlth plan, rcv new prsnl Dr'
      H00006  ='When joined hlth plan, rcv new prsnl Dr'
      H00007_O='Hlth plan: problem to get Dr happy with'
      H00007  ='Hlth plan: problem to get Dr happy with'
      H00008_O='Have one person you think of as prsnl Dr'
      H00008  ='Have one person you think of as prsnl Dr'
      S00C01_O='Gen Dr,specialist, physician asst, nurse'
      S00C01  ='Gen Dr,specialist, physician asst, nurse'
      S00C02_O='Months/years going to prsnl Doctor'
      S00C02  ='Months/years going to prsnl Doctor'
      S00C03_O='Physical/mental cond. interferes w/work'
      S00C03  ='Physical/mental cond. interferes w/work'
      S00C04_O='Dr undrstnd hlth prblm affect daily life'
      S00C04  ='Dr undrstnd hlth prblm affect daily life'
      H00009_O='Rating of your personal doctor or nurse'
      H00009  ='Rating of your personal doctor or nurse'
      H00010_O='Currently enrolled in TRICARE Prime'
      H00010  ='Currently enrolled in TRICARE Prime'
H00011_O='TRICARE membr:prmry care mgr mil or cvl'
H00011  ='TRICARE membr:prmry care mgr mil or cvl'
H00012_O="Know your PCM's name"
      H00012  ="Know your PCM's name"
      H00013_O='In lst yr:you/dr think you needed spclst'
H00013  ='In lst yr:you/dr think you needed spclst'
      H00014_O='In lst yr:how much prblm rfrl to spclst'
      H00014  ='In lst yr:how much prblm rfrl to spclst'
      H00015_O='In lst yr:did you see a specialist'
      H00015  ='In lst yr:did you see a specialist'
      S00C05_O='In lst yr:# times you went to a spclst'
      S00C05  ='In lst yr:# times you went to a spclst'
      H00016_O='Rating of specialist seen in last year'
      H00016  ='Rating of specialist seen in last year'
      H00017_O='In lst yr:spclst saw same as prsnl Dr '
      H00017  ='In lst yr:spclst saw same as prsnl Dr '
      H00018_O='In lst yr:call Dr for hlp/advice for slf'
      H00018  ='In lst yr:call Dr for hlp/advice for slf'
      H00019_O='In lst yr:when call how often get hlp nd'
      H00019  ='In lst yr:when call how often get hlp nd'
      H00020_O='In lst yr:make appts for reg hlth care'
H00020  ='In lst yr:make appts for reg hlth care'
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      H00021_O='In lst yr:appt reg hlth care when wanted'
      H00021  ='In lst yr:appt reg hlth care when wanted'
      H00022_O='In lst yr:days btwn appt & seeing prvder'
      H00022  ='In lst yr:days btwn appt & seeing prvder'
      H00023_O='In lst yr:illness/injury care right away'
      H00023  ='In lst yr:illness/injury care right away'
      H00024_O='In lst yr:get care as soon as wanted'
      H00024  ='In lst yr:get care as soon as wanted'
H00025_O='In lst yr:wait btwn try get care,see prv'
      H00025  ='In lst yr:wait btwn try get care,see prv'
      H00026_O='In lst yr:goto emrgncy rm for own care'
      H00026  ='In lst yr:goto emrgncy rm for own care'
      H00027_O="In lst yr:goto Dr office/clinic for care"
H00027  ="In lst yr:goto Dr office/clinic for care"
      H00028_O='In lst yr:prblm to get care thght ncssry'
      H00028  ='In lst yr:prblm to get care thght ncssry'
      H00029_O='In lst yr:prblm w/dlys waiting for apprv'
      H00029  ='In lst yr:prblm w/dlys waiting for apprv'
      H00030_O='In lst yr:wait > 15 min past appt see Dr'
      H00030  ='In lst yr:wait > 15 min past appt see Dr'
      H00031_O='In lst yr:how oftn treat w/ crtsy/rspct'
      H00031  ='In lst yr:how oftn treat w/ crtsy/rspct'
      H00032_O='In lst yr:how oftn staff helpful'
      H00032  ='In lst yr:how oftn staff helpful'
      H00033_O='In lst yr:how oftn Drs listen to you'
      H00033  ='In lst yr:how oftn Drs listen to you'
      H00034_O='In lst yr:how oftn Drs explain things'
      H00034  ='In lst yr:how oftn Drs explain things'
      H00035_O='In lst yr:how oftn Drs show respect'
      H00035  ='In lst yr:how oftn Drs show respect'
      H00036_O='In lst yr:how oftn Drs spend enough time'
      H00036  ='In lst yr:how oftn Drs spend enough time'
      S00C06_O='In lst yr:any decision made about hltcre'
      S00C06  ='In lst yr:any decision made about hltcre'
      S00C07_O='In lst yr:how oftn invld as much as wntd'
      S00C07  ='In lst yr:how oftn invld as much as wntd'
      S00C08_O='In lst yr:prbm to get dr to agree w/you'
      S00C08  ='In lst yr:prbm to get dr to agree w/you'
      H00037_O='Rating of all health care in last year'
      H00037  ='Rating of all health care in last year'
      H00038_O='MTF conveniently located to you'
      H00038  ='MTF conveniently located to you'
      H00039_O='In lst yr:how much hlthcre from MTF'
      H00039  ='In lst yr:how much hlthcre from MTF'
      H00040_O='In lst yr:prscrptns filled at MTF'
      H00040  ='In lst yr:prscrptns filled at MTF'
      H00041_O='In lst yr:prscrptns by cvl,filled at mil'
      H00041  ='In lst yr:prscrptns by cvl,filled at mil'
      H00042_O='In lst yr:fclty used most for hlth care '
      H00042  ='In lst yr:fclty used most for hlth care '
      S00C09_O='In lst yr:needed special medical equip'
      S00C09  ='In lst yr:needed special medical equip'
      S00C10_O='In lst yr:prblm get special medicl equip'
      S00C10  ='In lst yr:prblm get special medicl equip'
      S00C11_O='In lst yr:needed special therapy'
      S00C11  ='In lst yr:needed special therapy'
      S00C12_O='In lst yr:prblm getting special therapy'
      S00C12  ='In lst yr:prblm getting special therapy'
      S00C13_O='In lst yr:need home healthcare/asstnce'
      S00C13  ='In lst yr:need home healthcare/asstnce'
      S00C14_O='In lst yr:prblm getting care/asstnce'
      S00C14  ='In lst yr:prblm getting care/asstnce'
      H00043_O='In lst yr:send in any claims'
      H00043  ='In lst yr:send in any claims'
      H00044_O='In lst yr:hlth pln handle in rsnble time'
      H00044  ='In lst yr:hlth pln handle in rsnble time'
      H00045_O='In lst yr:how oftn handle correctly'
      H00045  ='In lst yr:how oftn handle correctly'
      H00046_O='In lst yr:before care, know amt to pay'
      H00046  ='In lst yr:before care, know amt to pay'
      H00047_O='In lst yr:info in written materials'
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H00047  ='In lst yr:info in written materials'
H00048_O='In lst yr:prblm to find/undrstnd mtrls'
H00048  ='In lst yr:prblm to find/undrstnd mtrls'
H00049_O="In lst yr:health plan's cstmr srvc help"
H00049  ="In lst yr:health plan's cstmr srvc help"
H00050_O='In lst yr:prblm get help from cstmr srvc'
H00050  ='In lst yr:prblm get help from cstmr srvc'
H00051_O='Called or written plan w/complaint/prblm'
H00051  ='Called or written plan w/complaint/prblm'
H00052_O='How long for hlth pln to resolve cmplnt'
H00052  ='How long for hlth pln to resolve cmplnt'
H00053_O='Complaint/prblm settled to satisfaction'
H00053  ='Complaint/prblm settled to satisfaction'
H00054_O='In lst yr:experiences w/ paperwork'
H00054  ='In lst yr:experiences w/ paperwork'
H00055_O='In lst yr:problems w/ paperwork'
H00055  ='In lst yr:problems w/ paperwork'
H00056_O='Rating of all experience w/health plan'
H00056  ='Rating of all experience w/health plan'
H00057_O='In nxt yr:lkly to dsnrl in TRICARE Prime'
H00057  ='In nxt yr:lkly to dsnrl in TRICARE Prime'
H00058_O='In nxt yr:lkly to enrl in TRICARE Prime'
H00058  ='In nxt yr:lkly to enrl in TRICARE Prime'
H00059_O='In last year:expnses not cvrd hlth plan'
H00059  ='In last year:expnses not cvrd hlth plan'
H00060_O='Put off dr visit bc of cost'
H00060  ='Put off dr visit bc of cost'
H00061_O='Not sick/prgnt: last mdcl/physcl exam'
H00061  ='Not sick/prgnt: last mdcl/physcl exam'
H00062_O='Blood pressure: when last reading'
H00062  ='Blood pressure: when last reading'
H00063_O='Blood pressure: know if too high or not'
H00063  ='Blood pressure: know if too high or not'
H00064_O='When last have cholesterol screening'
H00064  ='When last have cholesterol screening'
H00065_O='When did you last have a flu shot'
H00065  ='When did you last have a flu shot'
H00066_O='Smoked  at least 100 cigarettes in life'
H00066  ='Smoked  at least 100 cigarettes in life'
H00067_O='Smoke everyday, some days or not at all'
H00067  ='Smoke everyday, some days or not at all'
H00068_O='How long since you quit smoking'
H00068  ='How long since you quit smoking'
H00069_O='Lst year: # vst advised to quit smoking'
H00069  ='Lst year: # vst advised to quit smoking'
H00070_O="Are you male or female"
H00070  ="Are you male or female"
H00071_O='Last prostate disease exam or blood test'
H00071  ='Last prostate disease exam or blood test'
H00072_O='Last have a Pap smear test'
H00072  ='Last have a Pap smear test'
H00073AO='Are you under age 40 '
H00073A ='Are you under age 40 '
H00073BO='Last time: breasts checked mammography'
H00073B ='Last time: breasts checked mammography'
H00074_O='Last time: breast exam by professional'
H00074  ='Last time: breast exam by professional'
H00075_O='Been pregnant in last yr or pregnant now'
H00075  ='Been pregnant in last yr or pregnant now'
H00076AO='In what trimester is your pregnancy'
H00076A ='In what trimester is your pregnancy'
H00076BO='Trimester first received prenatal care '
H00076B ='Trimester first received prenatal care '
H00077_O='In gnrl, how would you rate ovrall hlth'
H00077  ='In gnrl, how would you rate ovrall hlth'
S00C15_O='Need help with personal care needs'
S00C15  ='Need help with personal care needs'
S00C16_O='Need help with routine needs'
S00C16  ='Need help with routine needs'
S00C17_O='Physical/mntl cond interfere w/indpndnce'
S00C17  ='Physical/mntl cond interfere w/indpndnce'
```

```
S00C18_O='Rating of equip, srvces, help provision'
S00C18  ='Rating of equip, srvces, help provision'
S00C19_O='In lst year:patient overnignt or lngr'
S00C19  ='In lst year:patient overnignt or lngr'
S00C20_O='Physcl/mntal conds that have lstd 3mos'
S00C20  ='Physcl/mntal conds that have lstd 3mos'
S00C21_O='In lst yr:seen dr more than twice'
S00C21  ='In lst yr:seen dr more than twice'
S00C22_O='Taking prcrptn med for at least 3mos'
S00C22  ='Taking prcrptn med for at least 3mos'
SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H00079_O='Are you Spanish/Hispanic/Latino'
H00079  ='Are you Spanish/Hispanic/Latino'
SRRACEAO='Race: White '
SRRACEA ='Race: White '
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asain'
SRRACED ='Race: Asain'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'
H00082AO='How much hlth care would you get frm MTF'
H00082A ='How much hlth care would you get frm MTF'
H00082BO='Likely to fill prescriptions at MTF'
H00082B ='Likely to fill prescriptions at MTF'
H00083AO='Decision use MTF: Cost'
H00083A ='Decision use MTF: Cost'
H00083BO='Decision use MTF: Location convenience'
H00083B ='Decision use MTF: Location convenience'
H00083CO='Decision use MTF: Quality of health care'
H00083C ='Decision use MTF: Quality of health care'
H00083DO='Decision use MTF: Telephone access'
H00083D ='Decision use MTF: Telephone access'
H00083EO='Decision use MTF: Timeliness of appts'
H00083E ='Decision use MTF: Timeliness of appts'
H00083FO='Decision use MTF: Miliatry courtesy'
H00083F ='Decision use MTF: Miliatry courtesy'
H00083GO='Decision use MTF: personal physician'
H00083G ='Decision use MTF: personal physician'
H00083HO='Decision use MTF: co-location of svcs'
H00083H ='Decision use MTF: co-location of svcs'
H00083IO='Decision use MTF: lack of paperwork'
H00083I ='Decision use MTF: lack of paperwork'
H00084_O='Single most important reason to use MTF'
H00084  ='Single most important reason to use MTF'
H00085AO='Info sources:Retiree org. newsletter'
H00085A ='Info sources:Retiree org. newsletter'
H00085BO='Info sources:Health Benefits Advisor'
H00085B ='Info sources:Health Benefits Advisor'
H00085CO='Info sources:Pamphlets in MTF'
H00085C ='Info sources:Pamphlets in MTF'
H00085DO='Info sources:Internet'
H00085D ='Info sources:Internet'
H00085EO='Info sources:Base newspaper'
H00085E ='Info sources:Base newspaper'
H00085FO='Info sources:retired pay statement'
H00085F ='Info sources:retired pay statement'
H00085GO='Info sources:TV'
H00085G ='Info sources:TV'
H00085HO='Info sources:Radio'
H00085H ='Info sources:Radio'
H00085IO='Info sources:Friends or relatives'
H00085I ='Info sources:Friends or relatives'
H00085JO='Info sources:BCACs'
H00085J ='Info sources:BCACs'
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"
              N23A="Coding Scheme Note 23A"
              N23B="Coding Scheme Note 23B"
              N23C="Coding Scheme Note 23C"
              N24= "Coding Scheme Note 24"
              N25= "Coding Scheme Note 25"
              N26= "Coding Scheme Note 26"
              N28= "Coding Scheme Note 28"
              MISS_1 = "Count of: Violates Skip Pattern"
              MISS_4 = "Count of: Incomplete grid error"
              MISS_5 = "Count of: Scalable reponse of Don't know"
              MISS_6 = "Count of: Not applicable - valid skip"
              MISS_7 = "Count of: Out-of-range error"
              MISS_8 = "Count of: Multiple response error"
              MISS_9 = "Count of: No response - invalid skip"
              MISS_TOT = "Total number of missing responses"
              XSEXA = "Male or Female  - R"
            ;
```

B. QUARTER II

```
 ****************************************************************************;
*  Program:  Cschm00q.sas
*  Written:  06/04/2001
*   Author:  C. Rankin
*
*    Input:  MERGENRC.SD2 - Merged MPR Sampling, DEERS, and NRC Response Data
*   Output:  CSCHM00Q.SD2 - Coding scheme file
*
* Modified:
*
*  Purpose:  Apply Coding Scheme Specifications to DoD Health Care Survey
*            Response Data, check for consistency in responses and skip
*            patterns
*  Include
*    files:  Cschm00q.fmt
*
****************************************************************************;

OPTIONS PS=67 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;


LIBNAME LIBRARY "...\DATA\AFINAL\FMTLIB";
LIBNAME IN      "...\DATA\AFINAL";
LIBNAME OUT     "C:\DOD";

%LET INDATA=MERGENRC;
%LET OUTDATA=CSCHM00Q;
%LET PERIOD=April, 2000 to March, 2001;

/* Variable names in survey -- become recoded varibles */
```

```
%Let varlist1 =

 H00001   H00002   H00003A  H00003B  H00003C  H00003D  H00003E  H00003F
 H00003G  H00003H  H00003I  H00003J  H00003K  H00003L  H00004
 H00006   H00007   H00008   H00009   H00010   H00011   H00012   H00013
 H00014   H00015   H00016   H00017   H00018   H00019   H00020   H00021
 H00022   H00023   H00024   H00025   H00026   H00027   H00028   H00029
 H00030   H00031   H00032   H00033   H00034   H00035   H00036   H00037
 H00038   H00039   H00040   H00041   H00042   H00043   H00044   H00045
 H00046   H00047   H00048   H00049   H00050   H00051   H00052   H00053
 H00054   H00055   H00056   H00057   H00058   H00059   H00061
 H00062   H00063   H00064   H00065   H00066   H00067   H00068   H00069
 H00070   H00071   H00072   H00073A  H00073B  H00074   H00075   H00076A
 H00076B  H00077   SREDA
 H00079   SRRACEA  SRRACEB  SRRACEC  SRRACED  SRRACEE  SRAGE    H00083A
 H00083B  H00083C  H00083D  H00083E  H00083F  H00083G  H00083H  H00083I
 H00084   H00085A  H00085B  H00085C  H00085D  H00085E  H00085F  H00085G
 H00085H  H00085I  H00085J
 S00M01   S00M02   S00M03   S00A01A  S00A01B  S00A01C  S00A01D  S00A01E
 S00A01F  S00A01G  S00A01H  S00A01I  S00A01J  S00A01K  S00A01L  S00A01M
 S00A01N  S00A01O  S00A01P  S00A01Q  S00A01R  S00A02   S00A03   S00A04
 S00A05A  S00A05B  S00A05C  S00A05D  S00A05E  S00A05F  S00A05G  S00A05H
 S00A06   S00A07   S00A08   S00A09   S00A10   S00A11A  S00A11B  S00A11C
 S00A11D  S00A11E  S00A11F  S00A11G  S00A11H  S00A11I S00A11J  S00A12
 S00A13;

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

%Let varlist2 =
 H00001_O H00002_O H00003AO H00003BO H00003CO H00003DO H00003EO H00003FO
 H00003GO H00003HO H00003IO H00003JO H00003KO H00003LO H00004_O
 H00006_O H00007_O H00008_O H00009_O H00010_O H00011_O H00012_O H00013_O
 H00014_O H00015_O H00016_O H00017_O H00018_O H00019_O H00020_O H00021_O
 H00022_O H00023_O H00024_O H00025_O H00026_O H00027_O H00028_O H00029_O
 H00030_O H00031_O H00032_O H00033_O H00034_O H00035_O H00036_O H00037_O
 H00038_O H00039_O H00040_O H00041_O H00042_O H00043_O H00044_O H00045_O
 H00046_O H00047_O H00048_O H00049_O H00050_O H00051_O H00052_O H00053_O
 H00054_O H00055_O H00056_O H00057_O H00058_O H00059_O H00061_O
 H00062_O H00063_O H00064_O H00065_O H00066_O H00067_O H00068_O H00069_O
 H00070_O H00071_O H00072_O H00073AO H00073BO H00074_O H00075_O H00076AO
 H00076BO H00077_O SREDA_O
 H00079_O SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O  H00083AO
 H00083BO H00083CO H00083DO H00083EO H00083FO H00083GO H00083HO H00083IO
 H00084_O H00085AO H00085BO H00085CO H00085DO H00085EO H00085FO H00085GO
 H00085HO H00085IO H00085JO
 S00M01_O S00M02_O S00M03_O S00A01AO S00A01BO S00A01CO S00A01DO S00A01EO
 S00A01FO S00A01GO S00A01HO S00A01IO S00A01JO S00A01KO S00A01LO S00A01MO
 S00A01NO S00A01OO S00A01PO S00A01QO S00A01RO S00A02_O S00A03_O S00A04_O
 S00A05AO S00A05BO S00A05CO S00A05DO S00A05EO S00A05FO S00A05GO S00A05HO
 S00A06_O S00A07_O S00A08_O S00A09_O S00A10_O S00A11AO S00A11BO S00A11CO
 S00A11DO S00A11EO S00A11FO S00A11GO S00A11HO S00A11IO S00A11JO S00A12_O
 S00A13_O;


TITLE  "DoD 2000 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";

DATA OUT.CSCHM00Q;
  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;
  %INCLUDE "CSCHM00Q.FMT";

/* label and format statements for original variables */

  SET IN.MERGENRC;


/* This is a version of the coding scheme and coding tables for the
   2000 HCSDB Form A.
   The following tables outline the coding of screening questions (skip),
   and subsequent items to be answered (or not answered in a series
```

```
   following a skip question.) */

/* First set up new variables that capture the original values */
/* recode the initial numeric values to the SAS numeric values */
/* specified in the coding scheme                              */

  SEX=PNSEXCD;
  AGE=DAGEQY;
  DROP SEX AGE;

  ARRAY RECODE(*) &VARLIST1;
  ARRAY   ORIG(*) &VARLIST2;

  DO I = 1 to DIM(ORIG);
      ORIG(I) = RECODE(I);
      IF ORIG(I) < 0 THEN DO;
              IF ORIG(I)= -9 THEN RECODE(I)=.;
         ELSE IF ORIG(I)= -8 THEN RECODE(I)=.A;
         ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
         ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
         ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
         ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
         ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
         ELSE RECODE(I)=RECODE(I);
      END;
  END;
  DROP I;

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

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

  ARRAY   MARKED(*) H00003A H00003B H00003C H00003D H00003E H00003F
                    H00003G H00003H H00003I H00003J H00003K H00003L
                    SRRACEA SRRACEB SRRACEC SRRACED SRRACEE H00083A
                    H00083B H00083C H00083D H00083E H00083F H00083G
                    H00083H H00083I H00085A H00085B H00085C H00085D
                    H00085E H00085F H00085G H00085H H00085I H00085J
                    S00A01A S00A01B S00A01C S00A01D S00A01E S00A01F
                    S00A01G S00A01H S00A01I S00A01J S00A01K S00A01L
                    S00A01M S00A01N S00A01O S00A01P S00A01Q S00A01R
                    S00A05A S00A05B S00A05C S00A05D S00A05E S00A05F
                    S00A05G S00A05H S00A11A S00A11B S00A11C S00A11D
                    S00A11E S00A11F S00A11G S00A11H S00A11I S00A11J;

  ARRAY INFORMAT(*) H00003AO H00003BO H00003CO H00003DO H00003EO H00003FO
                    H00003GO H00003HO H00003IO H00003JO H00003KO H00003LO
                    SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO H00083AO
                    H00083BO H00083CO H00083DO H00083EO H00083FO H00083GO
                    H00083HO H00083IO H00085AO H00085BO H00085CO H00085DO
                    H00085EO H00085FO H00085GO H00085HO H00085IO H00085JO
                    S00A01AO S00A01BO S00A01CO S00A01DO S00A01EO S00A01FO
                    S00A01GO S00A01HO S00A01IO S00A01JO S00A01KO S00A01LO
                    S00A01MO S00A01NO S00A01OO S00A01PO S00A01QO S00A01RO
                    S00A05AO S00A05BO S00A05CO S00A05DO S00A05EO S00A05FO
                    S00A05GO S00A05HO S00A11AO S00A11BO S00A11CO S00A11DO
                    S00A11EO S00A11FO S00A11GO S00A11HO S00A11IO S00A11JO;


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

  FORMAT H00003A H00003B H00003C H00003D H00003E H00003F
         H00003G H00003H H00003I H00003J H00003K H00003L
         SRRACEA SRRACEB SRRACEC SRRACED SRRACEE H00083A
         H00083B H00083C H00083D H00083E H00083F H00083G
         H00083H H00083I H00085A H00085B H00085C H00085D
         H00085E H00085F H00085G H00085H H00085I H00085J
```

```
         S00A01A S00A01B S00A01C S00A01D S00A01E S00A01F
         S00A01G S00A01H S00A01I S00A01J S00A01K S00A01L
         S00A01M S00A01N S00A01O S00A01P S00A01Q S00A01R
         S00A05A S00A05B S00A05C S00A05D S00A05E S00A05F
         S00A05G S00A05H S00A11A S00A11B S00A11C S00A11D
         S00A11E S00A11F S00A11G S00A11H S00A11I S00A11J
         MARKED.;

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

  IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;

/* 6/05/2001 -- Recode responses from NRC to conform to final questionnaire */

  IF H00004_O=4  THEN H00004=.D;
  IF H00011_O=4  THEN H00011=.N;
  IF H00017_O=3  THEN H00017=.N;
  IF H00043_O=3  THEN H00043=.D;
  IF H00066_O=3  THEN H00066=.D;
 /* IF S00A10_O=4  THEN S00A10=.D; */

  ARRAY RESCALE1(*) H00061_O H00064_O H00071_O H00072_O H00073BO
                    H00074_O H00077_O;
  ARRAY  RECODE1(*) H00061 H00064 H00071 H00072 H00073B
                    H00074 H00077;
  DO J=1 TO DIM(RESCALE1);
     IF RESCALE1(J)>0 THEN DO;
        IF RESCALE1(J)=1 THEN RECODE1(J)=5;
        IF RESCALE1(J)=2 THEN RECODE1(J)=4;
        IF RESCALE1(J)=4 THEN RECODE1(J)=2;
        IF RESCALE1(J)=5 THEN RECODE1(J)=1;
     END;
  END;
  DROP J;

  IF H00062_O>0 THEN DO;                /* Question 63 */
     IF H00062_O=3 THEN H00062=1;
     IF H00062_O=1 THEN H00062=3;
  END;

  ARRAY RESCALE2(*) H00065_O H00076BO;
  ARRAY  RECODE2(*) H00065   H00076B;
  DO K=1 TO DIM(RESCALE2);
     IF RESCALE2(K)>0 THEN DO;
         IF RESCALE2(K)=1 THEN RECODE2(K)=4;
         IF RESCALE2(K)=2 THEN RECODE2(K)=3;
         IF RESCALE2(K)=3 THEN RECODE2(K)=2;
         IF RESCALE2(K)=4 THEN RECODE2(K)=1;
     END;
  END;
  DROP K;

  IF H00067_O>0 THEN DO;                /* Question 68 */
          IF H00067_O=1 THEN H00067=4;
     ELSE IF H00067_O=2 THEN H00067=3;
     ELSE IF H00067_O=3 THEN H00067=2;
     ELSE IF H00067_O=4 THEN H00067=.D;
  END;

  IF H00068_O>0 THEN DO;                /* Question 69 */
     IF H00068_O=1 THEN H00068=3;
     IF H00068_O=3 THEN H00068=.D;
  END;

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

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

  IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;

/** Note 1 -- health plan usage  **/
```

```
  IF H00001 > 0 OR H00001 =.D THEN N1=1;
  ELSE IF H00001=.N  THEN DO;
     IF H00002 NOT=. THEN DO;
        N1=2;
        H00002=.C;
     END;
     ELSE DO;
        N1=3;
        H00002=.N;
     END;
  END;
  ELSE IF H00001=.   THEN N1=4;
  ELSE IF H00001=.A  THEN DO;
     IF H00002 NOT=. THEN N1=5;
     ELSE DO;
         H00001=.N;
         H00002=.N;
         N1=6;
     END;
  END;

/** Note2  -- H00006, H00007: Personal doctor or nurse **/

  IF H00006=1 AND H00007 IN (1,2,3,.,.A) THEN N2=1;
  ELSE IF H00006 IN (1,.,.A) AND H00007=.N THEN DO;
     H00006=2;
     H00007=.C;
     N2=2;
  END;
  ELSE IF H00006 IN (2,.,.A) AND H00007>0 THEN DO;
     H00006=1;
     N2=3;
  END;
  ELSE IF H00006=2 AND H00007 IN (.N,.,.A) THEN DO;
     IF H00007=. THEN H00007=.N;
     ELSE H00007=.C;
     N2=4;
  END;
  ELSE IF H00006=. AND H00007=.A THEN DO;
     H00006=1;
     N2=5;
  END;
  ELSE IF H00006=. AND H00007=. THEN N2=6;
  ELSE IF H00006=.A AND H00007=. THEN DO;
     H00006=2;
     H00007=.N;
     N2=7;
  END;
  ELSE IF H00006=.A AND H00007=.A THEN N2=8;


/** Note 3 -- H00008, H00009:  Personal doctor or nurse **/


  IF H00008 = 1 AND (H00009 GE 0 OR H00009 IN (.,.A)) THEN N3=1;
  ELSE IF H00008 IN (1,.,.A) AND H00009=.N THEN DO;
     N3=2;
     H00008=2;
     IF H00009=. THEN H00009=.N;
     ELSE H00009=.C;
  END;
  ELSE IF H00008 IN (2,.,.A) AND (H00009 GE 0 OR H00009=.A) THEN DO;
     H00008=1;
     N3=3;
  END;
  ELSE IF H00008=2 AND H00009 IN (.N,.)  THEN DO;
     N3=4;
     IF H00009=. THEN H00009=.N;
     ELSE H00009=.C;
  END;
```

```
  ELSE IF H00008=. AND  H00009=. THEN N3=5;
  ELSE IF H00008=.A AND H00009=. THEN DO;
     H00008=2;
     N3=6;
     H00009=.N;
  END;


/** Note 4 -- H00010-H00012:  currently enrolled in Tricare Prime  **/

  ARRAY NOTE4 H00011 H00012;
  N4NMISS=0;
  N4MARK=0;
  DO OVER NOTE4;
     IF NOTE4 NE . THEN N4NMISS+1;          /* check for all missing */
     IF NOTE4 NOT IN (.,.N) THEN N4MARK+1; /* not missing or NA */
  END;

  IF H00010=1 AND (N4NMISS=0 OR N4MARK>0) THEN N4=1;
  ELSE IF H00010 IN (1,.,.A) AND H00011=.N AND H00012=. THEN DO;
     H00010=2;
     N4=2;
     DO OVER NOTE4;
        IF NOTE4=. THEN NOTE4=.N;
        ELSE NOTE4=.C;
     END;
  END;
  ELSE IF H00010 IN (2,.,.A) AND N4MARK>0 THEN DO;
     H00010=1;
     N4=3;
  END;
  ELSE IF H00010=2 AND ((N4NMISS=0) OR (H00011=.N AND H00012=.))THEN DO;
     N4=4;
     DO OVER NOTE4;
        IF NOTE4=. THEN NOTE4=.N;
        ELSE NOTE4=.C;
     END;
  END;
  ELSE IF H00010=. AND N4NMISS=0 THEN N4=5;
  ELSE IF H00010=.A AND N4NMISS=0 THEN DO;
     H00010=2;
     N4=6;
     DO OVER NOTE4;
        NOTE4=.N;
     END;
  END;

  DROP N4MARK N4NMISS;

/** Note 5 -- H00013, H00014:  needed to see a specialist in last 12 months **/

  IF H00013=1 AND H00014 IN (1,2,3,.,.A) THEN N5=1;
  ELSE IF H00013 IN (1,.,.A) AND H00014=.N THEN DO;
     H00013=2;
     H00014=.C;
     N5=2;
  END;
  ELSE IF H00013 IN (2,.,.A) AND H00014 IN (1,2,3) THEN DO;
     H00013=1;
     N5=3;
  END;
  ELSE IF H00013=2 AND H00014 IN (.,.A,.N) THEN DO;
     IF H00014=. THEN H00014=.N;
     ELSE H00014=.C;
     N5=4;
  END;
  ELSE IF H00013=. AND H00014=.A THEN DO;
     H00013=1;
     N5=5;
  END;
  ELSE IF H00013=.  AND H00014=. THEN N5=6;
```

```
  ELSE IF H00013=.A AND H00014=. THEN DO;
     H00013=2;
     H00014=.N;
     N5=7;
  END;
  ELSE IF H00013=.A AND H00014=.A THEN N5=7;

/** Note 6 -- H00015,H00016,H00017: saw a specialist in last 12 months **/

  ARRAY NOTE6 H00016 H00017;
  N6MARK=0;
  N6NMISS=0;

  DO OVER NOTE6;
     IF NOTE6 NE . THEN N6NMISS+1;
  END;

  DO OVER NOTE6;
     IF NOTE6 NOT IN (.N,.) THEN N6MARK+1;
  END;

  IF H00015=1 AND (N6NMISS=0 OR N6MARK>0) THEN N6=1;
  ELSE IF H00015 IN (1,.,.A) AND N6NMISS>0 AND N6MARK=0 THEN DO;
     H00015=2;
     N6=2;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
  END;
  ELSE IF H00015 IN (2,.,.A) AND N6MARK>0 THEN DO;
     H00015=1;
     N6=3;
  END;
  ELSE IF H00015=2 AND N6NMISS=0 OR (N6NMISS>0 AND N6MARK=0) THEN DO;
     N6=4;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
  END;
  ELSE IF H00015=. AND  N6NMISS=0 THEN N6=5;
  ELSE IF H00015=.A AND N6NMISS=0 THEN DO;
     H00015=2;
     N6=6;
     DO OVER NOTE6;
        NOTE6=.N;
     END;
  END;

  DROP N6NMISS N6MARK;


/** Note 7 -- called a doctor's office:  H00018, H00019 **/

  IF H00018=1 AND H00019 IN (1,2,3,4,.,.A) THEN N7=1;
  ELSE IF H00018 IN (1,.,.A) AND H00019=.N THEN DO;
     H00018=2;
     H00019=.C;
     N7=2;
  END;
  ELSE IF H00018 IN (2,.,.A) AND H00019 IN (1,2,3,4) THEN DO;
     H00018=1;
     N7=3;
  END;

  ELSE IF H00018=2 AND H00019 IN (.,.A,.N) THEN DO;
     IF H00019=. THEN H00019=.N;
     ELSE H00019=.C;
     N7=4;
  END;
```

```
  ELSE IF H00018=.  AND H00019=.A THEN DO;
     H00018=1;
     N7=5;
  END;
  ELSE IF H00018=.  AND H00019=.  THEN N7=6;
  ELSE IF H00018=.A AND H00019=.A THEN N7=7;
  ELSE IF H00018=.A AND H00019=.  THEN DO;
     H00018=2;
     N7=8;
  END;

/** Note 8 -- H00020,H00021,H00022:  regular or routine healthcare **/

  ARRAY NOTE8 H00021 H00022;
  N8MARK=0;
  N8NMISS=0;

  DO OVER NOTE8;
     IF NOTE8 NE . THEN N8NMISS+1;
  END;

  DO OVER NOTE8;
     IF NOTE8 NOT IN (.N,.) THEN N8MARK+1;
  END;
  IF H00020=1 AND (N8NMISS=0 OR N8MARK>0) THEN N8=1;
  ELSE IF H00020 IN (1,.,.A) AND N8NMISS>0 AND N8MARK=0 THEN DO;
     H00020=2;
     N8=2;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF H00020 IN (2,.,.A) AND N8MARK>0 THEN DO;
     H00020=1;
     N8=3;
  END;
  ELSE IF H00020=2 AND (N8NMISS=0 OR (N8NMISS>0 AND N8MARK=0)) THEN DO;
     N8=4;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF H00020=.  AND  N8NMISS=0 THEN N8=5;
  ELSE IF H00020=.A AND N8NMISS=0 THEN DO;
     H00020=2;
     N8=6;
     DO OVER NOTE8;
        NOTE8=.N;
     END;
  END;

  DROP N8NMISS N8MARK;

/** Note 9 -- H00023,H00024,H00025:  illness or injury **/

  ARRAY NOTE9 H00024 H00025;
  N9MARK=0;
  N9NMISS=0;

  DO OVER NOTE9;
     IF NOTE9 NE . THEN N9NMISS+1;
  END;

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

  IF H00023=1 AND (N9NMISS=0 OR N9MARK>0) THEN N9=1;
  ELSE IF H00023 IN (1,.,.A) AND N9NMISS>0 AND N9MARK=0 THEN DO;
```

```
      H00023=2;
      N9=2;
      DO OVER NOTE9;
         IF NOTE9=. THEN NOTE9=.N;
         ELSE NOTE9=.C;
      END;
   END;
   ELSE IF H00023 IN (2,.,.A) AND N9MARK>0 THEN DO;
      H00023=1;
      N9=3;
   END;
   ELSE IF H00023=2 AND (N9NMISS=0 OR (N9NMISS>0 AND N9MARK=0)) THEN DO;
      N9=4;
      DO OVER NOTE9;
         IF NOTE9=. THEN NOTE9=.N;
         ELSE NOTE9=.C;
      END;
   END;
   ELSE IF H00023=.  AND N9NMISS=0 THEN N9=5;
   ELSE IF H00023=.A AND N9NMISS=0 THEN DO;
      H00023=2;
      N9=6;
      DO OVER NOTE9;
         NOTE9=.N;
      END;
   END;

   DROP N9NMISS N9MARK;

 /** Note 10 -- H00027,S00C06-S00C08,H00028-H00038: doctor's office or clinic **/

   ARRAY NOTE10  H00028-H00038;
   N10MARK=0;
   N10NMISS=0;

   DO OVER NOTE10;
      IF NOTE10 NE . THEN N10NMISS+1;
      IF NOTE10 NOT IN (.N,.) THEN N10MARK+1;
   END;

   IF H00027=1 AND (N10NMISS=0 OR (N10NMISS>0 AND N10MARK=0)) THEN DO;
      N10=1;
      DO OVER NOTE10;
         IF NOTE10=. THEN NOTE10=.N;
         ELSE NOTE10=.C;
      END;
   END;
   ELSE IF H00027 IN (1,.,.A) AND N10MARK>0 THEN N10=2;
   ELSE IF H00027 IN (2,3,4,5,6,7,.,.A) AND (N10NMISS>0 AND N10MARK=0) THEN DO;
      H00027=1;
      N10=3;
      DO OVER NOTE10;
         IF NOTE10=. THEN NOTE10=.N;
         ELSE NOTE10=.C;
      END;
   END;
   ELSE IF H00027 IN (2,3,4,5,6,7) AND (N10NMISS=0 OR N10MARK>0) THEN N10=4;
   ELSE IF H00027=.  AND N10NMISS=0 THEN N10=5;
   ELSE IF H00027=.A AND N10NMISS=0 THEN DO;
      H00027=1;
      N10=6;
      DO OVER NOTE10;
         NOTE10=.N;
      END;
   END;

   DROP N10NMISS N10MARK;

 /* Note 11 S00M01, S00M02, S00M03: treatment or counseling in last 12 months  */

   ARRAY NOTE11 S00M02 S00M03;
```

```
  N11MARK=0;
  N11NMISS=0;

  DO OVER NOTE11;
     IF NOTE11 NE . THEN N11NMISS+1;
     IF NOTE11 NOT IN (.N,.) THEN N11MARK+1;
  END;

  IF S00M01 IN (1,.D) AND (N11NMISS=0 OR N11MARK>0) THEN N11=1;
  ELSE IF S00M01 IN (1,.D,.,.A) AND N11NMISS>0 AND N11MARK=0 THEN DO;
     S00M01=2;
     N11=2;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF S00M01 IN (2,.,.A) AND N11MARK>0 THEN DO;
     S00M01=1;
     N11=3;
  END;
  ELSE IF S00M01=2 AND (N11NMISS=0 OR (N11NMISS>0 AND N11MARK=0)) THEN DO;
     N11=4;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF S00M01=.  AND N11NMISS=0 THEN N11=5;
  ELSE IF S00M01=.A AND N11NMISS=0 THEN DO;
     S00M01=2;
     N11=6;
     DO OVER NOTE11;
        NOTE11=.N;
     END;
  END;

  DROP N11NMISS N11MARK;

/** Note 12 -- H00043, H00044-H00046: claims to health plan **/

  ARRAY NOTE12 H00044-H00046;
  N12MARK=0;
  N12NMISS=0;

  DO OVER NOTE12;
     IF NOTE12 NE . THEN N12NMISS+1;
  END;

  DO OVER NOTE12;
     IF NOTE12 NOT IN (.N,.) THEN N12MARK+1;
  END;

  IF H00043 IN (1,.D) AND (N12NMISS=0 OR N12MARK>0) THEN N12=1;
  ELSE IF H00043 IN (1,.D,.,.A) AND N12NMISS>0 AND N12MARK=0 THEN DO;
     H00043=2;
     N12=2;
     DO OVER NOTE12;
        IF NOTE12=. THEN NOTE12=.N;
        ELSE NOTE12=.C;
     END;
  END;
  ELSE IF H00043 IN (2,.,.A) AND N12MARK>0 THEN DO;
     H00043=1;
     N12=3;
  END;
  ELSE IF H00043=2 AND (N12NMISS=0 OR (N12NMISS>0 AND N12MARK=0)) THEN DO;
     N12=4;
     DO OVER NOTE12;
        IF NOTE12=. THEN NOTE12=.N;
        ELSE NOTE12=.C;
```

```
      END;
   END;
   ELSE IF H00043=.  AND N12NMISS=0 THEN N12=5;
   ELSE IF H00043=.A AND N12NMISS=0 THEN DO;
      H00043=2;
      N12=6;
      DO OVER NOTE12;
         NOTE12=.N;
      END;
   END;

   DROP N12NMISS N12MARK;

 /** Note13  -- H00047, H00048: **/

   IF H00047=1 AND H00048 IN (1,2,3,.,.A) THEN N13=1;
   ELSE IF H00047 IN (1,.,.A) AND H00048=.N THEN DO;
      H00047=2;
      H00048=.C;
      N13=2;
   END;
   ELSE IF H00047 IN (2,3,.,.A) AND H00048 IN (1,2,3) THEN DO;
      H00047=1;
      N13=3;
   END;
   ELSE IF H00047 IN (2,3) AND H00048 IN (.N,.,.A) THEN DO;
      IF H00048=. THEN H00048=.N;
      ELSE H00048=.C;
      N13=4;
   END;
   ELSE IF H00047=. AND H00048=.A THEN DO;
      H00047=1;
      N13=5;
   END;
   ELSE IF H00047=. AND H00048=. THEN N13=6;
   ELSE IF H00047=.A AND H00048=. THEN DO;
      H00047=2;
      H00048=.N;
      N13=7;
   END;

 /** Note14 -- H00049, H00050: health plan's customer service **/

   IF H00049=1 AND H00050 IN (1,2,3,.,.A) THEN N14=1;
   ELSE IF H00049 IN (1,.,.A) AND H00050=.N THEN DO;
      H00049=2;
      H00050=.C;
      N14=2;
   END;
   ELSE IF H00049 IN (2,.,.A) AND H00050 IN (1,2,3) THEN DO;
      H00049=1;
      N14=3;
   END;
   ELSE IF H00049=2 AND H00050 IN (.N,.,.A) THEN DO;
      IF H00050=. THEN H00050=.N;
      ELSE H00050=.C;
      N14=4;
   END;
   ELSE IF H00049=. AND H00050=.A THEN DO;
      H00049=1;
      N14=5;
   END;
   ELSE IF H00049=. AND H00050=. THEN N14=6;
   ELSE IF H00049=.A AND H00050=. THEN DO;
      H00049=2;
      H00050=.N;
      N14=7;
   END;

 /** Note 15 -- H00051, H00052, H00053:  complaint or problem  **/
```

```
  ARRAY NOTE15 H00052 H00053;
  N15MARK=0;
  N15NMISS=0;

  DO OVER NOTE15;
     IF NOTE15 NE . THEN N15NMISS+1;
     IF NOTE15 NOT IN (.N,.) THEN N15MARK+1;
  END;

  IF H00051=1 AND (N15NMISS=0 OR N15MARK>0) THEN N15=1;
  ELSE IF H00051 IN (1,3,.,.A) AND N15NMISS>0 AND N15MARK=0 THEN DO;
     H00051=2;
     N15=2;
     DO OVER NOTE15;
        IF NOTE15=. THEN NOTE15=.N;
        ELSE NOTE15=.C;
     END;
  END;
  ELSE IF H00051 IN (2,3,.,.A) AND N15MARK>0 THEN DO;
     H00051=1;
     N15=3;
  END;
  ELSE IF H00051=2 AND (N15NMISS=0 OR (N15NMISS>0 AND N15MARK=0)) THEN DO;
     N15=4;
     DO OVER NOTE15;
        IF NOTE15=. THEN NOTE15=.N;
        ELSE NOTE15=.C;
     END;
  END;
  ELSE IF H00051=.  AND N15NMISS=0 THEN N15=5;
  ELSE IF H00051=.A AND N15NMISS=0 THEN DO;
     H00051=2;
     N15=6;
     DO OVER NOTE15;
        NOTE15=.N;
     END;
  END;

  DROP N15NMISS N15MARK;

/** Note16  -- H00054, H00055: paperwork  **/

  IF H00054=1 AND H00055 IN (1,2,3,.,.A) THEN N16=1;
  ELSE IF H00054 IN (1,.,.A) AND H00055=.N THEN DO;
     H00054=2;
     H00055=.C;
     N16=2;
  END;
  ELSE IF H00054 IN (2,.,.A) AND H00055 IN (1,2,3,.A) THEN DO;
     H00054=1;
     N16=3;
  END;
  ELSE IF H00054=2 AND H00055 IN (.N,.)THEN DO;
     IF H00055=. THEN  H00055=.N;
     ELSE H00055=.C;
     N16=4;
  END;
  ELSE IF H00054=.  AND H00055=. THEN N16=5;
  ELSE IF H00054=.A AND H00055=. THEN DO;
     H00054=2;
     H00055=.N;
     N16=6;
  END;

/** Note 17 -- smoking:  H00066 - H00069  **/

  IF H00066=1 and H00067 IN (3,4) THEN DO;  /* still smoke */
     IF H00068 NE . THEN DO;
        H00068=.C;
        N17=1;
     END;
```

```
   ELSE IF H00068=. THEN DO;
      H00068=.N;
      N17=2;
   END;
END;
ELSE IF H00066=1 AND H00067=2 THEN DO;         /* quit */
   IF H00068 IN (2,.D) AND H00069 NE . THEN DO;   /* > 1 year ago */
      H00069 =.C;
      N17=3;
   END;
   ELSE IF H00068 IN (2,.D) AND H00069=. THEN DO;
      H00069 =.N;
      N17=4;
   END;
   ELSE IF H00068 IN (3,.,.A) THEN N17=5;      /* < 1 year ago */
END;
ELSE IF H00066=1 AND H00067 IN (.D,.,.A) THEN DO;  /* don't know */
   IF H00068=2 AND H00069 NE . THEN DO;        /* > 1 year ago */
      H00067=2;
      H00069=.C;
      N17=6;
   END;
   ELSE IF H00068=2 AND H00069 = . THEN DO;
      H00067=2;
      H00069=.N;
      N17=7;
   END;
   ELSE IF H00068=3 THEN DO;            /* < 1 year ago */
      H00067=2;
      N17=8;
   END;
   ELSE IF H00068 IN (.D,.,.A) THEN N17=9;  /* don't know */
END;
ELSE IF H00066 IN (2,.D,.,.A) AND H00067 IN (3,4) THEN DO; /*never smoke*/
   IF H00068 NE . THEN DO;
      H00066=1;
      H00068=.C;
      N17=10;
   END;
   ELSE IF H00068=. THEN DO;
      H00066=1;
      H00068=.N;
      N17=11;
   END;
END;
ELSE IF H00066 IN (2,.D) AND H00067 IN (2,.D,.A) THEN DO; /*never smoke*/
   IF H00068 NE . AND H00069 NE . THEN DO;
      H00067 =.C;
      H00068 =.C;
      H00069 =.C;
      N17=12;
   END;
   ELSE IF H00068 NE . AND H00069=. THEN DO;
      H00067=.C;
      H00068=.C;
      H00069=.N;
      N17=13;
   END;
   ELSE IF H00068=. AND H00069 NE . THEN DO;
      H00067=.C;
      H00068=.N;
      H00069=.C;
      N17=14;
   END;
   ELSE IF H00068=. AND H00069=. THEN DO;
      H00067=.C;
      H00068=.N;
      H00069=.N;
      N17=15;
   END;
END;
```

```
ELSE IF H00066 IN (2,.D) AND H00067= . THEN DO; /*never smoke*/
   IF H00068 NE . AND H00069 NE . THEN DO;
      H00067=.N;
      H00068=.C;
      H00069=.C;
      N17=16;
   END;
   ELSE IF H00068 NE . AND H00069=. THEN DO;
      H00067=.N;
      H00068=.C;
      H00069=.N;
      N17=17;
   END;
   ELSE IF H00068=. AND H00069 NE . THEN DO;
      H00067=.N;
      H00068=.N;
      H00069=.C;
      N17=18;
   END;
   ELSE IF H00068=. AND H00069=. THEN DO;
      H00067=.N;
      H00068=.N;
      H00069=.N;
      N17=19;
   END;
END;
ELSE IF H00066 IN (.A, .) AND H00067 IN (2,.,.A) THEN DO; /*MRE/blank*/
   IF H00068=3 THEN DO;
      H00066=1;
      N17=20;
   END;
   ELSE IF H00068=2 AND H00069 NE . THEN DO;
      H00066 =1;
      H00069 =.C;
      N17=21;
   END;
   ELSE IF H00068=2 AND H00069=. THEN DO;
      H00066=1;
      H00069=.N;
      N17=22;
   END;
   ELSE IF H00068=.D AND H00069=. THEN DO;
      H00069=.N;
      N17=23;
   END;
   ELSE IF H00068=.D AND H00069 NE . THEN DO;
      H00069=.C;
      N17=24;
   END;
   ELSE IF H00068 IN (.,.A) AND H00069 IN (2,3,4,5) THEN DO;
      H00066=1;
      N17=25;
   END;
   ELSE IF H00068 IN (.,.A) AND H00069 IN (1,.,.A) THEN N17=26;
END;
ELSE IF H00066 IN (.A,.) AND H00067=.D THEN DO; /*MRE/blank*/
   IF H00068 NE . AND H00069 NE .  THEN DO;
      H00068=.C;
      H00069=.C;
      N17=27;
   END;
   ELSE IF H00068 NE . AND H00069=.  THEN DO;
      H00068=.C;
      H00069=.N;
      N17=28;
   END;
   IF H00068=. AND H00069=.  THEN DO;
      H00068=.N;
      H00069=.N;
      N17=29;
   END;
```

```
      ELSE IF H00068=. AND H00069 NE .  THEN DO;
         H00068=.N;
         H00069=.C;
         N17=30;
      END;
   END;

/** Note 18 - gender H00070, SEX, H00071, H00072--H00076B, XSEXA */

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


   IF H00071 > 0 THEN MALE=1;     /* prostate */
   ELSE MALE = 0;
   IF H00072>0 OR H00073A>0 OR H00073B>0 OR H00074>0 OR H00075>0
      OR H00076A>0 OR H00076B>0  THEN FMALE=1; /* mammogram/pap smear/PREGNANT*/
   ELSE FMALE = 0;
   IF H00070=. OR H00070=.A THEN DO;
      IF (SEX='F' AND MALE AND FMALE) THEN DO;
         N18A=1;
         XSEXA=2;
      END;
      ELSE IF (SEX='F' AND MALE=0 AND FMALE=0) THEN DO;
         N18A=2;
         XSEXA=2;
      END;
      ELSE IF (SEX='M' AND MALE AND FMALE) THEN DO;
         N18A=3;
         XSEXA=1;
      END;
      ELSE IF (SEX='M' AND MALE=0 AND FMALE=0) THEN DO;
         N18A=4;
         XSEXA=1;
      END;
      ELSE IF MALE AND NOT FMALE THEN DO;
         N18A=5;
         XSEXA=1;
      END;
      ELSE IF FMALE AND NOT MALE THEN DO;
         N18A=6;
         XSEXA=2;
      END;
      ELSE IF (SEX='Z' AND MALE AND FMALE) THEN DO;
         N18A=7;
         XSEXA=.;
      END;
      ELSE IF (SEX='Z' AND MALE=0 AND FMALE=0) THEN DO;
         N18A=8;
         XSEXA=.;
      END;
   END;
   ELSE IF (H00070=1) THEN DO;
      IF MALE AND NOT FMALE THEN DO;
         N18A=9;
         XSEXA=1;
      END;
      ELSE IF NOT MALE AND FMALE THEN DO;
         IF SEX='F' THEN DO;
            N18A=10;
            XSEXA=2;
         END;
         ELSE DO;
            N18A=11;
            XSEXA=1;
         END;
      END;
      ELSE IF MALE AND FMALE THEN DO;
         N18A=12;
         XSEXA=1;
```

```
      END;
      ELSE IF MALE=0 AND FMALE=0 THEN DO;
         N18A=13;
         XSEXA=1;
      END;
   END;
   ELSE IF (H00070=2) THEN DO;
      IF NOT MALE AND FMALE THEN DO;
        N18A=14;
        XSEXA=2;
      END;
      ELSE IF MALE AND NOT FMALE THEN DO;
         IF SEX='M' THEN DO;
           N18A=15;
           XSEXA=1;
         END;
         ELSE DO;
            N18A=16;
            XSEXA=2;
         END;
      END;
      ELSE IF MALE AND FMALE THEN DO;
         N18A=17;
         XSEXA=2;
      END;
      ELSE IF MALE=0 AND FMALE=0 THEN DO;
         N18A=18;
         XSEXA=2;
      END;
   END;

/* Note 18b - gender vs prostate */

   IF XSEXA=1 THEN N18B=1;    /* male    */
   ELSE IF XSEXA=2 THEN DO;   /* female  */
      IF H00071 NE . THEN DO;
         N18B=2;
         H00071=.C;
      END;                    /*inconsistent resp */
      ELSE DO;
         N18B=3;
         H00071=.N;
      END;                    /* valid skip   */
   END;
   ELSE IF XSEXA=. THEN DO;   /*  missing sex */
      N18B=4;
      H00071=.;
   END;

/* Note 18c - gender vs mammogram/paps */
/*   REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM OR PAP SMEAR ENTRIES  */

   ARRAY NOTE18C H00072 H00073A H00073B H00074 H00075 H00076A H00076B;

   IF H00072 NE . OR H00073A NE . OR H00073B NE . OR H00074 NE . OR
      H00075 NE . OR H00076A NE . OR H00076B NE . THEN FMALE=1; /* mammogram or pap smear
*/
   ELSE FMALE = 0;
   IF XSEXA=1 THEN DO;   /* male */
      IF FMALE=0 THEN DO;
         N18C=1;
         DO OVER NOTE18C;
            IF NOTE18C=. THEN NOTE18C = .N;
            ELSE NOTE18C=.C;
         END;
      END; /* inconsistent response */
      ELSE IF FMALE=1 THEN DO;
         N18C=2;
         DO OVER NOTE18C;
            NOTE18C=.N;
         END;
```

```
      END;   /* valid skip */
   END;
   ELSE IF XSEXA=2 THEN  N18C=3; /* female */
   ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
      N18C=4;
      DO OVER NOTE18C;
         NOTE18C=.;
      END;
   END;

   DROP MALE FMALE;

 /* Note 19 - breast exam for female 40 or over  */
 /* Note 1999 -- no self reported age variable  */
 /* Note no dob variable  -- macro not used     */

   IF XSEXA=1 THEN DO;  /* male */
      IF  (H00073A=.C OR H00073A=.N) AND (H00073B=.C OR H00073B=.N)
      AND (H00074=.C OR H00074=.N)  THEN N19 = 1;
   END;
   ELSE IF XSEXA=2 THEN DO;
      IF H00073A=2 THEN N19=2;         /* female 40 or over */
      ELSE IF H00073A=1 THEN DO;   /* female < 40 */
         IF H00073B NE . THEN H00073B=.C;
         ELSE H00073B=.N;
         IF H00074 NE . THEN H00074=.C;
         ELSE H00074=.N;
         N19=3;
      END;
      ELSE IF H00073A=.A THEN DO;
         IF H00073B NE . OR H00074 NE . THEN DO;
            H00073A=2;
            N19=4;
         END;
         ELSE IF H00073B=. AND H00074=. THEN DO;
            H00073A=1;
            IF H00073B NE . THEN H00073B=.C;
            ELSE H00074=.N;
            IF H00074 NE . THEN H00074=.C;
            ELSE H00074=.N;
            N19=5;
         END;
      END;
      ELSE IF H00073A=. THEN DO;
         IF H00073B NE . OR H00074 NE . THEN DO;
            H00073A=2;
            N19=6;
         END;
         ELSE IF H00073B=. AND H00074=. THEN DO;
            IF AGE<40 THEN DO;
               H00073A = 1;
               H00073B=.N;
               H00074=.N;
               N19=7;
            END;
            ELSE IF AGE >= 40 THEN DO;
               H00073A=1;
               H00073B=.N;
               H00074=.N;
               N19=8;
            END;
            ELSE IF AGE=. THEN N19=9;
         END;
      END;
   END;
   ELSE IF XSEXA=. THEN N19=10;

 /* Note 20 - gender vs Pregnancy */

   IF XSEXA=1 THEN N20=1;          /* male     */
   ELSE IF XSEXA=2 THEN DO;        /* female   */
```

```
      IF H00075=1 THEN N20=2;      /* pregnant */
      ELSE IF H00075=2 THEN DO;
         IF H00076A=. THEN H00076A = .N;
         ELSE H00076A=.C;
         N20=3;
      END;
      ELSE IF H00075=3 THEN DO;
         IF H00076A=. THEN H00076A = .N;
         ELSE H00076A=.C;
         IF H00076B=. THEN H00076B=.N;
         ELSE H00076B=.C;
         N20=4;
      END;
      ELSE IF H00075 IN (., .A) THEN DO;
         IF H00076A NE . THEN DO;
            H00075=1;
            N20=5;
         END;
         ELSE IF H00076A=. THEN DO;
            IF H00075=. THEN N20=6;
            ELSE IF H00075=.A THEN DO;
               H00075=3;
               H00076A=.N;
               IF H00076B=. THEN H00076B=.N;
               ELSE H00076B=.C;
               N20=7;
            END;
         END;

      END;
   END;
   ELSE IF XSEXA=. AND H00075 IN (.,.A) THEN N20=8;

/** Note 22 -- SRAGE,S00A01A-S00A13  **/

   ARRAY NOTE22 S00A01A--S00A01R S00A02-S00A04    S00A05A--S00A05H
                S00A06-S00A10    S00A11A--S00A11J S00A12-S00A13;
   N22MARK=0;

   DO OVER NOTE22;
      IF NOTE22 NE . THEN N22MARK+1;
   END;

   IF 1 LE SRAGE LE 5 THEN DO;
      N22=1;
      DO OVER NOTE22;
         IF NOTE22=. THEN NOTE22=.N;
         ELSE NOTE22=.C;
      END;
   END;
   IF SRAGE IN (.A,.) THEN N22=2;
   IF SRAGE IN (6,7) THEN N22=3;

   DROP N22MARK;

/** Note 23 -- S00A02, S00A03, S00A04, S00A05A-S00A05H **/

   ARRAY NOTE23  S00A03 S00A04 S00A05A--S00A05H;
   ARRAY NOTE23A S00A03 S00A04;
   ARRAY NOTE23B S00A05A--S00A05H;
   N23NMISS=0;
   N23NOTNA=0;

   DO OVER NOTE23A;
      IF NOTE23A  NOT IN (1,.,.N,.C) THEN N23NMISS+1;
   END;
   DO OVER NOTE23B;
      IF NOTE23B NOT IN (2,.,.N,.C) THEN N23NOTNA+1;
   END;

        IF S00A02 IN (.N, .C) THEN N23=1;
```

```
  ELSE IF S00A02 =1          THEN N23=2;
  ELSE IF S00A02 IN (2,.,.A) AND (N23NMISS+N23NOTNA) >0 THEN DO;
     N23=3;
     S00A02=1;
  END;
  ELSE IF S00A02 =2 AND (N23NMISS+N23NOTNA)=0 THEN DO;
     N23=4;
     DO OVER NOTE23;
        IF   NOTE23=.  THEN NOTE23=.N;
        ELSE NOTE23=.C;
     END;
  END;
  ELSE IF S00A02=.  AND N23NMISS=0 THEN N23=5;
  ELSE IF S00A02=.A AND N23NMISS=0 THEN DO;
     S00A02=2;
     N23=6;
     DO OVER NOTE23;
        IF   NOTE23=.  THEN NOTE23=.N;
        ELSE NOTE23=.C;
     END;
  END;

  DROP N23NMISS N23NOTNA ;

/** Note 24 -- S00A06, S00A07 **/

  IF S00A06 IN (.N, .C) AND S00A07 IN (.N,.C) THEN N24=1;

  IF S00A06 =1 THEN DO;
      N24=2;
      IF S00A07=. THEN S00A07=.N ;
      ELSE S00A07=.C;
  END;
  ELSE IF S00A06=2 THEN N24=3;
  ELSE IF S00A06 IN (.,.A) AND S00A07 IN (1,2,.D,.A) THEN DO;
       S00A06=2;
       N24=4;
  END;
  ELSE IF S00A06=.  AND S00A07=. THEN N24=5;
  ELSE IF S00A06=.A AND S00A07=. THEN DO;
     N24=6;
     S00A06=1;
     S00A07=.N;
  END;

/** Note 25 -- S00A07, S00A08, S00A09 **/

  IF S00A07 IN (.N,.C) AND S00A08 IN (.N,.C) AND S00A09 IN (.N,.C)
  THEN N25=1;
  ELSE IF S00A07 IN (1,2,.D,.A) THEN DO;
     N25=2;
     IF S00A08= . THEN S00A08=.N;
     ELSE S00A08=.C;
     IF S00A09= . THEN S00A09=.N;
     ELSE S00A09=.C;
  END;
  ELSE IF S00A07 IN (.,.N,.C) AND S00A08=1 AND S00A09  = . THEN DO;
     N25=3;
     S00A09=.N;
  END;
  ELSE IF S00A07 IN (.,.N,.C) AND S00A08=1 AND S00A09 NE . THEN N25=4;
  ELSE IF S00A07 IN (.,.N,.C) AND S00A08 IN (2,.A,.) AND S00A09  = . THEN DO;
     S00A09=.N;
     N25=5;
  END;
  ELSE IF S00A07 IN (.,.N,.C) AND S00A08 IN (2,.,.A) AND S00A09 IN (1,2,3,4,5,.D,.A) THEN
DO;
     S00A08=1;
     N25=6;
  END;
  ELSE IF S00A07 IN (.,.N,.C) AND S00A08=.  AND S00A09=. THEN N25=7;
```

```
/** Note 26:  S00A09, S00A10, S00A11A-S00A11J, S00A12, S00A13 **/

  ARRAY NOTE26   S00A10 S00A11A--S00A11J S00A12 S00A13;
  ARRAY NOTE26A  S00A10 S00A12 S00A13;
  ARRAY NOTE26B  S00A11A--S00A11J;
  N26NMISS=0;
  N26NSKIP=0;

  DO OVER NOTE26;
     IF NOTE26 NOT IN (.N,.C) THEN N26NSKIP+1;
  END;

  DO OVER NOTE26A;
     IF NOTE26A NOT IN (.,.N,.C) THEN N26NMISS+1;
  END;

  DO OVER NOTE26B;
     IF NOTE26B NOT IN (2,.N,.C) THEN N26NMISS+1;
  END;

  IF S00A09 IN (.N,.C) AND N26NSKIP=0 THEN N26=1;
  ELSE IF S00A09 IN (1,2,3,4,5,.D,.A) THEN DO;
     N26=2;
     DO OVER NOTE26;
        IF NOTE26 =. THEN NOTE26=.N;
        ELSE NOTE26= .C;
     END;
  END;
  ELSE IF S00A09 IN (.,.N,.C) THEN N26=3;
  DROP N26NMISS N26NSKIP;

/** Note 27: S00A12, S00A13 **/

  IF S00A12 IN (.N,.C) AND S00A13 IN (.N,.C) THEN N27=1;
  ELSE IF S00A12=1 AND S00A13= . THEN DO;
     N27=2;
     S00A13=.N;
  END;
  ELSE IF S00A12=1 AND S00A13 IN (1,2,3,4,5,.D,.A) THEN DO;
     N27=3;
     S00A13=.C;
  END;
  ELSE IF S00A12 IN (2,3,4,5,.D,.,.A) THEN N27=4;



NOSURVEY:

/* missing values */

  ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
  MISS_TOT=0;
  DO OVER MISS;
     MISS = 0;
  END;
  ARRAY MISSARAY &VARLIST2.;

  DO OVER MISSARAY;
     IF (MISSARAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
     ELSE IF (MISSARAY EQ -8) THEN MISS_8 = MISS_8 + 1;
     ELSE IF (MISSARAY EQ -7) THEN MISS_7 = MISS_7 + 1;
     ELSE IF (MISSARAY EQ -6) THEN MISS_6 = MISS_6 + 1;
     ELSE IF (MISSARAY EQ -5) THEN MISS_5 = MISS_5 + 1;
     ELSE IF (MISSARAY EQ -4) THEN MISS_4 = MISS_4 + 1;
     ELSE IF (MISSARAY EQ -1) THEN MISS_1 = MISS_1 + 1;
  END;
  DO OVER MISS;
     MISS_TOT=MISS_TOT + MISS;
  END;
```

```
*****************************************;

 OUTPUT;

RUN;


PROC FORMAT;
   VALUE GRID
     0='0'
     1-9999='>=1' ;
   VALUE $GRIDB
     1-5 = '1-5' ;
   VALUE $AGE
     018-039='<40'
     040-120='>=40';
   VALUE SCALE
     0-10='0-10';
   VALUE MARK
     1-6='Marked' ;
   VALUE MARKB
     2-7='Marked';

   VALUE MARKC
    1='1'
   2-HIGH='>1';

RUN;

PROC CONTENTS DATA=OUT.&OUTDATA;
RUN;


** first, examine initial recodes ;

PROC FREQ DATA=OUT.&OUTDATA;
   TABLES H00004_O*H00004
          H00011_O*H00011
          H00017_O*H00017
          H00061_O*H00061
          H00064_O*H00064
          H00071_O*H00071
          H00072_O*H00072
          H00073BO*H00073B
          H00074_O*H00074
          H00077_O*H00077
          H00062_O*H00062
          H00065_O*H00065
          H00076BO*H00076B
          H00067_O*H00067
          H00068_O*H00068/MISSING LIST;
   FORMAT _ALL_ ;
RUN;

PROC FREQ DATA=OUT.&OUTDATA;
   where flag_fin="1";
   TABLES N1-N17 N18A N18B N18C N19-N20 N22-N27/MISSING LIST;
RUN;

PROC MEANS DATA=OUT.&OUTDATA N NMISS MIN MAX SUM MEAN;
   TITLE3 'Frequency Checks - Missing Value Totals';
   VAR MISS_TOT MISS_1 MISS_4 MISS_5 MISS_6-MISS_9;
RUN;

%MACRO GETFREQS (NOTE,TABLES,FORMAT);

  PROC FREQ DATA=OUT.&OUTDATA;
      where flag_fin="1";
      TITLE3 "Freqency Checks - Note &NOTE.";
      TABLES &TABLES./MISSING LIST;
```

```
      FORMAT _ALL_;
      FORMAT &FORMAT.;
  RUN;

%MEND GETFREQS;

%GETFREQS(1,N1*H00001_O*H00002_O*H00001*H00002,H00001_O H00001 GRID.);

%GETFREQS(2,N2*H00006_O*H00007_O*H00006*H00007,H00007_O H00007 MARK.);

%GETFREQS(3,N3*H00008_O*H00008*H00009_O*H00009,
               H00009_O H00009 MARK.);

%GETFREQS(4,N4*H00010_O*H00011_O*H00012_O*H00010*H00011*H00012,
               H00011_O H00012_O H00011 H00012 MARK.);
%GETFREQS(5,N5*H00013_O*H00014_O*H00013*H00014,H00014_O H00014 MARK.);

%GETFREQS(6,N6*H00015_O*H00016_O*H00017_O*H00015*H00016*H00017,
               H00016_O H00017_O H00016 H00017 MARK.);
%GETFREQS(7,N7*H00018_O*H00019_O*H00018*H00019,H00019_O H00019 MARK.);

%GETFREQS(8,N8*H00020_O*H00021_O*H00022_O*H00020*H00021*H00022,
               H00021_O H00022_O H00021 H00022 MARK.);

%GETFREQS(9,N9*H00023_O*H00024_O*H00025_O*H00023*H00024*H00025,
               H00024_O H00025_O H00024 H00025  MARK.);

%GETFREQS(10,N10*H00027_O*H00028_O*H00029_O*H00030_O*H00031_O*H00032_O*H00033_O,
                 H00028_O H00029_O H00030_O H00031_O H00032_O H00033_O MARK.
                 H00027_O MARKB.);

%GETFREQS(11,N11*S00M01_O*S00M02_O*S00M03_O*S00M01*S00M02*S00M03,
                 S00M02_O S00M02 S00M03_O S00M03 MARK.);

%GETFREQS(12,N12*H00043_O*H00044_O*H00045_O*H00046_O*H00043*H00044*H00045*H00046,
                 H00044_O H00045_O H00046_O H00044 H00045 H00046 MARK.);

%GETFREQS(13,N13*H00047_O*H00048_O*H00047*H00048,H00048_O H00048 MARK.);

%GETFREQS(14,N14*H00049_O*H00050_O*H00049*H00050,H00050_O H00050 MARK.);

%GETFREQS(15,N15*H00051_O*H00052_O*H00053_O*H00051*H00052*H00053,
                 H00052_O H00053_O H00052 H00053 MARK.);

%GETFREQS(16,N16*H00054_O*H00055_O*H00054*H00055,H00055_O H00055 MARK.);

%GETFREQS(17,N17*H00066_O*H00067_O*H00068_O*H00069_O*H00066*H00067*H00068*H00069,
                 _all_ );

%GETFREQS(18A,N18A*H00070_O*H00070*PNSEXCD*XSEXA*H00072_O*H00073AO*H00073BO*H00074_O*
                   H00075_O*H00076AO*H00076BO,H00072_O H00073AO H00073BO H00074_O
                   H00075_O H00076AO H00076BO MARK. );

%GETFREQS(18B,N18B*H00071_O*H00071*XSEXA,H00071 H00071_O MARK.);

%GETFREQS(18C,N18C*XSEXA*H00072_O*H00073AO*H00073BO*H00074_O*H00075_O*H00076AO*
                   H00076BO,H00072_O H00073AO H00073BO H00074_O H00075_O H00076AO
                   H00076BO MARK.);

%GETFREQS(19,N19*XSEXA*DAGEQY*H00073AO*H00073BO*H00074_O*H00073A*H00073B*H00074,
                 H00073BO H00074_O H00073B H00074 MARK.);

%GETFREQS(20,N20*XSEXA*H00075_O*H00076AO*H00076BO*H00075*H00076A*H00076B,
                 H00076AO H00076BO H00076A H00076B MARK.);

%GETFREQS(22,N22*SRAGE*S00A01AO*S00A01A*S00A01BO*S00A01B*S00A01CO*S00A01C,
                 S00A01AO S00A01A S00A01BO S00A01B S00A01CO S00A01C MARK.);

%GETFREQS(23,N23*S00A02_O*S00A03_O*S00A04_O*S00A02*S00A03*S00A04,
                 S00A03_O S00A04_O S00A03 S00A04 MARKC.);
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%GETFREQS(24,N24*S00A06_O*S00A07_O*S00A06*S00A07,
                 S00A07_O S00A07 MARK.);

%GETFREQS(25,N25*S00A07*S00A08_O*S00A09_O*S00A08*S00A09,
                 S00A09_O S00A09 MARK.);

%GETFREQS(26,N26*S00A09*S00A10*S00A12*S00A13_O*S00A09_O*S00A10_O*
                 S00A12_O*S00A13_O,_ALL_ );

%GETFREQS(27,N27*S00A12_O*S00A13_O*S00A12*S00A13,
                S00A13_O S00A13 MARK.);


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

        FORMAT H00001  H00001_O HPLAN1_.
               H00002  H00002_O HPTIME.
               H00003A--H00003L H00003AO H00003BO H00003CO
               H00003DO H00003EO H00003FO H00003GO H00003HO
               H00003IO H00003JO H00003KO H00003LO HPLAN2_.
               H00004  H00004_O COST1_.
               H00006  H00006_O H00008 H00008_O
               H00010  H00010_O H00012 H00012_O
               H00013  H00013_O H00015 H00015_O H00018 H00018_O
               H00020  H00020_O H00023 H00023_O
               H00038  H00038_O H00049 H00049_O H00051 H00051_O
               H00054  H00054_O H00063 H00063_O H00073A H00073AO YN.
               H00007  H00007_O PROB1_.
               H00009  H00009_O RATE1_.
               H00011  H00011_O PCMBASE.
               H00014  H00014_O PROB2_.
               H00016  H00016_O RATE2_.
               H00017  H00017_O YNOFT.
               H00019  H00019_O OFTEN2_.
               H00021  H00021_O OFTEN3_.
               H00022  H00022_O TIME1B_.
               H00024  H00024_O OFTEN4_.
         H00025  H00025_O TIME2_.
               H00026  H00026_O OFTEN5_.
               H00027  H00027_O OFTEN6_.
               H00028  H00028_O
               H00029  H00029_O PROB3_.
               H00030-H00036 H00030_O--H00036_O  OFTEN7_.
               H00037  H00037_O RATE3_.
               S00M01  S00M01_O YN.
               S00M02  S00M02_O PROB11_.
               S00M03  S00M03_O RATE6_.
               H00039  H00039_O MTFREC.
               H00040  H00040_O PXFILL.
               H00041  H00041_O OFTENPX.
               H00042  H00042_O PLACE.
               H00043  H00043_O YNDNK.
               H00044-H00046  H00044_O--H00046_O OFTEN9_.
               H00047  H00047_O YNINFO.
               H00048  H00048_O PROB8_.
               H00050  H00050_O PROB9_.
               H00052  H00052_O TIME4_.
               H00053  H00053_O SETTLED.
               H00055  H00055_O PROB10_.
               H00056  H00056_O RATE4_.
               H00057  H00057_O
               H00058  H00058_O LIKELY.
               H00059  H00059_O COST2_.
               H00061  H00061_O TIME5_.
               H00062  H00062_O TIME6_.
               H00064  H00064_O TIME7_.
               H00065  H00065_O TIME8_.
               H00066  H00066_O SMOKE.
               H00067  H00067_O TIME9_.
               H00068  H00068_O TIME10_.
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      H00069  H00069_O OFTEN11_.
      H00070  H00070_O SEX.
      H00071  H00071_O TIME11_.
      H00072  H00072_O TIME12_.
      H00073B H00073BO TIME13_.
      H00074  H00074_O TIME14_.
      H00075  H00075_O YNPREG.
      H00076A H00076AO PREG1_.
H00076B H00076BO PREG2_.
      H00077  H00077_O HEALTH.
      SREDA   SREDA_O  EDUC.
      H00079  H00079_O HISP.
      SRRACEA SRRACEAO SRRACEB SRRACEBO SRRACEC SRRACECO
      SRRACED SRRACEDO SRRACEE SRRACEEO RACE.
      SRAGE   SRAGE_O  AGEGRP.
      S00A01A--S00A01R S00A01AO--S00A01RO MARKED.
      S00A02 S00A02_O YN.
      S00A03 S00A03_O VISIT1_.
      S00A04 S00A04_O STAY1_.
      S00A05A--S00A05H S00A05AO--S00A05HO MARKED.
      S00A06 S00A06_O YN.
      S00A07 S00A07_O YNDNK.
      S00A08 S00A08_O YN.
      S00A09 S00A09_O ENR1_.
      S00A10 S00A10_O MTFUSE1_.
      S00A11A--S00A11J S00A11AO--S00A11JO MARKED.
      S00A12 S00A12_O
      S00A13 S00a13_O ENR2_.
      H00083A--H00083I H00083AO--H00083IO REASON1_.
      H00084  H00084_O REASON2_.
      H00085A--H00085J H00085AO--H00085JO SOURCE.
      N1-N17 N18A N18B N18C N19 N20 N22-N27
      MISS_1 MISS_4-MISS_9 MISS_TOT 4.

;

LABEL H00001_O='Which health plan did you use most'
      H00001  ='Which health plan did you use most'
      H00002_O='Years in a row w/health plan'
      H00002  ='Years in a row w/health plan'
      H00003AO='Health plan(s) covered: TRICARE Prime'
      H00003A ='Health plan(s) covered: TRICARE Prime'
      H00003BO='Health plan(s) covered: TRICARE Sr Prime'
      H00003B ='Health plan(s) covered: TRICARE Sr Prime'
      H00003CO='Health plan(s) covered: TRICARE Ext/Stnd'
      H00003C ='Health plan(s) covered: TRICARE Ext/Stnd'
      H00003DO='Health plan(s) covered: Medicare Part A'
      H00003D ='Health plan(s) covered: Medicare Part A'
      H00003EO='Health plan(s) covered: Medicare Part B'
      H00003E ='Health plan(s) covered: Medicare Part B'
      H00003FO='Health plan(s) covered: Medigap'
      H00003F ='Health plan(s) covered: Medigap'
      H00003GO='Health plan(s) covered: FEHBP'
      H00003G ='Health plan(s) covered: FEHBP'
      H00003HO='Health plan(s) covered: Medicaid'
      H00003H ='Health plan(s) covered: Medicaid'
      H00003IO='Health plan(s) covered: Civilian HMO'
      H00003I ='Health plan(s) covered: Civilian HMO'
      H00003JO='Health plan(s) covered: Other civilian'
      H00003J ='Health plan(s) covered: Other civilian'
      H00003KO='Health plan(s) covered: USFHP'
      H00003K ='Health plan(s) covered: USFHP'
      H00003LO='Health plan(s) covered: Not sure'
      H00003L ='Health plan(s) covered: Not sure'
      H00004_O='How is enrllmnt fee paid'
      H00004  ='How is enrllmnt fee paid'
      H00006_O='When joined hlth plan, rcv new prsnl Dr'
      H00006  ='When joined hlth plan, rcv new prsnl Dr'
      H00007_O='Hlth plan: problem to get Dr happy with'
      H00007  ='Hlth plan: problem to get Dr happy with'
      H00008_O='Have one person you think of as prsnl Dr'
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      H00008  ='Have one person you think of as prsnl Dr'
      H00009_O='Rating of your personal doctor or nurse'
      H00009  ='Rating of your personal doctor or nurse'
      H00010_O='Currently enrolled in TRICARE Prime'
      H00010  ='Currently enrolled in TRICARE Prime'
H00011_O='TRICARE membr:prmry care mgr mil or cvl'
H00011  ='TRICARE membr:prmry care mgr mil or cvl'
H00012_O="Know your PCM's name"
      H00012  ="Know your PCM's name"
      H00013_O='In lst yr:you/dr think you needed spclst'
H00013  ='In lst yr:you/dr think you needed spclst'
      H00014_O='In lst yr:how much prblm rfrl to spclst'
      H00014  ='In lst yr:how much prblm rfrl to spclst'
      H00015_O='In lst yr:did you see a specialist'
      H00015  ='In lst yr:did you see a specialist'
      H00016_O='Rating of specialist seen in last year'
      H00016  ='Rating of specialist seen in last year'
      H00017_O='In lst yr:spclst saw same as prsnl Dr '
      H00017  ='In lst yr:spclst saw same as prsnl Dr '
      H00018_O='In lst yr:call Dr for hlp/advice for slf'
      H00018  ='In lst yr:call Dr for hlp/advice for slf'
      H00019_O='In lst yr:when call how often get hlp nd'
      H00019  ='In lst yr:when call how often get hlp nd'
      H00020_O='In lst yr:make appts for reg hlth care'
H00020  ='In lst yr:make appts for reg hlth care'
      H00021_O='In lst yr:appt reg hlth care when wanted'
      H00021  ='In lst yr:appt reg hlth care when wanted'
      H00022_O='In lst yr:days btwn appt & seeing prvder'
      H00022  ='In lst yr:days btwn appt & seeing prvder'
      H00023_O='In lst yr:illness/injury care right away'
      H00023  ='In lst yr:illness/injury care right away'
      H00024_O='In lst yr:get care as soon as wanted'
      H00024  ='In lst yr:get care as soon as wanted'
H00025_O='In lst yr:wait btwn try get care,see prv'
      H00025  ='In lst yr:wait btwn try get care,see prv'
      H00026_O='In lst yr:goto emrgncy rm for own care'
      H00026  ='In lst yr:goto emrgncy rm for own care'
      H00027_O="In lst yr:goto Dr office/clinic for care"
H00027  ="In lst yr:goto Dr office/clinic for care"
      H00028_O='In lst yr:prblm to get care thght ncssry'
      H00028  ='In lst yr:prblm to get care thght ncssry'
      H00029_O='In lst yr:prblm w/dlys waiting for apprv'
      H00029  ='In lst yr:prblm w/dlys waiting for apprv'
      H00030_O='In lst yr:wait > 15 min past appt see Dr'
      H00030  ='In lst yr:wait > 15 min past appt see Dr'
      H00031_O='In lst yr:how oftn treat w/ crtsy/rspct'
      H00031  ='In lst yr:how oftn treat w/ crtsy/rspct'
      H00032_O='In lst yr:how oftn staff helpful'
      H00032  ='In lst yr:how oftn staff helpful'
      H00033_O='In lst yr:how oftn Drs listen to you'
      H00033  ='In lst yr:how oftn Drs listen to you'
      H00034_O='In lst yr:how oftn Drs explain things'
      H00034  ='In lst yr:how oftn Drs explain things'
      H00035_O='In lst yr:how oftn Drs show respect'
      H00035  ='In lst yr:how oftn Drs show respect'
      H00036_O='In lst yr:how oftn Drs spend enough time'
      H00036  ='In lst yr:how oftn Drs spend enough time'
      H00037_O='Rating of all health care in last year'
      H00037  ='Rating of all health care in last year'
      S00M01  ='In lst yr:need treatment or counseling'
      S00M01_O='In lst yr:need treatment or counseling'
      S00M02  ='In lst yr:prblm to get treatment'
      S00M02_O='In lst yr:prblm to get treatment'
      S00M03  ='Rating of treatment or counseling'
      S00M03_O='Rating of treatment or counseling'
      H00038_O='MTF conveniently located to you'
      H00038  ='MTF conveniently located to you'
      H00039_O='In lst yr:how much hlthcre from MTF'
      H00039  ='In lst yr:how much hlthcre from MTF'
      H00040_O='In lst yr:prscrptns filled at MTF'
      H00040  ='In lst yr:prscrptns filled at MTF'
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H00041_O='In lst yr:prscrptns by cvl,filled at mil'
H00041  ='In lst yr:prscrptns by cvl,filled at mil'
H00042_O='In lst yr:fclty used most for hlth care '
H00042  ='In lst yr:fclty used most for hlth care '
H00043_O='In lst yr:send in any claims'
H00043  ='In lst yr:send in any claims'
H00044_O='In lst yr:hlth pln handle in rsnble time'
H00044  ='In lst yr:hlth pln handle in rsnble time'
H00045_O='In lst yr:how oftn handle correctly'
H00045  ='In lst yr:how oftn handle correctly'
H00046_O='In lst yr:before care, know amt to pay'
H00046  ='In lst yr:before care, know amt to pay'
H00047_O='In lst yr:info in written materials'
H00047  ='In lst yr:info in written materials'
H00048_O='In lst yr:prblm to find/undrstnd mtrls'
H00048  ='In lst yr:prblm to find/undrstnd mtrls'
H00049_O="In lst yr:health plan's cstmr srvc help"
H00049  ="In lst yr:health plan's cstmr srvc help"
H00050_O='In lst yr:prblm get help from cstmr srvc'
H00050  ='In lst yr:prblm get help from cstmr srvc'
H00051_O='Called or written plan w/complaint/prblm'
H00051  ='Called or written plan w/complaint/prblm'
H00052_O='How long for hlth pln to resolve cmplnt'
H00052  ='How long for hlth pln to resolve cmplnt'
H00053_O='Complaint/prblm settled to satisfaction'
H00053  ='Complaint/prblm settled to satisfaction'
H00054_O='In lst yr:experiences w/ paperwork'
H00054  ='In lst yr:experiences w/ paperwork'
H00055_O='In lst yr:problems w/ paperwork'
H00055  ='In lst yr:problems w/ paperwork'
H00056_O='Rating of all experience w/health plan'
H00056  ='Rating of all experience w/health plan'
H00057_O='In nxt yr:lkly to dsnrl in TRICARE Prime'
H00057  ='In nxt yr:lkly to dsnrl in TRICARE Prime'
H00058_O='In nxt yr:lkly to enrl in TRICARE Prime'
H00058  ='In nxt yr:lkly to enrl in TRICARE Prime'
H00059_O='In last year:expnses not cvrd hlth plan'
H00059  ='In last year:expnses not cvrd hlth plan'
H00061_O='Not sick/prgnt: last mdcl/physcl exam'
H00061  ='Not sick/prgnt: last mdcl/physcl exam'
H00062_O='Blood pressure: when last reading'
H00062  ='Blood pressure: when last reading'
H00063_O='Blood pressure: know if too high or not'
H00063  ='Blood pressure: know if too high or not'
H00064_O='When last have cholesterol screening'
H00064  ='When last have cholesterol screening'
H00065_O='When did you last have a flu shot'
H00065  ='When did you last have a flu shot'
H00066_O='Smoked  at least 100 cigarettes in life'
H00066  ='Smoked  at least 100 cigarettes in life'
H00067 ='Smoke everyday, some days or not at all'
H00067_O ='Smoke everyday, some days or not at all'
H00068_O='How long since you quit smoking'
H00068  ='How long since you quit smoking'
H00069_O='Lst year: # vst advised to quit smoking'
H00069  ='Lst year: # vst advised to quit smoking'
H00070_O="Are you male or female"
H00070  ="Are you male or female"
H00071_O='Last prostate disease exam or blood test'
H00071  ='Last prostate disease exam or blood test'
H00072_O='Last have a Pap smear test'
H00072  ='Last have a Pap smear test'
H00073AO='Are you under age 40 '
H00073A ='Are you under age 40 '
H00073BO='Last time: breasts checked mammography'
H00073B ='Last time: breasts checked mammography'
H00074_O='Last time: breast exam by professional'
H00074  ='Last time: breast exam by professional'
H00075_O='Been pregnant in last yr or pregnant now'
H00075  ='Been pregnant in last yr or pregnant now'
H00076AO='In what trimester is your pregnancy'
```

```
H00076A ='In what trimester is your pregnancy'
H00076BO='Trimester first received prenatal care '
H00076B ='Trimester first received prenatal care '
H00077_O='In gnrl, how would you rate ovrall hlth'
H00077  ='In gnrl, how would you rate ovrall hlth'
SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H00079_O='Are you Spanish/Hispanic/Latino'
H00079  ='Are you Spanish/Hispanic/Latino'
SRRACEAO='Race: White '
SRRACEA ='Race: White '
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asain'
SRRACED ='Race: Asain'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'
S00A01A ='Hrdning of the arteries, arteriosclrsis'
S00A01AO='Hrdning of the arteries, arteriosclrsis'
S00A01B ='Hypertension'
S00A01BO='Hypertension'
S00A01C ='A myocardial infarction or heart attack'
S00A01CO='A myocardial infarction or heart attack'
S00A01D ='Angina pectoris or coronary heart dis'
S00A01DO='Angina pectoris or coronary heart dis'
S00A01E ='Other heart conditions'
S00A01EO='Other heart conditions'
S00A01F ='Stroke,brain hmrrhge, crbrovasclr accdnt'
S00A01FO='Stroke,brain hmrrhge, crbrovasclr accdnt'
S00A01G ='Skin cancer'
S00A01GO='Skin cancer'
S00A01H ='Any other kind of cancer'
S00A01HO='Any other kind of cancer'
S00A01I ='Diabetes, high blood sugar,sgr in urine'
S00A01IO='Diabetes, high blood sugar,sgr in urine'
S00A01J ='Rheumatoid arthritis'
S00A01JO='Rheumatoid arthritis'
S00A01K ='Arthritis other than rheumatoid'
S00A01KO='Arthritis other than rheumatoid'
S00A01L ='Osteoperosis'
S00A01LO='Osteoperosis'
S00A01M ='A broken hip'
S00A01MO='A broken hip'
S00A01N ="Alzheimer's disease or dementia"
S00A01NO="Alzheimer's disease or dementia"
S00A01O ="A mental or psychiatric disorder"
S00A01OO="A mental or psychiatric disorder"
S00A01P ="Parkinson's disease"
S00A01PO="Parkinson's disease"
S00A01Q ="Emphysema, asthma or COPD"
S00A01QO="Emphysema, asthma or COPD"
S00A01R ="Complete or partial paralysis"
S00A01RO="Complete or partial paralysis"
S00A02  ="Used MTFs other thn for prscrption drugs"
S00A02_O="Used MTFs other thn for prscrption drugs"
S00A03  ="Visits to Drs office,clinic,emrgncy rm"
S00A03_O="Visits to Drs office,clinic,emrgncy rm"
S00A04  ="# Overnight stays as patient at MTF"
S00A04_O="# Overnight stays as patient at MTF"
S00A05A ="Emergency care from an emrgncy room"
S00A05AO="Emergency care from an emrgncy room"
S00A05B ="Urgnt care not from an emrgncy room"
S00A05BO="Urgnt care not from an emrgncy room"
S00A05C ="Preventive care"
S00A05CO="Preventive care"
S00A05D ="Routine care"
S00A05DO="Routine care"
```

```
S00A05E ="Hsptl care in whch you stayed overnight"
S00A05EO="Hsptl care in whch you stayed overnight"
S00A05F ="Labs and x-rays"
S00A05FO="Labs and x-rays"
S00A05G ="Surgry or diagnostics w/no ovrnight stay"
S00A05GO="Surgry or diagnostics w/no ovrnight stay"
S00A05H ="Care from a specialist"
S00A05HO="Care from a specialist"
S00A06  ="Are you covered by Medicare Part B now"
S00A06_O="Are you covered by Medicare Part B now"
S00A07  ="Will you begin paying Part B premium"
S00A07_O="Will you begin paying Part B premium"
S00A08  ="Are you enrlled in TRICARE Senior Prime"
S00A08_O="Are you enrlled in TRICARE Senior Prime"
S00A09  ="Disenrl frm TRICARE SP after 10/1/2001"
S00A09_O="Disenrl frm TRICARE SP after 10/1/2001"
S00A10  ="Chnge use of MTFs for space-available cr"
S00A10_O="Chnge use of MTFs for space-available cr"
S00A11A ="Will use MTF:Emrgncy care frm emrgncy rm"
S00A11AO="Will use MTF:Emrgncy care frm emrgncy rm"
S00A11B ="Will use MTF:Prescription Drugs"
S00A11BO="Will use MTF:Prescription Drugs"
S00A11C ="Will use MTF:Urgnt cre nt frm emrgncy rm"
S00A11CO="Will use MTF:Urgnt cre nt frm emrgncy rm"
S00A11D ="Will use MTF:Preventive care"
S00A11DO="Will use MTF:Preventive care"
S00A11E ="Will use MTF:Routine care"
S00A11EO="Will use MTF:Routine care"
S00A11F ="Will use MTF:Hospital care, ovrnght stay"
S00A11FO="Will use MTF:Hospital care, ovrnght stay"
S00A11G ="Will use MTF:Labs and x-rays"
S00A11GO="Will use MTF:Labs and x-rays"
S00A11H ="Will use MTF:Surgery, w/no ovrnight stay"
S00A11HO="Will use MTF:Surgery, w/no ovrnight stay"
S00A11I ="Will use MTF:Care from a specialist"
S00A11IO="Will use MTF:Care from a specialist"
S00A11J ="I won't use MTF for space available care"
S00A11JO="I won't use MTF for space available care"
S00A12  ="Would you enroll in TRICARE Prime"
S00A12_O="Would you enroll in TRICARE Prime"
S00A13  ="Enrl in TCP if you cldn't use mil. Dr"
S00A13_O="Enrl in TCP if you cldn't use mil. Dr"
H00083AO='Decision use MTF: Cost'
H00083A ='Decision use MTF: Cost'
H00083BO='Decision use MTF: Location convenience'
H00083B ='Decision use MTF: Location convenience'
H00083CO='Decision use MTF: Quality of health care'
H00083C ='Decision use MTF: Quality of health care'
H00083DO='Decision use MTF: Telephone access'
H00083D ='Decision use MTF: Telephone access'
H00083EO='Decision use MTF: Timeliness of appts'
H00083E ='Decision use MTF: Timeliness of appts'
H00083FO='Decision use MTF: Miliatry courtesy'
H00083F ='Decision use MTF: Miliatry courtesy'
H00083GO='Decision use MTF: personal physician'
H00083G ='Decision use MTF: personal physician'
H00083HO='Decision use MTF: co-location of svcs'
H00083H ='Decision use MTF: co-location of svcs'
H00083IO='Decision use MTF: lack of paperwork'
H00083I ='Decision use MTF: lack of paperwork'
H00084_O='Single most important reason to use MTF'
H00084  ='Single most important reason to use MTF'
H00085AO='Info sources:Retiree org. newsletter'
H00085A ='Info sources:Retiree org. newsletter'
H00085BO='Info sources:Health Benefits Advisor'
H00085B ='Info sources:Health Benefits Advisor'
H00085CO='Info sources:Pamphlets in MTF'
H00085C ='Info sources:Pamphlets in MTF'
H00085DO='Info sources:Internet'
H00085D ='Info sources:Internet'
H00085EO='Info sources:Base newspaper'
```

```
          H00085E ='Info sources:Base newspaper'
          H00085FO='Info sources:retired pay statement'
                H00085F ='Info sources:retired pay statement'
                H00085GO='Info sources:TV'
                H00085G ='Info sources:TV'
                H00085HO='Info sources:Radio'
                H00085H ='Info sources:Radio'
                H00085IO='Info sources:Friends or relatives'
                H00085I ='Info sources:Friends or relatives'
                H00085JO='Info sources:BCACs'
               H00085J ='Info sources:BCACs'
                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"
                N18A="Coding Scheme Note 18A"
                N18B="Coding Scheme Note 18B"
                N18C="Coding Scheme Note 18C"
                N19= "Coding Scheme Note 19"
                N20= "Coding Scheme Note 20"
                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"
                MISS_1 = "Count of: Violates Skip Pattern"
                MISS_4 = "Count of: Incomplete grid error"
                MISS_5 = "Count of: Scalable reponse of Don't know"
                MISS_6 = "Count of: Not applicable - valid skip"
                MISS_7 = "Count of: Out-of-range error"
                MISS_8 = "Count of: Multiple response error"
                MISS_9 = "Count of: No response - invalid skip"
                MISS_TOT = "Total number of missing responses"
                XSEXA = "Male or Female  - R"
              ;
```

C. QUARTER III

```
   ******************************************************************
*
*  PROGRAM:  CSCHM00C.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
* PREVIOUS PROGRAM: MERGNRCC.SAS
*
*    INPUT: MERGNRCC.SD2
*   OUTPUT: CSCHM00C.SD2
*
*******************************************************************;

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

LIBNAME LIBRARY 'J:\DOD\Q3_2000\DATA\CFINAL\FMTLIB';
LIBNAME IN      'J:\DOD\Q3_2000\DATA\CFINAL';
LIBNAME OUT     'J:\DOD\Q3_2000\DATA\CFINAL';
```

```
%LET INDATA=MERGNRCC;
%LET OUTDATA=CSCHM00C;


/* Vairable names in survey -- become recoded varibles               */
/* Note: Includes questions from both versions of the questionnaire  */

%Let varlist1 =

C00001  C00002  C00003  C00004A C00004B C00004C C00004D C00004E C00004F
C00004G C00004H C00004I C00005  C00006  C00007  C00008  C00009
C00010  C00011  C00012  C00013  C00014  C00015  C00016  C00017  C00018
C00019  C00020  C00021  C00022  C00023  C00024  C00025  C00026  C00027
C00028  C00029  C00030  C00031  C00032  C00033  C00034  C00035  C00036
C00037  C00038  C00039  C00040  C00041  C00042  C00043  C00044  C00045
C00046  C00047  C00048  C00049  C00050  C00051  C00052  C00053  C00054
C00055  C00056  C00057  C00058  C00059  C00060  C00061  C00062  C00063
C00064  C00065  C00066  C00067  C00068  C00069  C00070  C00071  C00072
C00073  C00074  C00075  C00076A C00076B C00076C C00076D C00076E C00076F
C00077A C00077B C00077C C00077D C00077E C00077F C00077G C00077H C00078
C00079  C00080A C00080B C00080C C00080D C00080E C00081  C00082  C00083
C00084 ;

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

%Let varlist2 =

C00001_O C00002_O C00003_O C00004AO C00004BO C00004CO C00004DO C00004EO C00004FO
C00004GO C00004HO C00004IO C00005_O C00006_O C00007_O C00008_O C00009_O
C00010_O C00011_O C00012_O C00013_O C00014_O C00015_O C00016_O C00017_O C00018_O
C00019_O C00020_O C00021_O C00022_O C00023_O C00024_O C00025_O C00026_O C00027_O
C00028_O C00029_O C00030_O C00031_O C00032_O C00033_O C00034_O C00035_O C00036_O
C00037_O C00038_O C00039_O C00040_O C00041_O C00042_O C00043_O C00044_O C00045_O
C00046_O C00047_O C00048_O C00049_O C00050_O C00051_O C00052_O C00053_O C00054_O
C00055_O C00056_O C00057_O C00058_O C00059_O C00060_O C00061_O C00062_O C00063_O
C00064_O C00065_O C00066_O C00067_O C00068_O C00069_O C00070_O C00071_O C00072_O
C00073_O C00074_O C00075_O C00076AO C00076BO C00076CO C00076DO C00076EO C00076FO
C00077AO C00077BO C00077CO C00077DO C00077EO C00077FO C00077GO C00077HO C00078_O
C00079_O C00080AO C00080BO C00080CO C00080DO C00080EO C00081_O C00082_O C00083_O
C00084_O;

TITLE 'DoD 2000 Child Survey';
TITLE2 'Apply Coding Scheme';

DATA OUT.&OUTDATA;

  %INCLUDE "CSCHM00C.FMT"; /* label and format statements */

  SET IN.&INDATA;

  DROP C00004HI;  /* not on the annotated questionnaire */
  /** First set up new variables that capture the original values */

  ARRAY RECODE &VARLIST1;
  ARRAY ORIG &VARLIST2;

  DO I = 1 to DIM(ORIG);
     ORIG(I) = RECODE(I);
     IF ORIG(I) < 0 THEN DO;
              IF ORIG(I)= -9 THEN RECODE(I)=.;
         ELSE IF ORIG(I)= -8 THEN RECODE(I)=.A;
         ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
         ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
         ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
         ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
         ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
         ELSE RECODE(I)=RECODE(I);
     END;
  END;
  DROP I;
```

```
/* recode selected responses to be 1=marked, 2=unmarked */
/* Added C. Rankin 10/23/2001                            */

ARRAY   MARKED(*) C00004A  C00004B  C00004C  C00004D C00004E C00004F
                  C00004G  C00004H  C00004I  C00077A C00077B C00077C
                  C00077D  C00077E  C00077F  C00077G C00077H C00080A
                  C00080B  C00080C  C00080D  C00080E;
ARRAY INFORMAT(*) C00004AO C00004BO C00004CO C00004DO C00004EO C00004FO
                  C00004GO C00004HO C00004IO C00077AO C00077BO C00077CO
                  C00077DO C00077EO C00077FO C00077GO C00077HO C00080AO
                  C00080BO C00080CO C00080DO C00080EO;

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 2:  C00004, C00005 -- C00008: health plan */

ARRAY NOTE2 C00006 C00007 C00008;
N2NMISS=0;
N2MARK=0;
DO OVER NOTE2;
   IF NOTE2 NE . THEN N2NMISS+1;
   IF NOTE2 NOT IN (.,.N) THEN N2MARK+1;
END;

     IF C00005=1 AND (N2MARK >0 OR N2NMISS=0) THEN N2=1;
ELSE IF C00005 IN (1,.,.A) AND (N2NMISS>0 AND N2MARK=0) THEN DO;
   N2=2;
   C00005=2;
   DO OVER NOTE2;
      IF NOTE2=. THEN NOTE2=.N;
      ELSE NOTE2=.C;
   END;
END;
ELSE IF C00005 IN (2,.,.A) AND N2MARK>0 THEN DO;
   N2=3;
   C00005=1;
END;
ELSE IF C00005=2 AND (N2NMISS=0 OR N2MARK=0) THEN DO;
   N2=4;
   DO OVER NOTE2;
      IF NOTE2=. THEN NOTE2=.N;
      ELSE NOTE2=.C;
   END;
END;
ELSE IF C00005=.  AND N2NMISS=0 THEN N2=5;
ELSE IF C00005=.A AND N2NMISS=0 THEN DO;
   N2=6;
   C00005=2;
   DO OVER NOTE2;
      NOTE2=.N;
   END;
END;
DROP N2MARK N2NMISS;

/** Note 3:  C00006, C00007 & C00008: health plan */

ARRAY NOTE3 C00007 C00008;

N3NMISS=0;
N3MARK=0;
DO OVER NOTE3;
   IF NOTE3 NE . THEN N3NMISS+1;
   IF NOTE3 NOT IN (.,.N,.C) THEN N3MARK+1;
```

```
END;

IF C00006 IN (.N,.C) THEN DO;
   N3=1;
   DO OVER NOTE3;
      IF NOTE3 IN (.,.N) THEN NOTE3=.N;
      ELSE NOTE3=.C;
   END;
END;
ELSE IF C00006 IN (1,2,3,.,.A) AND N3MARK>0 THEN N3=2;
ELSE IF C00006 IN (1,2,3,.A)   AND N3MARK=0 THEN DO;
   N3=3;
   C00006=.N;
   DO OVER NOTE3;
      IF NOTE3=. THEN NOTE3=.N;
      ELSE NOTE3=.C;
   END;
END;
ELSE IF C00006=. AND N3MARK=0 AND N3NMISS>0 THEN DO;
   N3=4;
   C00006=.N;
   DO OVER NOTE3;
      IF NOTE3=. THEN NOTE3=.N;
      ELSE NOTE3=.C;
   END;
END;
ELSE IF C00006=. AND N3NMISS=0 THEN N3=5;

DROP N3NMISS N3MARK;

/** Note 4:  C00007, C00008 --  personal doctor or nurse */

     IF C00007 IN (.N,.C) THEN N4=1;
ELSE IF C00007 IN (1,2,3,4,.,.A) AND C00008 NE .N THEN N4=2;
ELSE IF C00007 IN (1,2,3,4,.,.A) AND C00008 =  .N THEN DO;
   N4=3;
   C00007=.N;
   C00008=.C;
END;

/** Note 5:  C00009 - C00012, Primary care manager */

ARRAY NOTE5 C00010-C00012;
N5MARK=0;
N5NMISS=0;

DO OVER NOTE5;
   IF NOTE5 NE . THEN N5NMISS+1 ;
   IF NOTE5 NOT IN (.N, .) THEN N5MARK+1;
END;

     IF C00009=1 AND N5NMISS=0 THEN N5=1;
ELSE IF C00009 IN (1,.A,.) AND N5MARK > 0 THEN DO;
   C00009=1;
   N5=2;
END;
ELSE IF C00009 IN (1,.A,.) AND N5NMISS>0 AND N5MARK=0 THEN DO;
   C00009=2;
   N5=3;
   DO OVER NOTE5;
      IF NOTE5= . THEN NOTE5 = .N;
      ELSE NOTE5= .C;
   END;
END;
ELSE IF C00009 IN (2,.D,.N) AND N5NMISS=0 THEN DO;
   N5=4;
   DO OVER NOTE5;
      NOTE5 = .N;
   END;
END;
ELSE IF C00009 IN (2,.D,.N) AND N5MARK>0 THEN DO;
```

```
   N5=5;
   C00009=1;
END;
ELSE IF C00009 IN (2,.D,.N) AND N5NMISS>0 AND N5MARK=0 THEN DO;
   N5=6;
   C00009=2;
   DO OVER NOTE5;
      IF NOTE5=. THEN NOTE5=.N;
      ELSE NOTE5=.C;
   END;
END;
ELSE IF C00009=.A AND N5NMISS=0 THEN DO;
   N5=7;
   C00009=.D;
   DO OVER NOTE5;
      IF NOTE5=. THEN NOTE5=.N;
      ELSE NOTE5=.C;
   END;
END;
ELSE IF C00009=. AND N5NMISS=0 THEN N5=8;

DROP N5MARK N5NMISS;

/** Note 6 C00011, C00012 Primary Care Manager */

     IF C00011 IN (.C,.N) AND C00012 IN (.C,.N) THEN N6=1;
ELSE IF C00011>=1 OR C00011 IN (.,.A) THEN N6=2;
ELSE IF C00011=.N THEN DO;
   N6=3;
   IF   C00012=.  THEN C00012=.N;
   ELSE C00012=.C;
END;

/** Note 7 C00013 -- C00017:  Health Care from a specialist  */

ARRAY NOTE7 C00014-C00017;
N7MARK=0;
N7NMISS=0;

DO OVER NOTE7;
   IF NOTE7 NE . THEN N7NMISS+1 ;
   IF NOTE7 NOT  IN (.N,.) THEN N7MARK+1;
END;

IF C00015 IN (2, .) AND N7MARK> 0 THEN
N7MARK=N7MARK-1;

     IF C00013=1 AND (N7MARK>0 OR N7NMISS=0) THEN N7=1;
ELSE IF C00013 IN (1,.,.A) AND (N7NMISS> 0 AND N7MARK=0 AND
C00015 IN (2, .)) THEN DO;
   N7=2;
   C00013=2;
   DO OVER NOTE7;
      IF   NOTE7=.  THEN NOTE7=.N;
      ELSE NOTE7=.C;
   END;
END;
ELSE IF C00013 IN (2,.,.A) AND N7MARK>0 THEN DO;
   C00013=1;
   N7=3;
END;
ELSE IF C00013=2 AND (N7NMISS=0 OR N7MARK=0) THEN DO;
   N7=4;
   DO OVER NOTE7;
      IF NOTE7=. THEN NOTE7=.N;
      ELSE NOTE7=.C;
   END;
END;
ELSE IF C00013=.  AND N7NMISS=0 THEN N7=5;
ELSE IF C00013=.A AND N7NMISS=0 THEN DO;
   N7=6;
```

```
   C00013=2;
   DO OVER NOTE7;
      NOTE7=.N;
   END;
END;

DROP N7MARK N7NMISS;

/** Note 8 - health care specialist C00015 -- C00017  **/

ARRAY NOTE8 C00016 C00017;
N8NMISS=0;
N8MARK=0;

DO OVER NOTE8;
  IF NOTE8 NE . THEN N8NMISS+1;
  IF NOTE8 NOT IN (.N, .) THEN N8MARK+1;
END;

IF C00015 IN (.C,.N) THEN DO;
   N8=1;
   DO OVER NOTE8;
     IF NOTE8 IN (.N,.) THEN NOTE8=.N;
     ELSE NOTE8 = .C;
   END;
END;
ELSE IF C00015=1  AND (N8MARK>0 OR N8NMISS=0) THEN N8=2;
ELSE IF C00015 IN (1,.,.A) AND (N8NMISS>0 AND N8MARK=0) THEN DO;
   N8=3;
   C00015 = 2;
   DO OVER NOTE8;
      IF NOTE8=. THEN NOTE8=.N;
      ELSE NOTE8=.C;
   END;
END;
ELSE IF C00015 IN (2, ., .A) AND N8MARK>0 THEN DO;
   N8=4;
   C00015=1;
END;
ELSE IF C00015=2 AND (N8NMISS=0 OR N8MARK=0) THEN DO;
   N8=5;
   DO OVER NOTE8;
      IF NOTE8=.  THEN NOTE8=.N;
      ELSE NOTE8=.C;
   END;
END;
ELSE IF C00015=.  AND N8NMISS=0 THEN N8=6;
ELSE IF C00015=.A AND N8NMISS=0 THEN DO;
   N8=7;
   C00015 =2;
   DO OVER NOTE8;
      NOTE8=.N;
   END;
END;

DROP N8MARK N8NMISS;

/** Note 9 -- call during regular office hours:  C00018, C00019 **/

IF C00018 = 1 AND (C00019 GE 1 OR C00019 IN (., .A)) THEN N9=1;
ELSE IF C00018 IN (1,.,.A) AND C00019=.N THEN DO;
   N9=2;
   C00018=2;
   C00019=.C;
END;
ELSE IF C00018 IN (2,.,.A) AND (C00019 GE 1 OR C00019=.A) THEN DO;
   N9=3;
   C00018=1;
END;
ELSE IF C00018=2 AND C00019 IN (.N,.) THEN DO;
   N9=4;
```

```
   IF C00019=. THEN C00019=.N;
   ELSE C00019=.C;
END;
ELSE IF C00018=.  AND C00019=. THEN N9=5;
ELSE IF C00018=.A AND C00019=. THEN DO;
   N9=6;
   C00018=2;
   C00019=.N;
END;

/** Note 10 -- regular or routine health care: C00020 - C00022 **/

ARRAY NOTE10 C00021 C00022;

N10NMISS=0;
N10MARK=0;

DO OVER NOTE10;
   IF NOTE10 NE . THEN N10NMISS+1;
   IF NOTE10 NOT IN (., .N) THEN N10MARK+1;
END;

IF C00020=1 AND (N10NMISS=0 OR N10MARK>0) THEN N10=1;
ELSE IF C00020 IN (1,.,.A) AND N10NMISS> 0 AND N10MARK=0 THEN DO;
   N10=2;
   C00020=2;
   DO OVER NOTE10;
      IF NOTE10=. THEN NOTE10=.N;
      ELSE NOTE10=.C;
   END;
END;
ELSE IF C00020 IN (2,.,.A) AND N10MARK>0 THEN DO;
   N10=3;
   C00020=1;
END;
ELSE IF C00020=2 AND (N10NMISS=0 OR (N10NMISS>0 AND N10MARK=0)) THEN DO;
   N10=4;
   DO OVER NOTE10;
      IF NOTE10 =.  THEN NOTE10=.N;
      ELSE NOTE10=.C;
   END;
END;
ELSE IF C00020=.  AND N10NMISS= 0 THEN N10=5;
ELSE IF C00020=.A AND N10NMISS= 0 THEN DO;
   N10=6;
   C00020 = 2;
   DO OVER NOTE10;
      NOTE10=.N;
   END;
END;

DROP N10NMISS N10MARK;

/** Note 11 - immediate care: C00023 -- C00025         **/

ARRAY NOTE11 C00024 C00025;

N11NMISS=0;
N11MARK=0;

DO OVER NOTE11;
   IF NOTE11 NE . THEN N11NMISS+1;
   IF NOTE11 NOT IN (., .N) THEN N11MARK+1;
END;

     IF C00023=1  AND (N11NMISS=0 OR N11MARK>0) THEN N11=1;
ELSE IF C00023 IN (1,.,.A) AND N11MARK=0 AND N11NMISS>0 THEN DO;
   N11=2;
   C00023=2;
   DO OVER NOTE11;
      IF NOTE11=. THEN NOTE11=.N;
```

```
      ELSE NOTE11=.C;
   END;
END;
ELSE IF C00023 IN (2,.,.A) AND N11MARK>0 THEN DO;
   N11=3;
   C00023=1;
END;
ELSE IF C00023=2 AND (N11NMISS=0 OR (N11NMISS>0 AND N11MARK=0))THEN DO;
   N11=4;
   DO OVER NOTE11;
      IF NOTE11=. THEN NOTE11=.N;
      ELSE NOTE11=.C;
   END;
END;
ELSE IF C00023=.  AND N11NMISS= 0 THEN N11=5;
ELSE IF C00023=.A AND N11NMISS= 0 THEN DO;
   N11=6;
   C00023=2;
   DO OVER NOTE11;
      NOTE11=.N;
   END;
END;

DROP N11NMISS N11MARK;

/**  Note 12 - well-patient care:  C00026 - C00028      **/

ARRAY NOTE12 C00027 C00028;

N12NMISS=0;
N12MARK=0;

DO OVER NOTE12;
   IF NOTE12 NE . THEN N12NMISS+1;
   IF NOTE12 NOT IN (.,.N) THEN N12MARK+1;
END;

IF C00026=1 AND (N12NMISS=0 OR N12MARK>0) THEN N12=1;
ELSE IF C00026 IN (1,.,.A) AND N12MARK=0 AND N12NMISS>0 THEN DO;
   N12=2;
   C00026=2;
   DO OVER NOTE12;
      IF NOTE12=. THEN NOTE12=.N;
      ELSE NOTE12=.C;
   END;
END;
ELSE IF C00026 IN (2,.,.A) AND N12MARK>0 THEN DO;
   N12=3;
   C00026=1;
END;
ELSE IF C00026=2 AND (N12NMISS=0 OR (N12NMISS>0 AND N12MARK=0)) THEN DO;
   N12=4;
   DO OVER NOTE12;
      IF NOTE12=. THEN NOTE12=.N;
      ELSE NOTE12=.C;
   END;
END;
ELSE IF C00026=.  AND N12NMISS=0 THEN N12=5;
ELSE IF C00026=.A AND N12NMISS=0 THEN DO;
   C00026=2;
   N12=6;
   DO OVER NOTE12;
      NOTE12=.N;
   END;
END;

DROP N12NMISS N12MARK;

/** Note 13 - doctor's office or clinic:  C00030 -- C00042 **/

ARRAY NOTE13  C00031-C00042;
```

```
ARRAY NOTE13A C00031-C00038 C00040-C00042;

N13NMISS=0;
N13MARK=0;

DO OVER NOTE13;
   IF  NOTE13 NE . THEN N13NMISS+1;
END;

DO OVER NOTE13A;
   IF NOTE13A NOT IN (., .N) THEN N13MARK+1;
END;

IF C00030=1 AND (N13NMISS=0 OR (N13NMISS>0 AND N13MARK=0)) THEN DO;
   N13=1;
   DO OVER NOTE13;
      IF NOTE13=. THEN NOTE13=.N;
      ELSE NOTE13=.C;
   END;
END;
ELSE IF C00030 IN (1,.,.A) AND N13MARK>0 THEN N13=2;
ELSE IF C00030 GE 2 AND (N13NMISS=0 OR (N13NMISS>0 AND N13MARK>0)) THEN N13=3;
ELSE IF (C00030 GE 2 OR C00030 IN (.,.A)) AND (N13NMISS>0 AND N13MARK=0)
THEN DO;
   N13=4;
   C00030 = 1;
   DO OVER NOTE13;
      IF NOTE13=. THEN NOTE13=.N;
      ELSE NOTE13=.C;
   END;
END;
ELSE IF C00030=.  AND N13NMISS=0 THEN N13=5;
ELSE IF C00030=.A AND N13NMISS=0 THEN DO;
   N13=6;
   C00030=1;
   DO OVER NOTE13;
      NOTE13 = .N;
   END;
END;

DROP N13NMISS N13MARK;

/** Note14 - old enough to talk with doctors: C00039, C00040  **/

IF C00039 IN (.C,.N) AND C00040 IN (.C,.N) THEN N14=1;
ELSE IF C00039=1 AND C00040=.  THEN N14=2;
ELSE IF C00039=1 AND C00040=.N THEN DO;
   C00039=.C;
   C00040=.C;
   N14=3;
END;
ELSE IF C00039 IN (1,.,.A) AND (C00040 GE 1 OR C00040 IN (.A,.D))
THEN DO;
   N14=4;
   C00039=1;
END;
ELSE IF C00039 IN (.,.A) AND C00040=.N THEN DO;
   N14=5;
   C00039=2;
   C00040=.C;
END;
ELSE IF C00039=2 AND (C00040 GE 1 OR C00040 IN (.A, .D)) THEN DO;
   N14=6;
   C00039=1;
END;
ELSE IF C00039=2 AND (C00040=.N OR C00040=.) THEN DO;
   N14=7;
   IF C00040=. THEN C00040=.N;
   ELSE C00040=.C;
END;
ELSE IF C00039=.  AND C00040=. THEN N14=8;
```

```
ELSE IF C00039=.A AND C00040=. THEN DO;
   N14=9;
   C00039=2;
   C00040=.N;
END;

/** Note 15 - send in any claims:  C00044 - C00047    **/

ARRAY NOTE15 C00045 - C00047;

N15NMISS=0;
N15NOTNA=0;
N15MARK=0;

DO OVER NOTE15;
   IF NOTE15 NE . THEN N15NMISS+1;
   IF NOTE15 NE .N THEN N15NOTNA+1;
   IF NOTE15 NOT IN (., .N) THEN N15MARK+1;
END;

IF C00044=1 AND (N15NMISS=0 OR N15MARK >0) THEN N15 =1;
ELSE IF C00044 IN (1,.N,.,.A) AND N15NOTNA=0 THEN DO;
   N15=2;
   C00044=2;
   DO OVER NOTE15;
      NOTE15=.C;
   END;
END;
ELSE IF C00044 IN (1,.,.A) AND (N15NMISS>0 AND N15MARK=0) THEN DO;
   N15=3;
   C00044=2;
   DO OVER NOTE15;
      IF NOTE15=. THEN NOTE15=.N;
      ELSE NOTE15=.C;
   END;
END;
ELSE IF C00044 IN (2,.N,.A,.) AND N15MARK>0 THEN DO;
   C00044=1;
   N15=4;
END;
ELSE IF C00044 IN (2,.N) AND (N15NMISS=0 OR (N15MARK =0 AND N15NOTNA>0))
THEN DO;
   N15=5;
   DO OVER NOTE15;
      IF NOTE15=. THEN NOTE15=.N;
      ELSE NOTE15=.C;
   END;
END;
ELSE IF C00044=2 AND N15NOTNA=0 THEN DO;
   N15=6;
   DO OVER NOTE15;
      NOTE15=.C;
   END;
END;
ELSE IF C00044=.  AND N15NMISS=0 THEN N15=7;
ELSE IF C00044=.A AND N15NMISS=0 THEN DO;
   N15=8;
   C00044=2;
   DO OVER NOTE15;
      NOTE15=.N;
   END;
END;
DROP N15NMISS N15NOTNA N15MARK;

/** Note 16 - written materials: C00048, C00049       **/

IF C00048=1 AND C00049 IN (1,2,3,.,.A) THEN N16=1;
ELSE IF C00048 IN (1,.,.A) AND C00049=.N THEN DO;
   N16=2;
   C00048=2;
   C00049=.C;
```

```
END;
ELSE IF C00048 IN (2,.,.A) AND C00049 IN (1,2,3,.A) THEN DO;
   C00048=1;
   N16=3;
END;
ELSE IF C00048=2 AND C00049 IN (., .N) THEN DO;
   N16=4;
   IF C00049=. THEN C00049=.N;
   ELSE C00049=.C;
END;
ELSE IF C00048=.  AND C00049= . THEN N16=5;
ELSE IF C00048=.A AND C00049= . THEN DO;
   N16=6;
   C00048=2;
   C00049=.N;
END;

/** Note 17 - customer service:  C00050, C00051    **/

IF C00050=1 AND C00051 IN (1,2,3,.,.A) THEN N17=1;
ELSE IF C00050 IN (1,.,.A) AND C00051=.N THEN DO;
   N17=2;
   C00050=2;
   C00051=.C;
END;
ELSE IF C00050 IN (2,.,.A) AND C00051 IN (1,2,3,.A) THEN DO;
   N17=3;
   C00050=1;
END;
ELSE IF C00050=2 AND C00051 IN (.,.N) THEN DO;
   N17=4;
   IF C00051=. THEN C00051=.N;
   ELSE C00051 =.C;
END;
ELSE IF C00050=.  AND C00051=. THEN N17=5;
ELSE IF C00050=.A AND C00051=. THEN DO;
   N17=6;
   C00050=2;
   C00051=.N;
END;

/** Note 18 - called or written with complaint C00052 - C00054     **/

ARRAY NOTE18 C00053 C00054;

N18NMISS=0;
N18MARK=0;

DO OVER NOTE18;
   IF NOTE18 NE . THEN N18NMISS+1;
   IF NOTE18 NOT IN (., .N) THEN N18MARK+1;
END;

IF C00052=1 AND (N18NMISS=0 OR N18MARK>0) THEN N18=1;
ELSE IF C00052 IN (1, ., .A) AND (N18NMISS>0 AND N18MARK=0) THEN DO;
   N18=2;
   C00052=2;
   DO OVER NOTE18;
      IF NOTE18=. THEN NOTE18=.N;
      ELSE NOTE18=.C;
   END;
END;
ELSE IF C00052 IN (2,.,.A) AND N18MARK>0 THEN DO;
   N18=3;
   C00052=1;
END;
ELSE IF C00052=2 AND (N18NMISS=0 OR (N18NMISS>0 AND N18MARK=0)) THEN DO;
   N18=4;
   DO OVER NOTE18;
      IF NOTE18=. THEN NOTE18=.N;
      ELSE NOTE18=.C;
```

```
   END;
END;
ELSE IF C00052=. AND N18NMISS=0 THEN N18=5;
ELSE IF C00052=.A AND N18NMISS=0 THEN DO;
   N18=6;
   C00052=2;
   DO OVER NOTE18;
      NOTE18=.N;
   END;
END;

DROP N18NMISS N18MARK;

/** Note 19 - C00053, C00054:  how long to resolve complaint             **/
/** Note: Since questions overwritten by Note 18, use original responses **/
/** .N, valid skip recode is the same response as -6, NA                 **/

IF C00053 IN (.N, .C) AND C00054 IN (.N, .C) THEN N19=1;
ELSE IF (1 LE C00053 LE 5 OR C00053 IN (.,.A)) AND (C00054 IN (1,2,.,.A)) THEN N19=2;
ELSE IF C00053=6 AND C00054 IN (1,2,.,.A) THEN DO;
   N19=3;
   IF C00054=. THEN C00054=.N;
   ELSE C00054=.C;
END;
ELSE IF (C00053 GE 1 OR C00053 IN (.,.A)) AND C00054=3 THEN DO;
   N19=4;
   C00053=6;
END;
ELSE IF (C00053 GE 1 OR C00053=.A) AND C00054=.N THEN N19=5;
ELSE IF C00053=.N AND C00054 IN (1,2,.A) THEN N19=6;
ELSE IF C00053=.N AND C00054=3 THEN DO;
   N19=7;
   C00053=6;
END;

/** Note 20 - paperwork:  C00055, C00056     **/

IF C00055=1 AND C00056 IN (1,2,3,.,.A) THEN N20=1;
ELSE IF C00055 IN (1,.,.A) AND C00056=.N THEN DO;
   N20=2;
   C00055=2;
   C00056=.C;
END;
ELSE IF C00055 IN (2,.,.A) AND C00056 IN (1,2,3,.A) THEN DO;
   N20=3;
   C00055=1;
END;
ELSE IF C00055=2 AND C00056 IN (.N,.) THEN DO;
   N20=4;
   IF C00056=. THEN C00056=.N;
   ELSE C00056=.C;
END;
ELSE IF C00055=.  AND C00056=. THEN N20=5;
ELSE IF C00055=.A AND C00056=. THEN DO;
   N20=6;
   C00055=2;
   C00056=.N;
END;

/** Note 21 - medicine prescribed by a doctor     **/
/** C00059, C00060 & C00061                       **/

ARRAY NOTE21 C00060 C00061;

N21NMISS=0;
N21YES=0;

DO OVER NOTE21;
   IF NOTE21 NE . THEN N21NMISS+1;
   IF NOTE21=1 THEN N21YES+1;
END;
```

```
IF C00059=1 AND N21NMISS=0 THEN N21=1;
ELSE IF C00059 IN (1,.,.A) AND N21NMISS>0 THEN DO;
   N21=2;
   C00059=1;
END;
ELSE IF C00059=2 AND N21YES>0 THEN DO;
   N21=3;
   C00059=1;
END;
ELSE IF C00059=2 AND N21YES=0 THEN DO;
   N21=4;
   DO OVER NOTE21;
      IF NOTE21=. THEN NOTE21=.N;
      ELSE NOTE21=.C;
   END;
END;
ELSE IF C00059=.  AND N21NMISS=0 THEN N21=5;
ELSE IF C00059=.A AND N21NMISS=0 THEN DO;
   N21=6;
   C00059=2;
   DO OVER NOTE21;
      NOTE21=.N;
   END;
END;

DROP N21NMISS N21YES;

/** Note 22:  C00060 & C00061 - health condition **/

IF C00060 IN (.N,.C) THEN N22=1;
ELSE IF C00060=1  THEN N22=2;
ELSE IF C00060=2 AND C00061 IN (2,.) THEN DO;
   N22=3;
   IF C00061=. THEN C00061=.N;
   ELSE C00061=.C;
END;
ELSE IF C00060 IN (2,.,.A) AND C00061 IN (1,.A) THEN DO;
   N22=4;
   C00060=1;
END;
ELSE IF C00060 IN (.,.A) AND C00061=2 THEN DO;
   N22=5;
   C00060=1;
END;
ELSE IF C00060=.  AND C00061=. THEN N22=6;
ELSE IF C00060=.A AND C00061=. THEN DO;
   N22=7;
   C00060=2;
   C00061=.N;
END;

/** Note 23 - medical, mental health, or educational services **/
/** C00062, C00063 & C00064                                   **/

ARRAY NOTE23 C00063 C00064;

N23NMISS=0;
N23YES=0;

DO OVER NOTE23;
   IF NOTE23 NE . THEN N23NMISS+1;
   IF NOTE23=1 THEN N23YES+1;
END;

IF C00062=1 AND N23NMISS=0 THEN N23=1;
ELSE IF C00062 IN (1,.,.A) AND N23NMISS>0 THEN DO;
   N23=2;
   C00062=1;
END;
ELSE IF C00062=2 AND N23YES>0 THEN DO;
```

```
   N23=3;
   C00062=1;
END;
ELSE IF C00062=2 AND N23YES=0 THEN DO;
   N23=4;
   DO OVER NOTE23;
      IF NOTE23=. THEN NOTE23=.N;
      ELSE NOTE23=.C;
   END;
END;
ELSE IF C00062=.  AND N23NMISS=0 THEN N23=5;
ELSE IF C00062=.A AND N23NMISS=0 THEN DO;
   N23=6;
   C00062=2;
   DO OVER NOTE23;
      NOTE23=.N;
   END;
END;

DROP N23NMISS N23YES;

/** Note 24:  C00063 & C00064 - health condition **/

IF C00063 IN (.N,.C) THEN N24=1;
ELSE IF C00063=1  THEN N24=2;
ELSE IF C00063=2 AND C00064 IN (2,.) THEN DO;
   N24=3;
   IF C00064=. THEN C00064=.N;
   ELSE C00064=.C;
END;
ELSE IF C00063 IN (2,.,.A) AND C00064 IN (1,.A) THEN DO;
   N24=4;
   C00063=1;
END;
ELSE IF C00063 IN (.,.A) AND C00064=2 THEN DO;
   N24=5;
   C00063=1;
END;
ELSE IF C00063=.  AND C00064=. THEN N24=6;
ELSE IF C00063=.A AND C00064=. THEN DO;
   N24=7;
   C00063=2;
   C00064=.N;
END;

/** Note 25 - child limited or prevented in his or her ability **/
/** C00065, C00066 & C00067                                    **/

ARRAY NOTE25 C00066 C00067;

N25NMISS=0;
N25YES=0;

DO OVER NOTE25;
   IF NOTE25 NE . THEN N25NMISS+1;
   IF NOTE25=1 THEN N25YES+1;
END;

IF C00065=1 AND (N25NMISS=0 OR (N25NMISS>0 AND N25YES=0)) THEN N25=1;
ELSE IF C00065 IN (1,.,.A) AND N25NMISS>0 THEN DO;
   N25=2;
   C00065=1;
END;
ELSE IF C00065=2 AND N25YES>0 THEN DO;
   N25=3;
   C00065=1;
END;
ELSE IF C00065=2 AND N25YES=0 THEN DO;
   N25=4;
   DO OVER NOTE25;
      IF NOTE25=. THEN NOTE25=.N;
```

```
      ELSE NOTE25=.C;
   END;
END;
ELSE IF C00065=.  AND N25NMISS=0 THEN N25=5;
ELSE IF C00065=.A AND N25NMISS=0 THEN DO;
   N25=6;
   C00065=2;
   DO OVER NOTE25;
      NOTE25=.N;
   END;
END;

DROP N25NMISS N25YES;

/** Note 26:  C00066 & C00067 - health condition **/

IF C00066 IN (.N,.C) THEN N26=1;
ELSE IF C00066=1  THEN N26=2;
ELSE IF C00066=2 AND C00067 IN (2,.) THEN DO;
   N26=3;
   IF C00067=. THEN C00067=.N;
   ELSE C00067=.C;
END;
ELSE IF C00066 IN (2,.,.A) AND C00067 IN (1,.A) THEN DO;
   N26=4;
   C00066=1;
END;
ELSE IF C00066 IN (.,.A) AND C00067=2 THEN DO;
   N26=5;
   C00066=1;
END;
ELSE IF C00066=.  AND C00067=. THEN N26=6;
ELSE IF C00066=.A AND C00067=. THEN DO;
   N26=7;
   C00066=2;
   C00067=.N;
END;

/** Note 27 - child need to get special therapy    **/
/** C00068, C00069 & C000670                       **/

ARRAY NOTE27 C00069 C00070;

N27NMISS=0;
N27YES=0;

DO OVER NOTE27;
   IF NOTE27 NE . THEN N27NMISS+1;
   IF NOTE27=1 THEN N27YES+1;
END;

IF C00068=1 AND N27NMISS=0 THEN N27=1;
ELSE IF C00068 IN (1,.,.A) AND N27NMISS>0 THEN DO;
   N27=2;
   C00068=1;
END;
ELSE IF C00068=2 AND N27YES>0 THEN DO;
   N27=3;
   C00068=1;
END;
ELSE IF C00068=2 AND N27YES=0 THEN DO;
   N27=4;
   DO OVER NOTE27;
      IF NOTE27=. THEN NOTE27=.N;
      ELSE NOTE27=.C;
   END;
END;
ELSE IF C00068=.  AND N27NMISS=0 THEN N27=5;
ELSE IF C00068=.A AND N27NMISS=0 THEN DO;
   N27=6;
   C00068=2;
```

```
   DO OVER NOTE27;
      NOTE27=.N;
   END;
END;

DROP N27NMISS N27YES;

/** Note 28:  C00069 & C00070 - health condition **/

IF C00069 IN (.N,.C) THEN N28=1;
ELSE IF C00069=1  THEN N28=2;
ELSE IF C00069=2 AND C00070 IN (2,.) THEN DO;
   N28=3;
   IF C00070=. THEN C00070=.N;
   ELSE C00070=.C;
END;
ELSE IF C00069 IN (2,.,.A) AND C00070 IN (1,.A) THEN DO;
   N28=4;
   C00069=1;
END;
ELSE IF C00069 IN (.,.A) AND C00070=2 THEN DO;
   N28=5;
   C00069=1;
END;
ELSE IF C00069=.  AND C00070=. THEN N28=6;
ELSE IF C00069=.A AND C00070=. THEN DO;
   N28=7;
   C00069=2;
   C00070=.N;
END;

/** Note 29:  C00071, C00072:  Need treatment or counseling **/

IF C00071=1 THEN N29=1;
ELSE IF C00071=2 AND C00072=. THEN DO;
   N29=2;
   C00072=.N;
END;
ELSE IF C00071 IN (2,.,.A) AND C00072 IN (1,2,.A) THEN DO;
   N29=3;
   C00071=1;
END;
ELSE IF C00071=.  AND C00072=. THEN N29=4;
ELSE IF C00071=.A AND C00072=. THEN DO;
   N29=5;
   C00071=2;
   C00072=.N;
END;

/** Note 30:  about your child and you   **/

ARRAY NOTE30A C00075 C00076A--C00076F C00077A--C00077H;
ARRAY NOTE30B C00075 C00076A--C00076F;
ARRAY NOTE30C C00076A--C00076F;
ARRAY NOTE30D C00077A--C00077H;

N30MARK=0;

DO OVER NOTE30C;
   IF NOTE30C NE . THEN N30MARK+1;
END;
DO OVER NOTE30D;
   IF NOTE30D=1 THEN N30MARK+1;
END;

IF C00074=1 THEN DO;
   N30=1;
   DO OVER NOTE30B;
      IF NOTE30B=. THEN NOTE30B=.N;
      ELSE NOTE30B=.C;
   END;
```

```
  END;
  ELSE IF C00074=2 THEN N30=2;
  ELSE IF C00074 IN (3,4,5,6) THEN DO;
     N30=3;
     DO OVER NOTE30A;
        IF NOTE30A=. THEN NOTE30A=.N;
        ELSE NOTE30A=.C;
     END;
  END;
  ELSE IF C00074 IN (.,.A) AND C00075 IN (1,2,.N) THEN DO;
     N30=4;
     C00074=2;
  END;
  ELSE IF C00074 IN (.,.A) AND N30MARK>0 THEN DO;
     N30=5;
     C00074=2;
  END;
  ELSE IF C00074 IN (.,.A) AND N30MARK=0 THEN N30=6;

  DROP N30MARK;

NOSURVEY:

  /* missing values */

  ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
  MISS_TOT=0;
  DO OVER MISS;
     MISS=0;
  END;
  ARRAY MISSARAY &VARLIST2;


  DO OVER MISSARAY;
     IF (MISSARAY EQ -9 ) THEN MISS_9=MISS_9 + 1;
     ELSE IF (MISSARAY EQ -8) THEN MISS_8=MISS_8 + 1;
     ELSE IF (MISSARAY EQ -7) THEN MISS_7=MISS_7 + 1;
     ELSE IF (MISSARAY EQ -6) THEN MISS_6=MISS_6 + 1;
     ELSE IF (MISSARAY EQ -5) THEN MISS_5=MISS_5 + 1;
     ELSE IF (MISSARAY EQ -4) THEN MISS_4=MISS_4 + 1;
     ELSE IF (MISSARAY EQ -1) THEN MISS_1=MISS_1 + 1;
  END;

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

  OUTPUT;

RUN;


PROC 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_5 MISS_6-MISS_9;
   TITLE3 'Frequency Checks - Missing Value Totals';
RUN;


PROC FREQ DATA=OUT.&OUTDATA;
   WHERE FLAG_FIN='1';
   TABLES &VARLIST1./MISSING LIST;
   TITLE3 'Frequency Checks - Formatted Response Variables'
RUN;

PROC FREQ DATA=OUT.&OUTDATA;
   WHERE FLAG_FIN='1';
   TABLES N2-N30/MISSING;
```

```
   TITLE3 'Frequency Checks - Coding Scheme Notes';
RUN;


%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;

%GETFREQS(N2*C00005_O*C00006_O*C00007_O*C00008_O*C00005*C00006,2);
%GETFREQS(N3*C00006_O*C00007_O*C00008_O*C00006*C00007*C00008,3);
%GETFREQS(N4*C00007_O*C00008_O*C00007*C00008,4);
%GETFREQS(N5*C00009_O*C00010_O*C00011_O*C00012_O*C00009*C00010,5);
%GETFREQS(N6*C00011_O*C00012_O*C00011*C00012,6);
%GETFREQS(N7*C00013_O*C00014_O*C00015_O*C00016_O*C00017_O*C00013*C00014,7);
%GETFREQS(N8*C00015_O*C00016_O*C00017_O*C00015*C00016*C00017,8);
%GETFREQS(N9*C00018_O*C00019_O*C00018*C00019,9);
%GETFREQS(N10*C00020_O*C00021_O*C00022_O*C00020*C00021*C00022,10);
%GETFREQS(N11*C00023_O*C00024_O*C00025_O*C00023*C00024*C00025,11);
%GETFREQS(N12*C00026_O*C00027_O*C00028_O*C00026*C00027*C00028,12);
%GETFREQS(N13*C00030_O*C00031_O*C00032_O*C00033_O*C00030*C00031,13);
%GETFREQS(N14*C00039_O*C00040_O*C00039*C00040,14);
%GETFREQS(N15*C00044_O*C00045_O*C00046_O*C00047_O*C00044*C00045,15);
%GETFREQS(N16*C00048_O*C00049_O*C00048*C00049,16);
%GETFREQS(N17*C00050_O*C00051_O*C00050*C00051,17);
%GETFREQS(N18*C00052_O*C00053_O*C00054_O*C00052*C00053*C00054,18);
%GETFREQS(N19*C00053_O*C00054_O*C00053*C00054,19);
%GETFREQS(N20*C00055_O*C00056_O*C00055*C00056,20);
%GETFREQS(N21*C00059_O*C00060_O*C00061_O*C00059*C00060*C00061,21);
%GETFREQS(N22*C00060_O*C00061_O*C00060*C00061,22);
%GETFREQS(N23*C00062_O*C00063_O*C00064_O*C00062*C00063*C00064,23);
%GETFREQS(N24*C00063_O*C00064_O*C00063*C00064,24);
%GETFREQS(N25*C00065_O*C00066_O*C00067_O*C00065*C00066*C00067,25);
%GETFREQS(N26*C00066_O*C00067_O*C00066*C00067,26);
%GETFREQS(N27*C00068_O*C00069_O*C00070_O*C00068*C00069*C00070,27);
%GETFREQS(N28*C00069_O*C00070_O*C00069*C00070,28);
%GETFREQS(N29*C00071_O*C00072_O*C00071*C00072,29);
%GETFREQS(N30*C00074_O*C00075_O*C00074*C00075,30);



LENGTH MPRID  $8
       C00001_O  C00001
       C00002_O  C00002
       C00003_O  C00003
       C00004AO  C00004A
       C00004BO  C00004B
       C00004CO  C00004C
       C00004DO  C00004D
       C00004EO  C00004E
       C00004FO  C00004F
       C00004GO  C00004G
       C00004HO  C00004H
       C00004IO  C00004I
       C00005_O  C00005
       C00006_O  C00006
       C00007_O  C00007
       C00008_O  C00008
       C00009_O  C00009
       C00010_O  C00010
       C00011_O  C00011
       C00012_O  C00012
       C00013_O C00013
       C00014_O  C00014
       C00015_O  C00015
```

C00016_O	C00016
C00017_O	C00017
C00018_O	C00018
C00019_O	C00019
C00020_O	C00020
C00021_O	C00021
C00022_O	C00022
C00023_O	C00023
C00024_O	C00024
C00025_O	C00025
C00026_O	C00026
C00027_O	C00027
C00028_O	C00028
C00029_O	C00029
C00030_O	C00030
C00031_O	C00031
C00032_O	C00032
C00033_O	C00033
C00034_O	C00034
C00035_O	C00035
C00036_O	C00036
C00037_O	C00037
C00038_O	C00038
C00039_O	C00039
C00040_O	C00040
C00041_O	C00041
C00042_O	C00042
C00043_O	C00043
C00044_O	C00044
C00045_O	C00045
C00046_O	C00046
C00047_O	C00047
C00048_O	C00048
C00049_O	C00049
C00050_O	C00050
C00051_O	C00051
C00052_O	C00052
C00053_O	C00053
C00054_O	C00054
C00055_O	C00055
C00056_O	C00056
C00057_O	C00057
C00058_O	C00058
C00059_O	C00059
C00060_O	C00060
C00061_O	C00061
C00062_O	C00062
C00063_O	C00063
C00064_O	C00064
C00065_O	C00065
C00066_O	C00066
C00067_O	C00067
C00068_O	C00068
C00069_O	C00069
C00070_O	C00070
C00071_O	C00071
C00072_O	C00072
C00073_O	C00073
C00074_O	C00074
C00075_O	C00075
C00076AO	C00076A
C00076BO	C00076B
C00076CO	C00076C
C00076DO	C00076D
C00076EO	C00076E
C00076FO	C00076F
C00077AO	C00077A
C00077BO	C00077B
C00077CO	C00077C
C00077DO	C00077D
C00077EO	C00077E

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C00077FO  C00077F
C00077GO  C00077G
C00077HO  C00077H
C00078_O  C00078
C00079_O  C00079
C00080AO  C00080A
C00080BO  C00080B
C00080CO  C00080C
C00080DO  C00080D
C00080EO  C00080E
C00081_O  C00081
C00082_O  C00082
C00083_O  C00083
C00084_O  C00084 4 ;


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

            Format      C00001_O  C00001   CYN2_.
                        C00002_O  C00002   CPLAN1_.
                        C00003_O  C00003   CENROLL.
                        C00004AO  C00004A  CMARK.
                        C00004BO  C00004B  CMARK.
                        C00004CO  C00004C  CMARK.
                        C00004DO  C00004D  CMARK.
                        C00004EO  C00004E  CMARK.
                        C00004FO  C00004F  CMARK.
                        C00004GO  C00004G  CMARK.
                        C00004HO  C00004H  CMARK.
                        C00004IO  C00004I  CMARK.
                        C00005_O  C00005   CYN2_.
                        C00006_O  C00006   CPROB1_.
                        C00007_O  C00007   COFTN1_.
                        C00008_O  C00008   CRATE1_.
                        C00009_O  C00009   CYN3_.
                        C00010_O  C00010   CYN2_.
                        C00011_O  C00011   CPROB2_.
                        C00012_O  C00012   CWORK.
                        C00013_O  C00013   CYN2_.
                        C00014_O  C00014   CPROB3_.
                        C00015_O  C00015   CYN2_.
                        C00016_O  C00016   CRATE2_.
                        C00017_O  C00017   CYN4_.
                        C00018_O  C00018   CYN2_.
                        C00019_O  C00019   COFTN2_.
                        C00020_O  C00020   CYN2_.
                        C00021_O  C00021   COFTN3_.
                        C00022_O  C00022   CDAYS1_.
                        C00023_O  C00023   CYN2_.
                        C00024_O  C00024   COFTN4_.
                        C00025_O  C00025   CDAYS2_.
                        C00026_O  C00026   CYN2_.
                        C00027_O  C00027   COFTN5_.
                        C00028_O  C00028   CLONG.
                        C00029_O  C00029   CTIMESA.
                        C00030_O  C00030   CDOCCLIN.
                        C00031_O  C00031   CPROB4_.
                        C00032_O  C00032   CPROB4_.
                        C00033_O  C00033   COFTN6_.
                        C00034_O  C00034   COFTN6_.
                        C00035_O  C00035   COFTN6_.
                        C00036_O  C00036   COFTN6_.
                        C00037_O  C00037   COFTN6_.
                        C00038_O  C00038   COFTN6_.
                        C00039_O  C00039   CYN2_.
                        C00040_O  C00040   COFTN7_.
                        C00041_O  C00041   COFTN6_.
                        C00042_O  C00042   CRATE3_.
                        C00043_O  C00043   CTYPE.
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C00044_O  C00044   CYN1_.
C00045_O  C00045   COFTN8_.
C00046_O  C00046   COFTN8_.
C00047_O  C00047   COFTN8_.
C00048_O  C00048   CYN2_.
C00049_O  C00049   CPROB5_.
C00050_O  C00050   CYN2_.
C00051_O  C00051   CPROB6_.
C00052_O  C00052   CYN2_.
C00053_O  C00053   CSOLVE.
C00054_O  C00054   CYN5_.
C00055_O  C00055   CYN2_.
C00056_O  C00056   CPROB7_.
C00057_O  C00057   CRATE4_.
C00058_O  C00058   CHEALTH.
C00059_O  C00059   CYN2_.
C00060_O  C00060   CYN2_.
C00061_O  C00061   CYN2_.
C00062_O  C00062   CYN2_.
C00063_O  C00063   CYN2_.
C00064_O  C00064   CYN2_.
C00065_O  C00065   CYN2_.
C00066_O  C00066   CYN2_.
C00067_O  C00067   CYN2_.
C00068_O  C00068   CYN2_.
C00069_O  C00069   CYN2_.
C00070_O  C00070   CYN2_.
C00071_O  C00071   CYN2_.
C00072_O  C00072   CYN2_.
C00073_O  C00073   CPREVENT.
C00074_O  C00074   CAGE1_.
C00075_O  C00075   CYN1_.
C00076AO  C00076A  CVACCINE.
C00076BO  C00076B  CVACCINE.
C00076CO  C00076C  CVACCINE.
C00076DO  C00076D  CVACCINE.
C00076EO  C00076E  CVACCINE.
C00076FO  C00076F  CVACCINE.
C00077AO  C00077A  CMARK.
C00077BO  C00077B  CMARK.
C00077CO  C00077C  CMARK.
C00077DO  C00077D  CMARK.
C00077EO  C00077E  CMARK.
C00077FO  C00077F  CMARK.
C00077GO  C00077G  CMARK.
C00077HO  C00077H  CMARK.
C00078_O  C00078   CSEX.
C00079_O  C00079   CHISP.
C00080AO  C00080A  CMARK.
C00080BO  C00080B  CMARK.
C00080CO  C00080C  CMARK.
C00080DO  C00080D  CMARK.
C00080EO  C00080E  CMARK.
C00081_O  C00081   CAGE2_.
C00082_O  C00082   CSEX.
C00083_O  C00083   CRELEDU.
C00084_O  C00084   CRELATE.;


LABEL C00001_O='Are you adult responsible for child'
      C00001  ='Are you adult responsible for child'
      C00002_O='Which hlth plan did you use most '
      C00002  ='Which hlth plan did you use most '
      C00003_O='In last 12 mos,# mos in a row cvrd w/Pln'
      C00003  ='In last 12 mos,# mos in a row cvrd w/Pln'
      C00004AO='Child covered by TRICARE Prime'
      C00004A ='Child covered by TRICARE Prime'
      C00004BO='Child covered by TRICARE Extra/Standard'
      C00004B ='Child covered by TRICARE Extra/Standard'
      C00004CO='Child covered by Fed. EMP Health Benefit'
      C00004C ='Child covered by Fed. EMP Health Benefit'
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C00004DO='Child covered by Medicaid'
C00004D ='Child covered by Medicaid'
C00004EO='Child covered by Civilian HMO'
C00004E ='Child covered by Civilian HMO'
C00004FO='Child covered by Other Civilian Ins.'
C00004F ='Child covered by Other Civilian Ins.'
C00004GO='Child covered by USFP'
C00004G ='Child covered by USFP'
C00004HO='Not sure who Child covered by'
C00004H ='Not sure who Child covered by'
C00004IO='Child did not use health plan last 12mos'
C00004I ='Child did not use health plan last 12mos'
C00005_O='Does child have personal Dr/Nurse'
C00005  ='Does child have personal Dr/Nurse'
C00006_O='How much prblem to get personal Dr/Nurse'
C00006  ='How much prblem to get personal Dr/Nurse'
C00007_O='Talk about feeling/growing/behaving'
C00007  ='Talk about feeling/growing/behaving'
C00008_O='Rating of childs personal Dr/Nurse'
C00008  ='Rating of childs personal Dr/Nurse'
C00009_O='Does child have primary care manager'
C00009  ='Does child have primary care manager'
C00010_O='Know name of childs Primary care mgr'
C00010  ='Know name of childs Primary care mgr'
C00011_O='In last 12 mos how much prblm to see PCM'
C00011  ='In last 12 mos how much prblm to see PCM'
C00012_O='Is primary care mgr military or civilian'
C00012  ='Is primary care mgr military or civilian'
C00013_O='Did you think child needed to see spclst'
C00013  ='Did you think child needed to see spclst'
C00014_O='How much prblm to get referral to spclst'
C00014  ='How much prblm to get referral to spclst'
C00015_O='In last 12 mos did child see specialist'
C00015  ='In last 12 mos did child see specialist'
C00016_O='Rating of specialist seen most often'
C00016  ='Rating of specialist seen most often'
C00017_O='Specialist same as personal Dr'
C00017  ='Specialist same as personal Dr'
C00018_O='Call during reg. Hrs to get help/advice'
C00018  ='Call during reg. Hrs to get help/advice'
C00019_O='Called during reg Hrs did you get hlp'
C00019  ='Called during reg Hrs did you get hlp'
C00020_O='Make appt for regular/routine hlthcre'
C00020  ='Make appt for regular/routine hlthcre'
C00021_O='How oftn get appt for care soon as wnted'
C00021  ='How oftn get appt for care soon as wnted'
C00022_O='Wait btwn mking appt and seeing provider'
C00022  ='Wait btwn mking appt and seeing provider'
C00023_O='Have illness/injury need care right away'
C00023  ='Have illness/injury need care right away'
C00024_O='Get needed care as soon as wanted'
C00024  ='Get needed care as soon as wanted'
C00025_O='Wait btwn trying to & seeing provider'
C00025  ='Wait btwn trying to & seeing provider'
C00026_O='Appointment for well-patient care'
C00026  ='Appointment for well-patient care'
C00027_O='Get appt for well-patient care'
C00027  ='Get appt for well-patient care'
C00028_O='Wait to see provider for well-patnt care'
C00028  ='Wait to see provider for well-patnt care'
C00029_O='Times to ER'
C00029  ='Times to ER'
C00030_O='Times to Dr office/Clinic (excluding ER)'
C00030  ='Times to Dr office/Clinic (excluding ER)'
C00031_O='Problem to get necessary care'
C00031  ='Problem to get necessary care'
C00032_O='Problem wait for approval'
C00032  ='Problem wait for approval'
C00033_O='How oftn wait >15 mins'
C00033  ='How oftn wait >15 mins'
C00034_O='How oftn staff treat w/courtesy &respect'
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C00034  ='How oftn staff treat w/courtesy &respect'
C00035_O='How oftn were staff helpful'
C00035  ='How oftn were staff helpful'
C00036_O='How oftn did staff listen carefully'
C00036  ='How oftn did staff listen carefully'
C00037_O='How oftn did staff explain things to you'
C00037  ='How oftn did staff explain things to you'
C00038_O='How oftn staff respect what had to say'
C00038  ='How oftn staff respect what had to say'
C00039_O='Child old enough to talk to Dr'
C00039  ='Child old enough to talk to Dr'
C00040_O='Dr explain in way for child to undrstnd'
C00040  ='Dr explain in way for child to undrstnd'
C00041_O='How oftn spend enough time w/child'
C00041  ='How oftn spend enough time w/child'
C00042_O='Rating of childs healthcare'
C00042  ='Rating of childs healthcare'
C00043_O='Type of facility child used most often'
C00043  ='Type of facility child used most often'
C00044_O='Send in any claims'
C00044  ='Send in any claims'
C00045_O='Handle claim in reasonable time'
C00045  ='Handle claim in reasonable time'
C00046_O='Handle claim correctly'
C00046  ='Handle claim correctly'
C00047_O='Plan make clear how much to pay'
C00047  ='Plan make clear how much to pay'
C00048_O='Look for info/written material'
C00048  ='Look for info/written material'
C00049_O='Find/understand info in written material'
C00049  ='Find/understand info in written material'
C00050_O='Call customer service to get info'
C00050  ='Call customer service to get info'
C00051_O='Problem get help when call customer svc'
C00051  ='Problem get help when call customer svc'
C00052_O='Called/written plan with complaint'
C00052  ='Called/written plan with complaint'
C00053_O='How long to resolve complaint'
C00053  ='How long to resolve complaint'
C00054_O='Complaint/problem settled to satisfction'
C00054  ='Complaint/problem settled to satisfction'
C00055_O='Experience with paperwork'
C00055  ='Experience with paperwork'
C00056_O='Problem with paperwork'
C00056  ='Problem with paperwork'
C00057_O='Rating of exprience with child hlth plan'
C00057  ='Rating of exprience with child hlth plan'
C00058_O='Rate child overall health'
C00058  ='Rate child overall health'
C00059_O='Child use medicine prescribed by Dr'
C00059  ='Child use medicine prescribed by Dr'
C00060_O='Medicine b/c medical,behavioral,other'
C00060  ='Medicine b/c medical,behavioral,other'
C00061_O='Medicine b/c cndtn expected last>=12 mos'
C00061  ='Medicine b/c cndtn expected last>=12 mos'
C00062_O='Mre medical,mntl,eduction svcs thn usual'
C00062  ='Mre medical,mntl,edcution svcs thn usual'
C00063_O='Use svcs b/c medical, behavioral, oth'
C00063  ='Use svcs b/c medical, behavioral, oth'
C00064_O='Svcs b/c condition expected last>=12 mos'
C00064  ='Svcs b/c condition expected last>=12 mos'
C00065_O='Limited/prevented in ability'
C00065  ='Limited/prevented in ability'
C00066_O='Limited b/c medical, behavioral, other'
C00066  ='Limited b/c medical, behavioral, other'
C00067_O='Limited b/c condition expected last>=1yr'
C00067  ='Limited b/c condition expected last>=1yr'
C00068_O='Get special therapy'
C00068  ='Get special therapy'
C00069_O='Therapy b/c medical, behavioral, other'
C00069  ='Therapy b/c medical, behavioral, other'
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C00070_O='Therapy b/c condition expected last>=1yr'
C00070  ='Therapy b/c condition expected last>=1yr'
C00071_O='Problem for which gets trtmnt/counseling'
C00071  ='Problem for which gets trtmnt/counseling'
C00072_O='Trtmnt/counseling b/c conditn last>=1yr'
C00072  ='Trtmnt/counseling b/c conditn last>=1yr'
C00073_O='Last time routine preventive care appt'
C00073  ='Last time routine preventive care appt'
C00074_O='Childs age now'
C00074  ='Childs age now'
C00075_O='Child recd all immunizations'
C00075  ='Child recd all immunizations'
C00076AO='# times child recd Dtap,DT,DTP'
C00076A ='# times child recd Dtap,DT,DTP'
C00076BO='# times child recd MMR'
C00076B ='# times child recd MMR'
C00076CO='# times child recd IPV or OPV'
C00076C ='# times child recd IPV or OPV'
C00076DO='# times child recd Hib'
C00076D ='# times child recd Hib'
C00076EO='# times child recd HepB'
C00076E ='# times child recd HepB'
C00076FO='# times child recd Varicella'
C00076F ='# times child recd Varicella'
C00077AO='Talk about growth/development'
C00077A ='Talk about growth/development'
C00077BO='Talk about behaviors to expect'
C00077B ='Talk about behaviors to expect'
C00077CO='Talk about dress/bathe/feed child'
C00077C ='Talk about dress/bathe/feed child'
C00077DO='Talk about help child grow/learn'
C00077D ='Talk about help child grow/learn'
C00077EO='Talk about tlking/reading/plying w/child'
C00077E ='Talk about tlking/reading/plying w/child'
C00077FO='Talk about keep child from injured'
C00077F ='Talk about keep child from injured'
C00077GO='Talk about make car safe'
C00077G ='Talk about make car safe'
C00077HO='Talk about make house safe'
C00077H ='Talk about make house safe'
C00078_O='Is child male or female'
C00078  ='Is child male or female'
C00079_O='Is child Hispanic/Latino'
C00079  ='Is child Hispanic/Latino'
C00080AO='Child race:white'
C00080A ='Child race:white'
C00080BO='Child race:Black'
C00080B ='Child race:Black'
C00080CO='Child race:Asian'
C00080C ='Child race:Asian'
C00080DO='Child race:Native Hawaiian/Pacific Islnd'
C00080D ='Child race:Native Hawaiian/Pacific Islnd'
C00080EO='Child race:Am. Indian/Alaskan'
C00080E ='Child race:Am. Indian/Alaskan'
C00081_O='Your age now'
C00081  ='Your age now'
C00082_O='Are you male or female'
C00082  ='Are you male or female'
C00083_O='highest grade/level you completed'
C00083  ='highest grade/level you completed'
C00084_O='How related to child'
C00084  ='How related to child'

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"
      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_8="Count of: Multiple response error"
      MISS_9="Count of: No response - invalid skip"
      MISS_TOT= "Total number of missing responses"
  ;
```

D. QUARTER IV

```
   ****************************************************************************;
*  Program:  Cschm00q.sas
*  Written:  06/04/2001
*   Author:  C. Rankin
*
*    Input:  MERGENRC.SD2 - Merged MPR Sampling, DEERS, and NRC Response Data
*   Output:  CSCHM00Q.SD2 - Coding scheme file
*
* Modified:  9/20/2001 - Recodes removed (stored in recodes_old.sas)
*           10/31/2001 - Revised notes 16 and 17 (became notes 26 and 27)
*  Purpose:  Apply Coding Scheme Specifications to DoD Health Care Survey
*            Response Data, check for consistency in responses and skip
*            patterns
*  Include
*    files:  Cschm00q.fmt
*
****************************************************************************;

OPTIONS PS=67 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;

LIBNAME LIBRARY "...\DATA\AFINAL\FMTLIB";
LIBNAME IN      "...\DATA\AFINAL";
LIBNAME OUT     "...\DATA\AFINAL";

%LET INDATA=MERGENRC;
%LET OUTDATA=CSCHM00Q;
%LET PERIOD=July, 2000 to June, 2001;

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

%Let varlist1 =

 H00000   H00001   H00002   H00003A  H00003B  H00003C  H00003F
 H00003G  H00003H  H00003I  H00003J  H00003K  H00003L  H00003M  H00004
 H00006   H00007   H00008   H00009   H00010   H00011   H00012   H00013
 H00014   H00015   H00016   H00017   H00018   H00019   H00020   H00021
 H00022   H00023   H00024   H00025   H00026   H00027   H00028   H00029
 H00030   H00031   H00032   H00033   H00034   H00035   H00036   H00037
```

```
 H00038   H00039   H00040   H00041   H00042   H00043   H00044   H00045
 H00046   H00047   H00048   H00049   H00050   H00051   H00052   H00053
 H00054   H00055   H00056   H00057   H00059   H00061
 H00062   H00063   H00064   H00065   H00066   H00067   H00068   H00069
 H00070   H00071   H00072   H00073A  H00073B  H00074   H00075   H00076A
 H00076B  H00079   H00083A  H00083B  H00083C  H00083D  H00083E  H00083F
 H00083G  H00083H  H00083I  H00084   H00085A  H00085B  H00085C  H00085D
 H00085E  H00085F  H00085G  H00085H  H00085I  H00085J
 SREDA    SRRACEA  SRRACEB  SRRACEC  SRRACED  SRRACEE  SRAGE
 S00I01   S00I02   S00I03   S00S01   S00S02
 S00S03   S00S04   S00S05   S00S06   S00S07   S00S08   S00S09  ;
/*  _O variables are the original values from the survey response */

%Let varlist2 =
 H00000_O   H00001_O   H00002_O   H00003AO   H00003BO   H00003CO   H00003FO
 H00003GO   H00003HO   H00003IO   H00003JO   H00003KO   H00003LO   H00003MO   H00004_O
 H00006_O   H00007_O   H00008_O   H00009_O   H00010_O   H00011_O   H00012_O   H00013_O
 H00014_O   H00015_O   H00016_O   H00017_O   H00018_O   H00019_O   H00020_O   H00021_O
 H00022_O   H00023_O   H00024_O   H00025_O   H00026_O   H00027_O   H00028_O   H00029_O
 H00030_O   H00031_O   H00032_O   H00033_O   H00034_O   H00035_O   H00036_O   H00037_O
 H00038_O   H00039_O   H00040_O   H00041_O   H00042_O   H00043_O   H00044_O   H00045_O
 H00046_O   H00047_O   H00048_O   H00049_O   H00050_O   H00051_O   H00052_O   H00053_O
 H00054_O   H00055_O   H00056_O   H00057_O   H00059_O   H00061_O
 H00062_O   H00063_O   H00064_O   H00065_O   H00066_O   H00067_O   H00068_O   H00069_O
 H00070_O   H00071_O   H00072_O   H00073AO   H00073BO   H00074_O   H00075_O   H00076AO
 H00076BO   H00079_O   H00083AO   H00083BO   H00083CO   H00083DO   H00083EO   H00083FO
 H00083GO   H00083HO   H00083IO   H00084_O   H00085AO   H00085BO   H00085CO   H00085DO
 H00085EO   H00085FO   H00085GO   H00085HO   H00085IO   H00085JO
 SREDA_O    SRRACEAO   SRRACEBO   SRRACECO   SRRACEDO   SRRACEEO   SRAGE_O
 S00I01_O   S00I02_O   S00I03_O   S00S01_O   S00S02_O
 S00S03_O   S00S04_O   S00S05_O   S00S06_O   S00S07_O   S00S08_O   S00S09_O  ;


TITLE  "DoD 2000 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";

DATA OUT.CSCHM00Q;
  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;
  %INCLUDE "CSCHM00Q.FMT";

/* label and format statements for original variables */

  SET IN.MERGENRC;

*****************************************************************;
**** Recodes for invalid responses: C. Rankin 10/23/2001 ******;
*****************************************************************;

  IF SREDA=0  THEN SREDA=.;


/** Recode selected invalid responses **/

     IF H00008=3 THEN H00008=-8;
     IF H00011=0 then H00011=-8;

/**  RECODE THE HEALTH STATUS QUESTION - S00S01**/

     IF S00S01 =6 THEN H00077 = 0;
         ELSE IF S00S01 =5 THEN H00077 = 0;
     ELSE IF S00S01 = 4 THEN H00077 = 2;
     ELSE IF S00S01 = 3 THEN H00077 = 3;
     ELSE IF S00S01 = 2 THEN H00077 = 4;
     ELSE IF S00S01 = 1 THEN H00077 = 5;




*********************************************************************;
```

```
/* This is a version of the coding scheme and coding tables for the
   2000 HCSDB Form A.
   The following tables outline the coding of screening questions (skip),
   and subsequent items to be answered (or not answered in a series
   following a skip question.) */

/* First set up new variables that capture the original values */
/* recode the initial numeric values to the SAS numeric values */
/* specified in the coding scheme                              */

  SEX=PNSEXCD;
  AGE=DAGEQY;
  DROP SEX AGE;

  ARRAY RECODE(*) &VARLIST1;
  ARRAY   ORIG(*) &VARLIST2;

  DO I = 1 to DIM(ORIG);
      ORIG(I) = RECODE(I);
      IF ORIG(I) < 0 THEN DO;
              IF ORIG(I)= -9 THEN RECODE(I)=.;
         ELSE IF ORIG(I)= -8 THEN RECODE(I)=.A;
         ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
         ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
         ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
         ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
         ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
         ELSE RECODE(I)=RECODE(I);
      END;
  END;
  DROP I;



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

  ARRAY   MARKED(*) H00003A  H00003B  H00003C H00003F  H00003G  H00003H
                    H00003I  H00003J  H00003K H00003L  H00003M
                    H00083A  H00083B  H00083C  H00083D  H00083E  H00083F
                    H00083G  H00083H  H00083I  H00085A  H00085B  H00085C
                    H00085D  H00085E  H00085F  H00085G  H00085H  H00085I
                    H00085J  SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
                   ;

  ARRAY INFORMAT(*) H00003AO  H00003BO  H00003CO H00003FO  H00003GO  H00003HO
                    H00003IO  H00003JO  H00003KO H00003LO  H00003MO
                    H00083AO  H00083BO  H00083CO H00083DO  H00083EO  H00083FO
                    H00083GO  H00083HO  H00083IO H00085AO  H00085BO  H00085CO
                    H00085DO  H00085EO  H00085FO H00085GO  H00085HO  H00085IO
                    H00085JO  SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO
                    ;

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

  FORMAT H00003A  H00003B  H00003C H00003F  H00003G  H00003H
         H00003I  H00003J  H00003K H00003L  H00003M
         H00083A  H00083B  H00083C  H00083D  H00083E  H00083F
         H00083G  H00083H  H00083I  H00085A  H00085B  H00085C
         H00085D  H00085E  H00085F  H00085G  H00085H  H00085I
         H00085J  SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
         MARKED.;


*********************************************************************;
```

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

  IF FLAG_FIN NE '1' THEN GOTO NOSURVEY;

/** Note 1 -- health plan usage  **/

  IF H00001 > 0 OR H00001 =.D THEN N1=1;
  ELSE IF H00001=.N  THEN DO;
     IF H00002 NOT=. THEN DO;
        N1=2;
        H00002=.C;
     END;
     ELSE DO;
        N1=3;
        H00002=.N;
     END;
  END;
  ELSE IF H00001=.   THEN N1=4;
  ELSE IF H00001=.A  THEN DO;
     IF H00002 NOT=. THEN N1=5;
     ELSE DO;
         H00001=.N;
         H00002=.N;
         N1=6;
     END;
  END;

/** Note2  -- H00006, H00007: Personal doctor or nurse **/

  IF H00006=1 AND H00007 IN (1,2,3,.,.A) THEN N2=1;
  ELSE IF H00006 IN (1,.,.A) AND H00007=.N THEN DO;
     H00006=2;
     H00007=.C;
     N2=2;
  END;
  ELSE IF H00006 IN (2,.,.A) AND H00007>0 THEN DO;
     H00006=1;
     N2=3;
  END;
  ELSE IF H00006=2 AND H00007 IN (.N,.,.A) THEN DO;
     IF H00007=. THEN H00007=.N;
     ELSE H00007=.C;
     N2=4;
  END;
  ELSE IF H00006=. AND H00007=.A THEN DO;
     H00006=1;
     N2=5;
  END;
  ELSE IF H00006=. AND H00007=. THEN N2=6;
  ELSE IF H00006=.A AND H00007=. THEN DO;
     H00006=2;
     H00007=.N;
     N2=7;
  END;
  ELSE IF H00006=.A AND H00007=.A THEN N2=8;

/** Note 3 -- H00008, H00009:  Personal doctor or nurse **/

  IF H00008 = 1 AND (H00009 GE 0 OR H00009 IN (.,.A)) THEN N3=1;
  ELSE IF H00008 IN (1,.,.A) AND H00009=.N THEN DO;
     N3=2;
     H00008=2;
     H00009=.C;
  END;
  ELSE IF H00008 IN (2,.,.A) AND (H00009 GE 0 OR H00009=.A) THEN DO;
     H00008=1;
     N3=3;
  END;
  ELSE IF H00008=2 AND H00009 IN (.N,.)  THEN DO;
     N3=4;
     IF H00009=. THEN H00009=.N;
```

```
      ELSE H00009=.C;
   END;
   ELSE IF H00008=. AND  H00009=. THEN N3=5;
   ELSE IF H00008=.A AND H00009=. THEN DO;
      H00008=2;
      N3=6;
      H00009=.N;
   END;
   ELSE IF H00008=.A AND H00009=.A THEN N3=7;

/** Note 4 -- H00010-H00012:  currently enrolled in Tricare Prime  **/

   ARRAY NOTE4 H00011 H00012;
   N4NMISS=0;
   N4MARK=0;
   DO OVER NOTE4;
      IF NOTE4 NE . THEN N4NMISS+1;          /* check for all missing */
      IF NOTE4 NOT IN (.,.N) THEN N4MARK+1; /* not missing or NA */
   END;

   IF H00010=1 AND (N4NMISS=0 OR N4MARK>0) THEN N4=1;
   ELSE IF H00010 IN (1,.,.A) AND H00011=.N AND H00012=. THEN DO;
      H00010=2;
      N4=2;
      DO OVER NOTE4;
         IF NOTE4=. THEN NOTE4=.N;
         ELSE NOTE4=.C;
      END;
   END;
   ELSE IF H00010 IN (2,.,.A) AND N4MARK>0 THEN DO;
      H00010=1;
      N4=3;
   END;
   ELSE IF H00010=2 AND ((N4NMISS=0) OR (H00011=.N AND H00012=.))THEN DO;
      N4=4;
      DO OVER NOTE4;
         IF NOTE4=. THEN NOTE4=.N;
         ELSE NOTE4=.C;
      END;
   END;
   ELSE IF H00010=. AND N4NMISS=0 THEN N4=5;
   ELSE IF H00010=.A AND N4NMISS=0 THEN DO;
      H00010=2;
      N4=6;
      DO OVER NOTE4;
         NOTE4=.N;
      END;
   END;

   DROP N4MARK N4NMISS;

/** Note 5 -- H00013, H00014:  needed to see a specialist in last 12 months **/

   IF H00013=1 AND H00014 IN (1,2,3,.,.A) THEN N5=1;
   ELSE IF H00013 IN (1,.,.A) AND H00014=.N THEN DO;
      H00013=2;
      H00014=.C;
      N5=2;
   END;
   ELSE IF H00013 IN (2,.,.A) AND H00014 IN (1,2,3) THEN DO;
      H00013=1;
      N5=3;
   END;
   ELSE IF H00013=2 AND H00014 IN (.,.A,.N) THEN DO;
      IF H00014=. THEN H00014=.N;
      ELSE H00014=.C;
      N5=4;
   END;
   ELSE IF H00013=. AND H00014=.A THEN DO;
      H00013=1;
      N5=5;
```

```
  END;
  ELSE IF H00013=.  AND H00014=.  THEN N5=6;
  ELSE IF H00013=.A AND H00014=.A THEN N5=7;
  ELSE IF H00013=.A AND H00014=.  THEN DO;
     H00013=2;
     H00014=.N;
     N5=8;
  END;

/** Note 6 -- H00015,H00016,H00017: saw a specialist in last 12 months **/

  ARRAY NOTE6 H00016 H00017;
  N6MARK=0;
  N6NMISS=0;

  DO OVER NOTE6;
     IF NOTE6 NE . THEN N6NMISS+1;
  END;

  DO OVER NOTE6;
     IF NOTE6 NOT IN (.N,.) THEN N6MARK+1;
  END;

  IF H00015=1 AND (N6NMISS=0 OR N6MARK>0) THEN N6=1;
  ELSE IF H00015 IN (1,.,.A) AND N6NMISS>0 AND N6MARK=0 THEN DO;
     H00015=2;
     N6=2;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
  END;
  ELSE IF H00015 IN (2,.,.A) AND N6MARK>0 THEN DO;
     H00015=1;
     N6=3;
  END;
  ELSE IF H00015=2 AND N6NMISS=0 OR (N6NMISS>0 AND N6MARK=0) THEN DO;
     N6=4;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
  END;
  ELSE IF H00015=. AND  N6NMISS=0 THEN N6=5;
  ELSE IF H00015=.A AND N6NMISS=0 THEN DO;
     H00015=2;
     N6=6;
     DO OVER NOTE6;
        NOTE6=.N;
     END;
  END;

  DROP N6NMISS N6MARK;

/** Note 7 -- called a doctor's office:  H00018, H00019 **/

  IF H00018=1 AND H00019 IN (1,2,3,4,.,.A) THEN N7=1;
  ELSE IF H00018 IN (1,.,.A) AND H00019=.N THEN DO;
     H00018=2;
     H00019=.C;
     N7=2;
  END;
  ELSE IF H00018 IN (2,.,.A) AND H00019 IN (1,2,3,4) THEN DO;
     H00018=1;
     N7=3;
  END;

  ELSE IF H00018=2 AND H00019 IN (.,.A,.N) THEN DO;
     IF H00019=. THEN H00019=.N;
     ELSE H00019=.C;
     N7=4;
```

```
  END;
  ELSE IF H00018=.  AND H00019=.A THEN DO;
     H00018=1;
     N7=5;
  END;
  ELSE IF H00018=.  AND H00019=.  THEN N7=6;
  ELSE IF H00018=.A AND H00019=.A THEN N7=7;
  ELSE IF H00018=.A AND H00019=.  THEN DO;
     H00018=2;
     N7=8;
     H00019=.N;
  END;

/** Note 8 -- H00020,H00021,H00022:  regular or routine healthcare **/

  ARRAY NOTE8 H00021 H00022;
  N8MARK=0;
  N8NMISS=0;

  DO OVER NOTE8;
     IF NOTE8 NE . THEN N8NMISS+1;
  END;

  DO OVER NOTE8;
     IF NOTE8 NOT IN (.N,.) THEN N8MARK+1;
  END;
  IF H00020=1 AND (N8NMISS=0 OR N8MARK>0) THEN N8=1;
  ELSE IF H00020 IN (1,.,.A) AND N8NMISS>0 AND N8MARK=0 THEN DO;
     H00020=2;
     N8=2;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF H00020 IN (2,.,.A) AND N8MARK>0 THEN DO;
     H00020=1;
     N8=3;
  END;
  ELSE IF H00020=2 AND (N8NMISS=0 OR (N8NMISS>0 AND N8MARK=0)) THEN DO;
     N8=4;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF H00020=.  AND  N8NMISS=0 THEN N8=5;
  ELSE IF H00020=.A AND N8NMISS=0 THEN DO;
     H00020=2;
     N8=6;
     DO OVER NOTE8;
        NOTE8=.N;
     END;
  END;

  DROP N8NMISS N8MARK;

/** Note 9 -- H00023,H00024,H00025:  illness or injury **/

  ARRAY NOTE9 H00024 H00025;
  N9MARK=0;
  N9NMISS=0;

  DO OVER NOTE9;
     IF NOTE9 NE . THEN N9NMISS+1;
     IF NOTE9 NOT IN (.N,.) THEN N9MARK+1;
  END;

  IF H00023=1 AND (N9NMISS=0 OR N9MARK>0) THEN N9=1;
  ELSE IF H00023 IN (1,.,.A) AND N9NMISS>0 AND N9MARK=0 THEN DO;
     H00023=2;
```

```
      N9=2;
      DO OVER NOTE9;
         IF NOTE9=. THEN NOTE9=.N;
         ELSE NOTE9=.C;
      END;
   END;
   ELSE IF H00023 IN (2,.,.A) AND N9MARK>0 THEN DO;
      H00023=1;
      N9=3;
   END;
   ELSE IF H00023=2 AND (N9NMISS=0 OR (N9NMISS>0 AND N9MARK=0)) THEN DO;
      N9=4;
      DO OVER NOTE9;
         IF NOTE9=. THEN NOTE9=.N;
         ELSE NOTE9=.C;
      END;
   END;
   ELSE IF H00023=.  AND N9NMISS=0 THEN N9=5;
   ELSE IF H00023=.A AND N9NMISS=0 THEN DO;
      H00023=2;
      N9=6;
      DO OVER NOTE9;
         NOTE9=.N;
      END;
   END;

   DROP N9NMISS N9MARK;

/** Note 10 -- H00027, H00028-H00037: doctor's office or clinic **/

   ARRAY NOTE10  H00028-H00037;
   N10MARK=0;
   N10NMISS=0;

   DO OVER NOTE10;
      IF NOTE10 NE . THEN N10NMISS+1;
      IF NOTE10 NOT IN (.N,.) THEN N10MARK+1;
   END;

   IF H00027=1 AND (N10NMISS=0 OR (N10NMISS>0 AND N10MARK=0)) THEN DO;
      N10=1;
      DO OVER NOTE10;
         IF NOTE10=. THEN NOTE10=.N;
         ELSE NOTE10=.C;
      END;
   END;
   ELSE IF H00027 IN (1,.,.A) AND N10MARK>0 THEN N10=2;
   ELSE IF H00027 IN (2,3,4,5,6,7,.,.A) AND (N10NMISS>0 AND N10MARK=0) THEN DO;
      H00027=1;
      N10=3;
      DO OVER NOTE10;
         IF NOTE10=. THEN NOTE10=.N;
         ELSE NOTE10=.C;
      END;
   END;
   ELSE IF H00027 IN (2,3,4,5,6,7) AND (N10NMISS=0 OR N10MARK>0) THEN N10=4;
   ELSE IF H00027=.  AND N10NMISS=0 THEN N10=5;
   ELSE IF H00027=.A AND N10NMISS=0 THEN DO;
      H00027=1;
      N10=6;
      DO OVER NOTE10;
         NOTE10=.N;
      END;
   END;

   DROP N10NMISS N10MARK;

/** Note 11 -- H00043, H00044-H00046: claims to health plan **/

   ARRAY NOTE11 H00044-H00046;
   N11MARK=0;
```

```
  N11NMISS=0;
  N11NDK=0;

  DO OVER NOTE11;
     IF NOTE11 NE . THEN N11NMISS+1;
     IF NOTE11 NOT IN (.N,.) THEN N11MARK+1;
     IF NOTE11 NOT IN (.,.D) THEN N11NDK+1;
  END;

  IF H00043=1 AND (N11NMISS=0 OR N11MARK>0) THEN N11=1;
  ELSE IF H00043 IN (1,.D,.,.A) AND N11NMISS>0 AND N11MARK=0 THEN DO;
     N11=2;
     H00043=2;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H00043=.D AND N11MARK>0 AND N11NDK>0 THEN DO;
     N11=3;
     H00043=1;
  END;
  ELSE IF H00043=.D AND N11NMISS=0 OR N11NDK=0 THEN DO;
     N11=4;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H00043 IN (2,.,.A) AND N11MARK>0 THEN DO;
     H00043=1;
     N11=5;
  END;
  ELSE IF H00043=2 AND (N11NMISS=0 OR (N11NMISS>0 AND N11MARK=0)) THEN DO;
     N11=6;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H00043=.  AND N11NMISS=0 THEN N11=7;
  ELSE IF H00043=.A AND N11NMISS=0 THEN DO;
     H00043=2;
     N11=8;
     DO OVER NOTE11;
        NOTE11=.N;
     END;
  END;

  DROP N11NMISS N11MARK N11NDK;

/** Note12  -- H00047, H00048: **/

  IF H00047=1 AND H00048 IN (1,2,3,.,.A) THEN N12=1;
  ELSE IF H00047 IN (1,.,.A) AND H00048=.N THEN DO;
     H00047=2;
     H00048=.C;
     N12=2;
  END;
  ELSE IF H00047 IN (2,3,.,.A) AND H00048 IN (1,2,3,.A) THEN DO;
     H00047=1;
     N12=3;
  END;
  ELSE IF H00047 IN (2,3) AND H00048 IN (.N,.,.A) THEN DO;
     IF H00048=. THEN H00048=.N;
     ELSE H00048=.C;
     N12=4;
  END;
  ELSE IF H00047=. AND H00048=. THEN N12=5;
  ELSE IF H00047=.A AND H00048=. THEN DO;
     H00047=2;
```

```
      H00048=.N;
      N12=6;
   END;

/** Note13 -- H00049, H00050: health plan's customer service **/

   IF H00049=1 AND H00050 IN (1,2,3,.,.A) THEN N13=1;
   ELSE IF H00049 IN (1,.,.A) AND H00050=.N THEN DO;
      H00049=2;
      H00050=.C;
      N13=2;
   END;
   ELSE IF H00049 IN (2,.,.A) AND H00050 IN (1,2,3) THEN DO;
      H00049=1;
      N13=3;
   END;
   ELSE IF H00049=2 AND H00050 IN (.N,.,.A) THEN DO;
      IF H00050=. THEN H00050=.N;
      ELSE H00050=.C;
      N13=4;
   END;
   ELSE IF H00049=. AND H00050=.A THEN DO;
      H00049=1;
      N13=5;
   END;
   ELSE IF H00049=. AND H00050=. THEN N13=6;
   ELSE IF H00049=.A AND H00050=. THEN DO;
      H00049=2;
      H00050=.N;
      N13=7;
   END;

/** Note 14 -- H00051, H00052, H00053:  complaint or problem  **/

   ARRAY note14 H00052 H00053;
   N14MARK=0;
   N14NMISS=0;

   DO OVER note14;
      IF note14 NE . THEN N14NMISS+1;
      IF note14 NOT IN (.N,.) THEN N14MARK+1;
   END;

   IF H00051=1 AND (N14NMISS=0 OR N14MARK>0) THEN N14=1;
   ELSE IF H00051 IN (1,.,.A) AND N14NMISS>0 AND N14MARK=0 THEN DO;
      H00051=2;
      N14=2;
      DO OVER note14;
         IF note14=. THEN note14=.N;
         ELSE note14=.C;
      END;
   END;
   ELSE IF H00051 IN (2,.,.A) AND N14MARK>0 THEN DO;
      H00051=1;
      N14=3;
   END;
   ELSE IF H00051=2 AND (N14NMISS=0 OR (N14NMISS>0 AND N14MARK=0)) THEN DO;
      N14=4;
      DO OVER note14;
         IF note14=. THEN note14=.N;
         ELSE note14=.C;
      END;
   END;
   ELSE IF H00051=.  AND N14NMISS=0 THEN N14=5;
   ELSE IF H00051=.A AND N14NMISS=0 THEN DO;
      H00051=2;
      N14=6;
      DO OVER note14;
         note14=.N;
      END;
   END;
```

```
  DROP N14NMISS N14MARK;

/** Note15  -- H00054, H00055: paperwork  **/

  IF H00054=1 AND H00055 IN (1,2,3,.,.A) THEN N15=1;
  ELSE IF H00054 IN (1,.,.A) AND H00055=.N THEN DO;
     H00054=2;
     H00055=.C;
     N15=2;
  END;
  ELSE IF H00054 IN (2,.,.A) AND H00055 IN (1,2,3,.A) THEN DO;
     H00054=1;
     N15=3;
  END;
  ELSE IF H00054=2 AND H00055 IN (.N,.)THEN DO;
     IF H00055=. THEN  H00055=.N;
     ELSE H00055=.C;
     N15=4;
  END;
  ELSE IF H00054=.  AND H00055=. THEN N15=5;
  ELSE IF H00054=.A AND H00055=. THEN DO;
     H00054=2;
     H00055=.N;
     N15=6;
  END;


/** Note 24 -- smoking:  H00066 - H00069  **/

  IF H00066=1 and H00067 IN (3,4) THEN DO;  /* still smoke */
     IF H00068 NE . THEN DO;
        H00068=.C;
        N24=1;
     END;
     ELSE IF H00068=. THEN DO;
        H00068=.N;
        N24=2;
     END;
  END;
  ELSE IF H00066=1 AND H00067=2 THEN DO;         /* quit */
     IF H00068 IN (2,.D) AND H00069 NE . THEN DO;   /* > 1 year ago */
        H00069 =.C;
        N24=3;
     END;
     ELSE IF H00068 IN (2,.D) AND H00069=. THEN DO;
        H00069 =.N;
        N24=4;
     END;
     ELSE IF H00068 IN (3,.,.A) THEN N24=5;      /* < 1 year ago */
  END;
  ELSE IF H00066=1 AND H00067 IN (.D,.,.A) THEN DO;  /* don't know */
     IF H00068=2 AND H00069 NE . THEN DO;        /* > 1 year ago */
        H00067=2;
        H00069=.C;
        N24=6;
     END;
     ELSE IF H00068=2 AND H00069 = . THEN DO;
        H00067=2;
        H00069=.N;
        N24=7;
     END;
     ELSE IF H00068=3 THEN DO;            /* < 1 year ago */
        H00067=2;
        N24=8;
     END;
     ELSE IF H00068 IN (.D,.,.A) THEN N24=9;  /* don't know */
  END;
  ELSE IF H00066 IN (2,.D,.,.A) AND H00067 IN (3,4) THEN DO; /*never smoke*/
     IF H00068 NE . THEN DO;
        H00066=1;
```

```
      H00068=.C;
      N24=10;
   END;
   ELSE IF H00068=. THEN DO;
      H00066=1;
      H00068=.N;
      N24=11;
   END;
END;
ELSE IF H00066 IN (2,.D) AND H00067 IN (2,.D,.A) THEN DO; /*never smoke*/
   IF H00068 NE . AND H00069 NE . THEN DO;
      H00067 =.C;
      H00068 =.C;
      H00069 =.C;
      N24=12;
   END;
   ELSE IF H00068 NE . AND H00069=. THEN DO;
      H00067=.C;
      H00068=.C;
      H00069=.N;
      N24=13;
   END;
   ELSE IF H00068=. AND H00069 NE . THEN DO;
      H00067=.C;
      H00068=.N;
      H00069=.C;
      N24=14;
   END;
   ELSE IF H00068=. AND H00069=. THEN DO;
      H00067=.C;
      H00068=.N;
      H00069=.N;
      N24=15;
   END;
END;
ELSE IF H00066 IN (2,.D) AND H00067= . THEN DO; /*never smoke*/
   IF H00068 NE . AND H00069 NE . THEN DO;
      H00067=.N;
      H00068=.C;
      H00069=.C;
      N24=16;
   END;
   ELSE IF H00068 NE . AND H00069=. THEN DO;
      H00067=.N;
      H00068=.C;
      H00069=.N;
      N24=17;
   END;
   ELSE IF H00068=. AND H00069 NE . THEN DO;
      H00067=.N;
      H00068=.N;
      H00069=.C;
      N24=18;
   END;
   ELSE IF H00068=. AND H00069=. THEN DO;
      H00067=.N;
      H00068=.N;
      H00069=.N;
      N24=19;
   END;
END;
ELSE IF H00066 IN (.A, .) AND H00067 IN (2,.,.A) THEN DO; /*MRE/blank*/
   IF H00068=3 THEN DO;
      H00066=1;
      N24=20;
   END;
   ELSE IF H00068=2 AND H00069 NE . THEN DO;
      H00066 =1;
      H00069 =.C;
      N24=21;
   END;
```

```
      ELSE IF H00068=2 AND H00069=. THEN DO;
         H00066=1;
         H00069=.N;
         N24=22;
      END;
      ELSE IF H00068=.D AND H00069=. THEN DO;
         H00069=.N;
         N24=23;
      END;
      ELSE IF H00068=.D AND H00069 NE . THEN DO;
         H00069=.C;
         N24=24;
      END;
      ELSE IF H00068 IN (.,.A) AND H00069 IN (2,3,4,5) THEN DO;
         H00066=1;
         N24=25;
      END;
      ELSE IF H00068 IN (.,.A) AND H00069 IN (1,.,.A) THEN N24=26;
   END;
   ELSE IF H00066 IN (.A,.) AND H00067=.D THEN DO; /*MRE/blank*/
      IF H00068 NE . AND H00069 NE .  THEN DO;
         H00068=.C;
         H00069=.C;
         N24=27;
      END;
      ELSE IF H00068 NE . AND H00069=.  THEN DO;
         H00068=.C;
         H00069=.N;
         N24=28;
      END;
      IF H00068=. AND H00069=.  THEN DO;
         H00068=.N;
         H00069=.N;
         N24=29;
      END;
      ELSE IF H00068=. AND H00069 NE .  THEN DO;
         H00068=.N;
         H00069=.C;
         N24=30;
      END;
   END;

/** Note 25 - gender H00070, SEX, H00071, H00072--H00076B, XSEXA */

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


   IF H00071 > 0 THEN MALE=1;     /* prostate */
   ELSE MALE = 0;
   IF H00072>0 OR H00073A>0 OR H00073B>0 OR H00074>0 OR H00075>0
      OR H00076A>0 OR H00076B>0  THEN FMALE=1; /* mammogram/pap smear/PREGNANT*/
   ELSE FMALE = 0;
   IF H00070=. OR H00070=.A THEN DO;
      IF (SEX='F' AND MALE AND FMALE) THEN DO;
         N25A=1;
         XSEXA=2;
      END;
      ELSE IF (SEX='F' AND MALE=0 AND FMALE=0) THEN DO;
         N25A=2;
         XSEXA=2;
      END;
      ELSE IF (SEX='M' AND MALE AND FMALE) THEN DO;
         N25A=3;
         XSEXA=1;
      END;
      ELSE IF (SEX='M' AND MALE=0 AND FMALE=0) THEN DO;
         N25A=4;
         XSEXA=1;
      END;
```

```
      ELSE IF MALE AND NOT FMALE THEN DO;
         N25A=5;
         XSEXA=1;
      END;
      ELSE IF FMALE AND NOT MALE THEN DO;
         N25A=6;
         XSEXA=2;
      END;
      ELSE IF (SEX='Z' AND MALE AND FMALE) THEN DO;
         N25A=7;
         XSEXA=.;
      END;
      ELSE IF (SEX='Z' AND MALE=0 AND FMALE=0) THEN DO;
         N25A=8;
         XSEXA=.;
      END;
   END;
   ELSE IF (H00070=1) THEN DO;
      IF MALE AND NOT FMALE THEN DO;
         N25A=9;
         XSEXA=1;
      END;
      ELSE IF NOT MALE AND FMALE THEN DO;
         IF SEX='F' THEN DO;
            N25A=10;
            XSEXA=2;
         END;
         ELSE DO;
            N25A=11;
            XSEXA=1;
         END;
      END;
      ELSE IF MALE AND FMALE THEN DO;
         N25A=12;
         XSEXA=1;
      END;
      ELSE IF MALE=0 AND FMALE=0 THEN DO;
         N25A=13;
         XSEXA=1;
      END;
   END;
   ELSE IF (H00070=2) THEN DO;
      IF NOT MALE AND FMALE THEN DO;
        N25A=14;
        XSEXA=2;
      END;
      ELSE IF MALE AND NOT FMALE THEN DO;
         IF SEX='M' THEN DO;
           N25A=15;
           XSEXA=1;
         END;
         ELSE DO;
            N25A=16;
            XSEXA=2;
         END;
      END;
      ELSE IF MALE AND FMALE THEN DO;
         N25A=17;
         XSEXA=2;
      END;
      ELSE IF MALE=0 AND FMALE=0 THEN DO;
         N25A=18;
         XSEXA=2;
      END;
   END;

/* Note 25b - gender vs prostate */

   IF XSEXA=1 THEN N25B=1;    /* male    */
   ELSE IF XSEXA=2 THEN DO;   /* female  */
      IF H00071 NE . THEN DO;
```

```
         N25B=2;
         H00071=.C;
      END;                    /*inconsistent resp */
      ELSE DO;
         N25B=3;
         H00071=.N;
      END;                    /* valid skip   */
   END;
   ELSE IF XSEXA=. THEN DO;   /*  missing sex */
      N25B=4;
      H00071=.;
   END;

/* Note 25c - gender vs mammogram/paps */
/*   REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM OR PAP SMEAR ENTRIES  */

   ARRAY NOTE25C H00072 H00073A H00073B H00074 H00075 H00076A H00076B;

   IF H00072 NE . OR H00073A NE . OR H00073B NE . OR H00074 NE . OR
      H00075 NE . OR H00076A NE . OR H00076B NE . THEN FMALE=1; /* mammogram or pap smear
*/
   ELSE FMALE = 0;
   IF XSEXA=1 THEN DO;   /* male */
      IF FMALE=0 THEN DO;
         N25C=1;
         DO OVER NOTE25C;
            NOTE25C=.N;
         END;
      END; /* inconsistent response */
      ELSE IF FMALE=1 THEN DO;
         N25C=2;
         DO OVER NOTE25C;
            IF NOTE25C=. THEN NOTE25C = .N;
            ELSE NOTE25C=.C;
         END;
      END;   /* valid skip */
   END;
   ELSE IF XSEXA=2 THEN  N25C=3; /* female */
   ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
      N25C=4;
      DO OVER NOTE25C;
         NOTE25C=.;
      END;
   END;

   DROP MALE FMALE;

/* Note 26 - breast exam for female 40 or over  */
/* Note 1999 -- no self reported age variable  */
/* Note no dob variable  -- macro not used     */

   IF XSEXA=1 THEN DO;  /* male */
      IF  (H00073A=.C OR H00073A=.N) AND (H00073B=.C OR H00073B=.N)
      AND (H00074=.C OR H00074=.N)  THEN N26 = 1;
   END;
   ELSE IF XSEXA=2 THEN DO;
      IF H00073A=2 THEN N26=2;         /* female 40 or over */
      ELSE IF H00073A=1 THEN DO;   /* female < 40 */
         IF H00073B NE . THEN H00073B=.C;
         ELSE H00073B=.N;
         IF H00074 NE . THEN H00074=.C;
         ELSE H00074=.N;
         N26=3;
      END;
      ELSE IF H00073A=.A THEN DO;
         IF H00073B NE . OR H00074 NE . THEN DO;
            H00073A=2;
            N26=4;
         END;
         ELSE IF H00073B=. AND H00074=. THEN DO;
            H00073A=1;
```

```
            IF H00073B NE . THEN H00073B=.C;
            ELSE H00074=.N;
            IF H00074 NE . THEN H00074=.C;
            ELSE H00074=.N;
            N26=5;
         END;
      END;
      ELSE IF H00073A=. THEN DO;
         IF H00073B NE . OR H00074 NE . THEN DO;
            H00073A=2;
            N26=6;
         END;
         ELSE IF H00073B=. AND H00074=. THEN DO;
            IF AGE<40 THEN DO;
               H00073A = 1;
               H00073B=.N;
               H00074=.N;
               N26=7;
            END;
            ELSE IF AGE >= 40 THEN DO;
               H00073A=1;
               H00073B=.N;
               H00074=.N;
               N26=8;
            END;
            ELSE IF AGE=. THEN N27=9;
         END;
      END;
   END;
   ELSE IF XSEXA=. THEN N27=10;

/* Note 27 - gender vs Pregnancy */

   IF XSEXA=1 THEN N27=1;          /* male     */
   ELSE IF XSEXA=2 THEN DO;        /* female   */
      IF H00075=1 THEN N27=2;      /* pregnant */
      ELSE IF H00075=2 THEN DO;
         IF H00076A=. THEN H00076A = .N;
         ELSE H00076A=.C;
         N27=3;
      END;
      ELSE IF H00075=3 THEN DO;
         IF H00076A=. THEN H00076A = .N;
         ELSE H00076A=.C;
         IF H00076B=. THEN H00076B=.N;
         ELSE H00076B=.C;
         N27=4;
      END;
      ELSE IF H00075 IN (., .A) THEN DO;
         IF H00076A NE . THEN DO;
            H00075=1;
            N27=5;
         END;
         ELSE IF H00076A=. THEN DO;
            IF H00075=. THEN N27=6;
            ELSE IF H00075=.A THEN DO;
               H00075=3;
               H00076A=.N;
               IF H00076B=. THEN H00076B=.N;
               ELSE H00076B=.C;
               N27=7;
            END;
         END;

      END;
   END;
   ELSE IF XSEXA=. AND H00075 IN (.,.A) THEN N27=8;



NOSURVEY:
```

```
/* missing values */

  ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
  MISS_TOT=0;
  DO OVER MISS;
     MISS = 0;
  END;
  ARRAY MISSARAY &VARLIST2.;

  DO OVER MISSARAY;
     IF (MISSARAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
     ELSE IF (MISSARAY EQ -8) THEN MISS_8 = MISS_8 + 1;
     ELSE IF (MISSARAY EQ -7) THEN MISS_7 = MISS_7 + 1;
     ELSE IF (MISSARAY EQ -6) THEN MISS_6 = MISS_6 + 1;
     ELSE IF (MISSARAY EQ -5) THEN MISS_5 = MISS_5 + 1;
     ELSE IF (MISSARAY EQ -4) THEN MISS_4 = MISS_4 + 1;
     ELSE IF (MISSARAY EQ -1) THEN MISS_1 = MISS_1 + 1;
  END;
  DO OVER MISS;
     MISS_TOT=MISS_TOT + MISS;
  END;

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

 OUTPUT;

RUN;


PROC FORMAT;
   VALUE GRID
     0='0'
     1-9999='>=1' ;
   VALUE $GRIDB
     1-5 = '1-5' ;
   VALUE $AGE
     018-039='<40'
     040-120='>=40';
   VALUE SCALE
     0-10='0-10';
   VALUE MARK
     1-6='Marked' ;
   VALUE MARKB
     2-7='Marked';

   VALUE MARKC
    1='1'
   2-HIGH='>1';

RUN;


PROC FREQ DATA=OUT.&OUTDATA;
  where flag_fin="1";
  TABLES &VARLIST1./missing list;
RUN;


PROC CONTENTS DATA=OUT.&OUTDATA;
RUN;

** first, examine initial recodes ;

PROC FREQ DATA=OUT.&OUTDATA;
   TABLES H00004_O*H00004
          H00011_O*H00011
          H00017_O*H00017
          H00061_O*H00061
          H00064_O*H00064
          H00071_O*H00071
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          H00072_O*H00072
          H00073BO*H00073B
          H00074_O*H00074
          H00062_O*H00062
          H00065_O*H00065
          H00076BO*H00076B
          H00067_O*H00067
          H00068_O*H00068/MISSING LIST;
   FORMAT _ALL_ ;
RUN;


/*
PROC FREQ DATA=OUT.&OUTDATA;
   where flag_fin="1";
   TABLES N1-N24 N25A N25B N25C N26 N27/MISSING LIST;
RUN;

*/

PROC MEANS DATA=OUT.&OUTDATA N NMISS MIN MAX SUM MEAN;
   TITLE3 'Frequency Checks - Missing Value Totals';
   VAR MISS_TOT MISS_1 MISS_4 MISS_5 MISS_6-MISS_9;
RUN;

%MACRO GETFREQS (NOTE,TABLES,FORMAT);

  PROC FREQ DATA=OUT.&OUTDATA;
      where flag_fin="1";
      TITLE3 "Freqency Checks - Note &NOTE.";
      TABLES &TABLES./MISSING LIST;
      FORMAT _ALL_;
      FORMAT &FORMAT.;
  RUN;

%MEND GETFREQS;

%GETFREQS(1,N1*H00001_O*H00002_O*H00001*H00002,H00001_O H00001 GRID.);

%GETFREQS(2,N2*H00006_O*H00007_O*H00006*H00007,H00007_O H00007 MARK.);

%GETFREQS(3,N3*H00008_O*H00008*H00009_O*H00009,
               H00009_O H00009 MARK.);

%GETFREQS(4,N4*H00010_O*H00011_O*H00012_O*H00010*H00011*H00012,
               H00011_O H00012_O H00011 H00012 MARK.);
%GETFREQS(5,N5*H00013_O*H00014_O*H00013*H00014,H00014_O H00014 MARK.);

%GETFREQS(6,N6*H00015_O*H00016_O*H00017_O*H00015*H00016*H00017,
               H00016_O H00017_O H00016 H00017 MARK.);
%GETFREQS(7,N7*H00018_O*H00019_O*H00018*H00019,H00019_O H00019 MARK.);

%GETFREQS(8,N8*H00020_O*H00021_O*H00022_O*H00020*H00021*H00022,
               H00021_O H00022_O H00021 H00022 MARK.);

%GETFREQS(9,N9*H00023_O*H00024_O*H00025_O*H00023*H00024*H00025,
               H00024_O H00025_O H00024 H00025  MARK.);

%GETFREQS(10,N10*H00027_O*H00028_O*H00029_O*H00030_O*H00031_O*H00032_O*H00033_O,
                 H00028_O H00029_O H00030_O H00031_O H00032_O H00033_O MARK.
                 H00027_O MARKB.);

%GETFREQS(11,N11*H00043_O*H00044_O*H00045_O*H00046_O*H00043*H00044*H00045*H00046,
                 H00044_O H00045_O H00046_O H00044 H00045 H00046 MARK.);

%GETFREQS(12,N12*H00047_O*H00048_O*H00047*H00048,H00048_O H00048 MARK.);

%GETFREQS(13,N13*H00049_O*H00050_O*H00049*H00050,H00050_O H00050 MARK.);

%GETFREQS(14,N14*H00051_O*H00052_O*H00053_O*H00051*H00052*H00053,
                 H00052_O H00053_O H00052 H00053 MARK.);
```

```
%GETFREQS(15,N15*H00054_O*H00055_O*H00054*H00055,H00055_O H00055 MARK.);


%GETFREQS(24,N24*H00066_O*H00067_O*H00068_O*H00069_O*H00066*H00067*H00068*H00069,
                 _all_ );

%GETFREQS(25A,N25A*H00070_O*H00070*PNSEXCD*XSEXA*H00072_O*H00073AO*H00073BO*H00074_O*
                   H00075_O*H00076AO*H00076BO,H00072_O H00073AO H00073BO H00074_O
                   H00075_O H00076AO H00076BO MARK. );

%GETFREQS(25B,N25B*H00071_O*H00071*XSEXA,H00071 H00071_O MARK.);

%GETFREQS(25C,N25C*XSEXA*H00072_O*H00073AO*H00073BO*H00074_O*H00075_O*H00076AO*
                   H00076BO,H00072_O H00073AO H00073BO H00074_O H00075_O H00076AO
                   H00076BO MARK.);

%GETFREQS(26,N26*XSEXA*DAGEQY*H00073AO*H00073BO*H00074_O*H00073A*H00073B*H00074,
                 H00073BO H00074_O H00073B H00074 MARK.);

%GETFREQS(27,N27*XSEXA*H00075_O*H00076AO*H00076BO*H00075*H00076A*H00076B,
                 H00076AO H00076BO H00076A H00076B MARK.);

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

        FORMAT H00000 YN.
               H00001  H00001_O HPLAN1_.
               H00002  H00002_O HPTIME.
               H00003A H00003B H00003C H00003F
               H00003G H00003H H00003I
               H00003J H00003K H00003L H00003M
               H00003AO H00003BO H00003CO H00003FO
               H00003GO H00003HO
               H00003IO H00003JO H00003KO
               H00003LO H00003MO HPLAN2_.
               H00004  H00004_O COST1_.
               H00006  H00006_O H00008 H00008_O
               H00010  H00010_O H00012 H00012_O
               H00013  H00013_O H00015 H00015_O H00018 H00018_O
               H00020  H00020_O H00023 H00023_O
               H00038  H00038_O H00039 H00039_O
               H00040  H00040_O H00049  H00049_O
               H00051  H00051_O H00054  H00054_O
               H00073A H00073AO YN.
               H00007  H00007_O PROB1_.
               H00009  H00009_O RATE1_.
               H00011  H00011_O PCMBASE.
               H00014  H00014_O PROB2_.
               H00016  H00016_O RATE2_.
               H00017  H00017_O YNOFT.
               H00019  H00019_O OFTEN2_.
               H00021  H00021_O OFTEN3_.
               H00022  H00022_O TIME1B_.
               H00024  H00024_O OFTEN4_.
               H00025  H00025_O TIME2_.
               H00026  H00026_O OFTEN5_.
               H00027  H00027_O OFTEN6_.
               H00028  H00028_O
               H00029  H00029_O PROB3_.
               H00030-H00036 H00030_O--H00036_O  OFTEN7_.
               H00037  H00037_O RATE3_.
               H00041  H00041_O OFTENPX.
               H00042  H00042_O PLACE.
               H00043  H00043_O YNDNK.
               H00044-H00046  H00044_O--H00046_O OFTEN9_.
               H00047  H00047_O YNINFO.
               H00048  H00048_O PROB8_.
               H00050  H00050_O PROB9_.
               H00052  H00052_O TIME4_.
               H00053  H00053_O SETTLED.
```

```
      H00055  H00055_O PROB10_.
      H00056  H00056_O RATE4_.
      H00057  H00057_O LIKELY.
      H00059  H00059_O COST2_.
      H00061  H00061_O TIME5_.
      H00062  H00062_O TIME6_.
      H00063  H00063_O YNBP_.
      H00064  H00064_O TIME7_.
      H00065  H00065_O TIME8_.
      H00066  H00066_O SMOKE.
      H00067  H00067_O TIME9_.
      H00068  H00068_O TIME10_.
      H00069  H00069_O OFTEN11_.
      H00070  H00070_O SEX.
      H00071  H00071_O TIME11_.
      H00072  H00072_O TIME12_.
      H00073B H00073BO TIME13_.
      H00074  H00074_O TIME14_.
      H00075  H00075_O YNPREG.
      H00076A H00076AO PREG1_.
      H00076B H00076BO PREG2_.
      SREDA   SREDA_O  EDUC.
      H00079  H00079_O HISP.
      H00083A--H00083I H00083AO H00083BO H00083CO H00083DO
      H00083EO H00083FO H00083GO H00083HO H00083IO
      H00084 H00084_O WHYMTF.
      H00085A--H00085J H00085AO H00085BO H00085CO H00085DO
      H00085EO H00085FO H00085GO H00085HO H00085IO
      H00085JO  SOURCES.
      SRRACEA SRRACEAO SRRACEB SRRACEBO SRRACEC SRRACECO
      SRRACED SRRACEDO SRRACEE SRRACEEO RACE.
      SRAGE   SRAGE_O  AGEGRP.
      S00I01 S00I01_O MEDA.
      S00I02 S00I02_O MEDB.
      S00I03 S00I03_O MEDSUPP.
      S00S01 S00S01_O Health.
      S00S02 S00S02_O LIMITACT.
      S00S03 S00S03_O DAILYWRK.
      S00S04 S00S04_O PAIN.
      S00S05 S00S05_O ENERGY.
      S00S06 S00S06_O LIMITSOC.
      S00S07 S00S07_O EMOTPROB.
      S00S08 S00S08_O EMOTACT.
      S00S09 S00S09_O HLTH1YR.
      H00077 TESTHLTH.
      MISS_1 MISS_4-MISS_9 MISS_TOT 4.
    ;

LABEL H00000='Are you the person listed on envelope'
      H00001_O='Which health plan did you use most'
      H00001  ='Which health plan did you use most'
      H00002_O='Years in a row w/health plan'
      H00002  ='Years in a row w/health plan'
      H00003AO='Health plan(s) covered: TRICARE Prime'
      H00003A ='Health plan(s) covered: TRICARE Prime'
      H00003BO='Health plan(s) covered: TRICARE Sr Prime'
      H00003B ='Health plan(s) covered: TRICARE Sr Prime'
      H00003CO='Health plan(s) covered: TRICARE Ext/Stnd'
      H00003C ='Health plan(s) covered: TRICARE Ext/Stnd'
      H00003FO='Health plan(s) covered: MEDICARE'
      H00003F ='Health plan(s) covered: MEDICARE'
      H00003GO='Health plan(s) covered: FEHBP'
      H00003G ='Health plan(s) covered: FEHBP'
      H00003HO='Health plan(s) covered: Medicaid'
      H00003H ='Health plan(s) covered: Medicaid'
      H00003IO='Health plan(s) covered: Civilian HMO'
      H00003I ='Health plan(s) covered: Civilian HMO'
      H00003JO='Health plan(s) covered: Other civilian'
      H00003J ='Health plan(s) covered: Other civilian'
      H00003KO='Health plan(s) covered: USFHP'
      H00003K ='Health plan(s) covered: USFHP'
```

```
H00003LO='Health plan(s) covered: Not sure'
H00003L ='Health plan(s) covered: Not sure'
H00003MO='Health plan(s) covered: Veterans'
H00003M ='Health plan(s) covered: Veterans'
H00004_O='How is enrllmnt fee paid'
H00004  ='How is enrllmnt fee paid'
H00006_O='When joined hlth plan, rcv new prsnl Dr'
H00006  ='When joined hlth plan, rcv new prsnl Dr'
H00007_O='Hlth plan: problem to get Dr happy with'
H00007  ='Hlth plan: problem to get Dr happy with'
H00008_O='Have one person you think of as prsnl Dr'
H00008  ='Have one person you think of as prsnl Dr'
H00009_O='Rating of your personal doctor or nurse'
H00009  ='Rating of your personal doctor or nurse'
H00010_O='Currently enrolled in TRICARE Prime'
H00010  ='Currently enrolled in TRICARE Prime'
H00011_O='TRICARE membr:prmry care mgr mil or cvl'
H00011  ='TRICARE membr:prmry care mgr mil or cvl'
H00012_O="Know your PCM's name"
H00012  ="Know your PCM's name"
H00013_O='In lst yr:you/dr think you needed spclst'
H00013  ='In lst yr:you/dr think you needed spclst'
H00014_O='In lst yr:how much prblm rfrl to spclst'
H00014  ='In lst yr:how much prblm rfrl to spclst'
H00015_O='In lst yr:did you see a specialist'
H00015  ='In lst yr:did you see a specialist'
H00016_O='Rating of specialist seen in last year'
H00016  ='Rating of specialist seen in last year'
H00017_O='In lst yr:spclst saw same as prsnl Dr '
H00017  ='In lst yr:spclst saw same as prsnl Dr '
H00018_O='In lst yr:call Dr for hlp/advice for slf'
H00018  ='In lst yr:call Dr for hlp/advice for slf'
H00019_O='In lst yr:when call how often get hlp nd'
H00019  ='In lst yr:when call how often get hlp nd'
H00020_O='In lst yr:make appts for reg hlth care'
H00020  ='In lst yr:make appts for reg hlth care'
H00021_O='In lst yr:appt reg hlth care when wanted'
H00021  ='In lst yr:appt reg hlth care when wanted'
H00022_O='In lst yr:days btwn appt & seeing prvder'
H00022  ='In lst yr:days btwn appt & seeing prvder'
H00023_O='In lst yr:illness/injury care right away'
H00023  ='In lst yr:illness/injury care right away'
H00024_O='In lst yr:get care as soon as wanted'
H00024  ='In lst yr:get care as soon as wanted'
H00025_O='In lst yr:wait btwn try get care,see prv'
H00025  ='In lst yr:wait btwn try get care,see prv'
H00026_O='In lst yr:goto emrgncy rm for own care'
H00026  ='In lst yr:goto emrgncy rm for own care'
H00027_O="In lst yr:goto Dr office/clinic for care"
H00027  ="In lst yr:goto Dr office/clinic for care"
H00028_O='In lst yr:prblm to get care thght ncssry'
H00028  ='In lst yr:prblm to get care thght ncssry'
H00029_O='In lst yr:prblm w/dlys waiting for apprv'
H00029  ='In lst yr:prblm w/dlys waiting for apprv'
H00030_O='In lst yr:wait > 15 min past appt see Dr'
H00030  ='In lst yr:wait > 15 min past appt see Dr'
H00031_O='In lst yr:how oftn treat w/ crtsy/rspct'
H00031  ='In lst yr:how oftn treat w/ crtsy/rspct'
H00032_O='In lst yr:how oftn staff helpful'
H00032  ='In lst yr:how oftn staff helpful'
H00033_O='In lst yr:how oftn Drs listen to you'
H00033  ='In lst yr:how oftn Drs listen to you'
H00034_O='In lst yr:how oftn Drs explain things'
H00034  ='In lst yr:how oftn Drs explain things'
H00035_O='In lst yr:how oftn Drs show respect'
H00035  ='In lst yr:how oftn Drs show respect'
H00036_O='In lst yr:how oftn Drs spend enough time'
H00036  ='In lst yr:how oftn Drs spend enough time'
H00037_O='Rating of all health care in last year'
H00037  ='Rating of all health care in last year'
H00038_O='Is MTF convenient'
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H00038  ='Is MTF convenient'
H00039_O='How much healthcare from MTF'
H00039  ='How much healthcare from MTF'
H00040_O='How many prescriptions from MTF Pharm'
H00040  ='How many prescriptions from MTF Pharm'
H00041_O='In lst yr:prscrptns by cvl,filled at mil'
H00041  ='In lst yr:prscrptns by cvl,filled at mil'
H00042_O='In lst yr:fclty used most for hlth care '
H00042  ='In lst yr:fclty used most for hlth care '
H00043_O='In lst yr:send in any claims'
H00043  ='In lst yr:send in any claims'
H00044_O='In lst yr:hlth pln handle in rsnble time'
H00044  ='In lst yr:hlth pln handle in rsnble time'
H00045_O='In lst yr:how oftn handle correctly'
H00045  ='In lst yr:how oftn handle correctly'
H00046_O='In lst yr:before care, know amt to pay'
H00046  ='In lst yr:before care, know amt to pay'
H00047_O='In lst yr:info in written materials'
H00047  ='In lst yr:info in written materials'
H00048_O='In lst yr:prblm to find/undrstnd mtrls'
H00048  ='In lst yr:prblm to find/undrstnd mtrls'
H00049_O="In lst yr:health plan's cstmr srvc help"
H00049  ="In lst yr:health plan's cstmr srvc help"
H00050_O='In lst yr:prblm get help from cstmr srvc'
H00050  ='In lst yr:prblm get help from cstmr srvc'
H00051_O='Called or written plan w/complaint/prblm'
H00051  ='Called or written plan w/complaint/prblm'
H00052_O='How long for hlth pln to resolve cmplnt'
H00052  ='How long for hlth pln to resolve cmplnt'
H00053_O='Complaint/prblm settled to satisfaction'
H00053  ='Complaint/prblm settled to satisfaction'
H00054_O='In lst yr:experiences w/ paperwork'
H00054  ='In lst yr:experiences w/ paperwork'
H00055_O='In lst yr:problems w/ paperwork'
H00055  ='In lst yr:problems w/ paperwork'
H00056_O='Rating of all experience w/health plan'
H00056  ='Rating of all experience w/health plan'
H00057_O='In nxt yr:lkly to dsnrl in TRICARE Prime'
H00057  ='In nxt yr:lkly to dsnrl in TRICARE Prime'
H00059_O='In last year:expnses not cvrd hlth plan'
H00059  ='In last year:expnses not cvrd hlth plan'
H00061_O='Not sick/prgnt: last mdcl/physcl exam'
H00061  ='Not sick/prgnt: last mdcl/physcl exam'
H00062_O='Blood pressure: when last reading'
H00062  ='Blood pressure: when last reading'
H00063_O='Blood pressure: know if too high or not'
H00063  ='Blood pressure: know if too high or not'
H00064_O='When last have cholesterol screening'
H00064  ='When last have cholesterol screening'
H00065_O='When did you last have a flu shot'
H00065  ='When did you last have a flu shot'
H00066_O='Smoked  at least 100 cigarettes in life'
H00066  ='Smoked  at least 100 cigarettes in life'
H00067 ='Smoke everyday, some days or not at all'
H00067_O ='Smoke everyday, some days or not at all'
H00068_O='How long since you quit smoking'
H00068  ='How long since you quit smoking'
H00069_O='Lst year: # vst advised to quit smoking'
H00069  ='Lst year: # vst advised to quit smoking'
H00070_O="Are you male or female"
H00070  ="Are you male or female"
H00071_O='Last prostate disease exam or blood test'
H00071  ='Last prostate disease exam or blood test'
H00072_O='Last have a Pap smear test'
H00072  ='Last have a Pap smear test'
H00073AO='Are you under age 40 '
H00073A ='Are you under age 40 '
H00073BO='Last time: breasts checked mammography'
H00073B ='Last time: breasts checked mammography'
H00074_O='Last time: breast exam by professional'
H00074  ='Last time: breast exam by professional'
```

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H00075_O='Been pregnant in last yr or pregnant now'
H00075  ='Been pregnant in last yr or pregnant now'
H00076AO='In what trimester is your pregnancy'
H00076A ='In what trimester is your pregnancy'
H00076BO='Trimester first received prenatal care '
H00076B ='Trimester first received prenatal care '
H00077  ='Health during past 4 weeks - recode '
SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H00079_O='Are you Spanish/Hispanic/Latino'
H00079  ='Are you Spanish/Hispanic/Latino'
H00083A ='Decision to use MTF:Cost'
H00083AO='Decision to use MTF:Cost'
H00083B ='Decision to use MTF:location'
H00083BO='Decision to use MTF:location'
H00083C ='Decision to use MTF:Quality'
H00083CO='Decision to use MTF:Quality'
H00083D ='Decision to use MTF:Phone Access'
H00083DO='Decision to use MTF:Phone Access'
H00083E ='Decision to use MTF:Timeliness'
H00083EO='Decision to use MTF:Timeliness'
H00083F ='Decision to use MTF:Courtesy'
H00083FO='Decision to use MTF:Courtesy'
H00083G ='Decision to use MTF:Personal Relationship'
H00083GO='Decision to use MTF:Personal Relationship'
H00083H ='Decision to use MTF:Co-location'
H00083HO='Decision to use MTF:Co-location'
H00083I ='Decision to use MTF:Lack Paperwork'
H00083IO='Decision to use MTF:Lack Paperwork'
H00084  ='Most important reason to use MTF'
H00084_O='Most important reason to use MTF'
H00085A ='Sources of Info: Retiree Newsletter'
H00085AO='Sources of Info: Retiree Newsletter'
H00085B ='Sources of Info: Benefits Advisor'
H00085BO='Sources of Info: Benefits Advisor'
H00085C ='Sources of Info: Pamphlets'
H00085CO='Sources of Info: Pamphlets'
H00085D ='Sources of Info: Internet'
H00085DO='Sources of Info: Internet'
H00085E ='Sources of Info: Base Newspaper'
H00085EO='Sources of Info: Base Newspaper'
H00085F ='Sources of Info: Pay statement'
H00085FO='Sources of Info: Pay statement'
H00085G ='Sources of Info: TV'
H00085GO='Sources of Info: TV'
H00085H ='Sources of Info: Radio'
H00085HO='Sources of Info: Radio'
H00085I ='Sources of Info: Friends/relatives'
H00085IO='Sources of Info: Friends/relatives'
H00085J ='Sources of Info: BCACs'
H00085JO='Sources of Info: BCACs'
SRRACEAO='Race: White '
SRRACEA ='Race: White '
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asian'
SRRACED ='Race: Asian'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'
S00I01  ='Currently Covered Medicare Part A'
S00I01_O='Currently Covered Medicare Part A'
S00I02  ='Currently Covered Medicare Part B'
S00I02_O='Currently Covered Medicare Part B'
S00I03  ='Currently Covered Medicare Supplemental'
S00I03_O='Currently Covered Medicare Supplemental'
S00S01  ='Health during past 4 weeks'
S00S01_O='Health during past 4 weeks'
```

```
              S00S02  ='Health prblms limit physical activity'
              S00S02_O='Health prblms limit physical activity'
              S00S03  ='Difficulty doing daily work b/c hlth prblms'
              S00S03_O='Difficulty doing daily work b/c hlth prblms'
              S00S04  ='How much bodily pain during Past 4 weeks'
              S00S04_O='How much bodily pain during Past 4 weeks'
              S00S05  ='Energy during Past 4 weeks'
              S00S05_O='Energy during Past 4 weeks'
              S00S06  ='Physical/Emotional hlth limit social'
              S00S06_O='Physical/Emotional hlth limit social'
              S00S07  ='Bothered by emotional problems'
              S00S07_O='Bothered by emotional problems'
              S00S08  ='Personal/emotional prblms keep from work'
              S00S08_O='Personal/emotional prblms keep from work'
              S00S09  ='Rate health compared to one year ago'
              S00S09_O='Rate health compared to one year ago'
              MISS_1 = "Count of: Violates Skip Pattern"
              MISS_4 = "Count of: Incomplete grid error"
              MISS_5 = "Count of: Scalable reponse of Don't know"
              MISS_6 = "Count of: Not applicable - valid skip"
              MISS_7 = "Count of: Out-of-range error"
              MISS_8 = "Count of: Multiple response error"
              MISS_9 = "Count of: No response - invalid skip"
              MISS_TOT = "Total number of missing responses"
              XSEXA = "Male or Female  - R"
            ;
```

3. CREATE STATUS FLAG FOR RECORD SELECTION

```
***************************************************************************
*
* PROGRAM: SELECTQ.SAS
* TASK:    QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (8687-100)
* PURPOSE: ASSIGN FINAL STATUS FOR RECORD SELECTION PURPOSES.
* WRITTEN: 12/14/2000 BY KEITH RATHBUN
*
* INPUTS:  1) CSCHM00Q.SD2 - 2000 Quarterly DOD Health Survey Data
*
* OUTPUTS: 1) SELECTQ.SD2 - 2000 Quarterly DOD Health Survey Data w/FNSTATUS
*
***************************************************************************
*;
LIBNAME IN      "...\DATA\AFINAL";
LIBNAME OUT     "...\DATA\AFINAL";
LIBNAME LIBRARY "...\DATA\AFINAL\FMTLIB";

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

PROC SORT DATA=IN.CSCHM00Q OUT=TEMPA1; BY MPRID; RUN;

DATA TEMPA2 OUT.DUPSA;
   SET TEMPA1;
   BY MPRID;
   /*********************************************************************/
   /** KEY VARIABLES (Total=29)                                        **/
   /*********************************************************************/
   ARRAY KEYVAR H00001 H00006 H00007 H00008 H00009 H00010 H00011 H00013
                H00015 H00016 H00018 H00019 H00020 H00023 H00024 H00026
                H00027 H00028 H00030 H00037 H00042 H00047 H00049 H00054
                H00056 S00S01 H00079 SREDA
                  ;
   ARRAY RACE(5) SRRACEA SRRACEB SRRACEC SRRACED SRRACEE;

   FLAGRACE = 0; DROP FLAGRACE;
   DO I = 1 TO DIM(RACE);
      IF RACE(I) EQ 1 THEN FLAGRACE = 1;
   END;

   KEYCOUNT = 0;
   DO I = 1 TO DIM(KEYVAR); DROP I;
      IF KEYVAR(I) NOT IN (.,.A,.O,.I,.B) THEN KEYCOUNT = KEYCOUNT + 1;
   END;
```

```
   KEYCOUNT = KEYCOUNT + FLAGRACE;

   /*********************************************************************/
   /** SET FLAG FOR DUPLICATES                                         **/
   /*********************************************************************/
   LENGTH DUPFLAG $3;
   DUPFLAG = 'NO';
   IF NOT (FIRST.MPRID AND LAST.MPRID) THEN DUPFLAG = 'YES';

   /*********************************************************************/
   /** DETERMINE FNSTATUS                                              **/
   /*********************************************************************/
   FNSTATUS = 0;
   IF FLAG_FIN = "1" THEN DO;
      ************************************************************
      **** APPLY THE COMPLETE QUESTIONNAIRE RULE (50% OF KEY   ****
      **** VARIABLES).                                          ****
      ************************************************************;
      IF KEYCOUNT GT 14 THEN FNSTATUS = 11;
      ELSE FNSTATUS = 12;
   END;
   ELSE IF FLAG_FIN IN("3","6","8","10","11","14","16","21") THEN DO;
      FNSTATUS = 20;
   END;
   ELSE IF FLAG_FIN IN("2","4","5","7","12","13","15") THEN DO;
      FNSTATUS = 30;
   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.DUPSA;
   ELSE OUTPUT TEMPA2;

RUN;

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

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

DATA OUT.SELECTQ;
   SET TEMPA2 DEDUPED;
   LABEL FNSTATUS = "Final Status"
         DUPFLAG  = "Multiple Response Indicator"
         STRATUM  = "Sampling STRATUM"
         KEYCOUNT = "# Key Questions Answered (Out of 29)"
        ;
RUN;

TITLE1 "Quarterly DOD Health Survey FNSTATUS assignment (8687-100)";
TITLE2 "Program Name: SELECTQ.SAS By Keith Rathbun";
TITLE3 "Program Output: SELECTQ.SD2";

PROC CONTENTS DATA=OUT.SELECTQ; RUN;
```

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

4. CONSTRUCTED VARIABLES FOR ANALYSIS

```
*******************************************************************************
* PROGRAM:   CONVARQ.SAS
* WRITTEN:   2/3/99 BY KELLY WHITE
* UPDATED:   2/29/2000 BY NATALIE JUSTH
* UPDATED:   11/16/2000 BY JOAN JAMES
* UPDATED FOR QUARTERLY 2001:  1/22/2001 BY NATALIE JUSTH
* UPDATED FOR QUARTER 2 2001:  6/5/2001 BY NATALIE JUSTH
*                              UPDATES NOTED WITH NJ_Q2
* UPDATED FOR QUARTER 3 2001:  8/20/2001 BY NATALIE JUSTH
* UPDATED FOR QUARTER 4 2001: 12/11/2001 BY NATALIE JUSTH, REMOVED KENRINTN
*            AND CHANGE DAGEQY TO FIELDAGE.
*
* PURPOSE:   TO CREATE 5 INDEPENDENT VARIABLES: XENRLLMT, XENR_PCM, XINS_COV
*            XQENROLL,  XBNFGRP
*            1 INDEPENDENT VARIABLE ALREADY CREATED FROM DEERS-BFGROUPP
*            TO CREATE DEPENDENT VARIABLES: KENRINTN, KDISENRL, KBGPRB1,
*            KBGPRB2, KMILOFFC, KCIVOFFC, KMILOPQY, KCIVOPQY, HP_PRNTL, HP_MAMOG,
*            HP_PAP, HP_BP, HP_FLU, HP_PROS, KCIVINS, KMEDIGAP, KCOST_2 KPRSCPTN
* INPUT:     J:\DOD\Q4_2000\DATA\AFINAL\SELECTQ.SD2
* OUTPUT:    J:\DOD\Q4_2000\DATA\AFINAL\CONVARQ.SD2
*******************************************************************************
*;

/* NOTES ON UPDATES FOR QUARTER 1 2000
1.  ZAGE has been changed to DAGEQY
2.  ENGROUPP and BFGROUPP have been combined into 1 variable, ENBGSMPL
3.  Note that XENR_PCM is missing the group 65+, civilian PCM
4.  Note that XENRLLMT=5 now includes 65+, civilian PCM
5.  Cannot construct KMILWAT1, KCIVWAT1
6.  KMILOFFC, KCIVOFFC - now it is a wait of 15 minutes rather than 30 minutes
7.  H00042 has more categories this year than just military and civilian.  The 2 new
    categories are civilian and are included in appropriate constructed variables.
8.  Changed the name of KMILOP99 and KCIVOP99 to KMILOPQY and KCIVOPQY
9.  KPRSCPTN how looks at 6 or more, not 7 or more
*/

LIBNAME IN '...\DATA\AFINAL';
LIBNAME LIBRARY '...\DATA\AFINAL\FMTLIB';
OPTIONS PS=78 LS=124 ERRORS=2 CENTER ;
TITLE1 '2000 Quarter 4 Health Care Survey of DoD Beneficiaries Study - Adult Form A';
TITLE2 'CREATE CONSTRUCTED & OUTCOME MEASURE VARIABLES';


DATA IN.CONVARQ(KEEP=XENRLLMT XENR_PCM XINS_COV XQENROLL XREGION ENBGSMPL XBNFGRP
                     KDISENRL KMILOFFC KCIVOFFC KBGPRB1 KBGPRB2
                     KMILOPQY KCIVOPQY HP_PRNTL HP_MAMOG HP_MAM50 HP_PAP HP_BP HP_FLU
HP_PROS
                     MPRID KCIVINS KMEDIGAP KCOST_2 HP_GP HP_CHOL HP_BRST HP_SMOKE
KPRSCPTN KBRSTCR
                     OUTCATCH LEGDDSCD)
     CONVARQ;
   SET IN.SELECTQ;



LABEL
   XENRLLMT    =  "Enrollment in TRICARE Prime"
   XENR_PCM    =  "Enrollment by PCM type"
   XINS_COV    =  "Insurance Coverage"
   XQENROLL    =  "Enrllmnt accordng to questionre rspnse"
   XBNFGRP     =  "Constructed Beneficiary Group"
/*   KENRINTN    =  "Intention to enroll         "  */
```

```
   KDISENRL    =  "Intention to disenroll      "
   KMILOFFC    =  "Office wait of 15 min or more-Mil"
   KCIVOFFC    =  "Office wait of 15 min or more-Civ"
   KBGPRB1     =  "Big problem getting referrals to spclst"
   KBGPRB2     =  "Big problem getting necessary care"
   KMILOPQY    =  "Outpatient visits to Military facility"
   KCIVOPQY    =  "Outpatient visits to Civilian facility"
   KPRSCPTN    =  "7 or > civ prscrptns filled by mil phmcy"
   HP_PRNTL    =  "Prgnt in lst yr, received cre 1st trimstr"
   HP_MAMOG    =  "Women 40>=, mammography in pst 2 yrs"
   HP_MAM50    =  "Women 50>=, mammography in pst 2 yrs"
   HP_PAP      =  "All women, Pap smear in lst 3 yrs"
   HP_BP       =  "Bld prsre chck in lst 2 yrs,know rslts"
   HP_FLU      =  "65 and older, flu shot in lst 12 mnths"
   HP_PROS     =  "Men 50>=, prostrate exam in lst 12 mnths"
   HP_GP       =  "General physical exam in lst 12 mnths"
   HP_CHOL     =  "Cholesterol screening in lst 5 yrs"
   HP_SMOKE    =  "Advised to quit smoking in lst 12 mnths"
   HP_BRST     =  "Women >=40, breast exam in lst 12 mnths"
   KCIVINS     =  "Beneficiary coverd by civilian insurance"
   KMEDIGAP    =  "Beneficiary covered by Medigap"
   KCOST_2     =  "Out-of-pocket costs > $500"
   KBRSTCR     =  "Women 40>= ever had mammogram & brst exm"
   OUTCATCH    =  "Out of catchment area indicator"
   ;


FORMAT
   XENRLLMT       ENROLL.
   XENR_PCM       PCM.
   XINS_COV       INSURE.
   XQENROLL       PCM.
   XBNFGRP        XBGC_S.
/*   KENRINTN       HAYNN.    */
   KDISENRL       HAYNN.
   KMILOFFC       HAYNN.
   KCIVOFFC       HAYNN.
   KBGPRB1        HAYNN.
   KBGPRB2        HAYNN.
   KMILOPQY       HAGRID.
   KCIVOPQY       HAGRID.
   KPRSCPTN       HAYNN.
   HP_PRNTL       PRNTL.
   HP_MAMOG       HAYNN.
   HP_MAM50       HAYNN.
   HP_PAP         HAYNN.
   HP_BP          HAYNN2_.
   HP_FLU         HAYNN.
   HP_PROS        HAYNN.
   HP_GP          HAYNN.
   HP_CHOL        HAYNN.
   HP_SMOKE       HAYNN.
   HP_BRST        HAYNN.
   KCIVINS        HAYNN2_.
   KMEDIGAP       HAYNN2_.
   KBRSTCR        HAYNN.
   KCOST_2        COST.
   OUTCATCH       OCATCH.
   LEGDDSCD       $DDSFMT.
   ;



/* CREATE INDEPENDENT VARIABLES */



/* XENRLLMT--ENROLLMENT STATUS */
IF 18 <= FIELDAGE < 65 THEN DO;
   IF ENBGSMPL = 1 THEN XENRLLMT = 1;                    /*   Active duty (<65) */
```

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

/* XENR_PCM--ENROLLMENT BY PCM TYPE */
IF 18 <= FIELDAGE < 65 THEN DO;
   IF ENBGSMPL = 1 THEN XENR_PCM = 1;              /*   Active duty (<65)        */
   ELSE IF ENBGSMPL IN (3, 6) THEN XENR_PCM = 2;   /*   Enrolled (<65) - mil PCM */
   ELSE IF ENBGSMPL IN (2, 5) THEN XENR_PCM = 3;   /*   Enrolled (<65) - civ PCM */
   ELSE IF ENBGSMPL IN (4, 7) THEN XENR_PCM = 4;   /*   Not Enrolled (<65)       */
END;
 ELSE IF FIELDAGE > = 65 THEN DO;
    IF ENBGSMPL = 10 THEN XENR_PCM = 5;            /*  Not Enrolled (65+)       */
    IF ENBGSMPL = 9 THEN XENR_PCM = 6;             /*  Enrolled (65+)-mil PCM   */
    IF ENBGSMPL = 8 THEN XENR_PCM = 7;             /*  Enrolled (65+)-civ PCM   */
/*NJ_Q2*/
 END;

/* XINS_COV--INSURANCE COVERAGE */
IF XENRLLMT = 1 THEN XINS_COV =1;                                  /* Prime <65-Active
Duty */
  ELSE IF 18 <= FIELDAGE  < 65 AND H00001 IN (1,2) THEN XINS_COV = 2; /* Prime <65-Non-
active Duty */
  ELSE IF H00001 = 3 THEN XINS_COV = 3;                             /* Standard/Extra */
  ELSE IF H00001 = 4 THEN XINS_COV = 4;                             /* Medicare A or B*/
  ELSE IF H00001 IN (5, 6, 7, 8, 9) THEN XINS_COV = 5;              /* Other civilian
health insurance*/
  ELSE IF FIELDAGE >= 65 THEN DO;
     IF XENRLLMT = 5 AND H00001 IN (1,2) THEN XINS_COV=6;           /* Prime, >= 65 */
  END;


/* XQENROLL--ENROLLMENT ACCORDING TO QUESTIONNAIRE RESPONSES AND */
/* USING DEERS SAMPLING VALUES  */
IF ENBGSMPL = 1 AND 18 <= FIELDAGE < 65 THEN XQENROLL = 1;   /* Active Duty (<65)*/

   ELSE IF 18 <= FIELDAGE < 65 AND H00010 = 1 THEN DO;
      IF H00011 = 1 THEN XQENROLL = 2;                     /*  Enrolled (<65) - mil PCM
*/
      ELSE IF H00011 = 2 THEN XQENROLL = 3;                /*  Enrolled (<65) - civ PCM
*/

      ELSE IF H00011 = 3 THEN DO;
         IF ENBGSMPL IN (3, 6) THEN XQENROLL = 2;          /* Enrolled (<65) - Mil PCM */
         ELSE IF ENBGSMPL IN (2, 5) THEN XQENROLL = 3;     /* Enrolled (<65) - Civ PCM */
      END;
   END;
   ELSE IF H00010 NE 1 THEN DO;
      IF 18 <= FIELDAGE < 65 THEN XQENROLL = 4;            /* Not enrolled (<65)   */
      ELSE IF FIELDAGE >= 65 THEN XQENROLL = 5;              /* Not enrolled (>=65) */
   END;


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

```
/* CREATE DEPENDENT VARIABLES */

/* KENRINTN--INTENTION TO ENROLL */
/*IF H00058  IN (4, 5) THEN KENRINTN = 1;
   ELSE IF H00058  IN (1, 2, 3, -5) THEN KENRINTN = 2;  */

/* KDISENRL--INTENTION TO DISNEROLL */
IF H00057  IN (4, 5) THEN KDISENRL = 1;                  /* Yes */
   ELSE IF H00057  IN (1, 2, 3, -5) THEN KDISENRL = 2;    /* No  */

/* KMILWAT1--WAIT LESS THAN 4 WEEKS FOR WELL PATIENT VISIT AT MIL FACILITIES
   KCIVWAT1--WAIT LESS THAN 4 WEEKS FOR WELL PATIENT VISIT AT CIV FACILITIES*/
/* NOTE: no equivalent question to H99042 in the current survey;
IF H00042  = 1 THEN DO;
   IF H99042  IN (1, 2) THEN KMILWAT1 = 1;
   ELSE IF H99042  IN (3,4) THEN KMILWAT1 = 2;
END;
ELSE IF H00042  IN (2, 3, 4) THEN DO;
   IF H99042  IN (1, 2) THEN KCIVWAT1 = 1;
   ELSE IF H99042  IN (3,4) THEN KCIVWAT1 = 2;
END;
*/

/* KMILOFFC--OFFICE WAIT OF 15 MINUTES OR MORE AT MILITARY FACILITES
   KCIVOFFC--OFFICE WAIT OF 15 MINUTES OR MORE AT CIVILIAN FACILITES */
IF H00042  = 1 THEN DO;                                 /* Military */
   IF H00030  IN (3,4) THEN KMILOFFC = 1;               /* Yes */
   ELSE IF H00030  IN (1,2) THEN KMILOFFC = 2;          /* No  */
END;
   ELSE IF H00042 IN (2, 3, 4) THEN DO;                 /* Civilian */
      IF H00030 IN (3,4) THEN KCIVOFFC = 1;             /* Yes */
      ELSE IF H00030  IN (1,2) THEN KCIVOFFC = 2;       /* No */
   END;

/* KBGPRB1--BIG PROBLEM GETTING REFERRALS TO SPECIALISTS */
IF H00014 = 1 THEN KBGPRB1 = 1;                           /* YES */
   ELSE IF H00014 IN (2,3) THEN KBGPRB1 = 2;              /* NO  */

/* KBGPRB2--BIG PROBLEM GETTING NECESSARY CARE */
IF H00028 = 1 THEN KBGPRB2 = 1;                          /* YES */
    ELSE IF H00028 IN (2,3) THEN KBGPRB2 = 2;            /* NO  */

/* KMILOPQY--OUTPATIENT VISITS TO MILITARY FACILITY
   KCIVOPQY--OUTPATIENT VISITS TO CIVILIAN FACILITY */
IF H00042 = 1 THEN DO;
   KMILOPQY=H00027;
   KCIVOPQY=1;
END;
ELSE IF H00042 IN  (2, 3, 4) THEN DO;
   KCIVOPQY=H00027;
   KMILOPQY=1;
END;
ELSE IF H00042 = 5 THEN DO;
   KMILOPQY=1;
   KCIVOPQY=1;
END;

/* KPRSCPTN--6 OR MORE CIVILIAN PRESCRIPTIONS FILLED BY MILITARY PHARMACY */
IF H00041 IN (3,4,5) THEN KPRSCPTN = 1;      /* YES */
   IF H00041 IN (1,2) THEN KPRSCPTN = 2;     /* NO */

/* HP_PRNTL--IF PREGNANT LAST YEAR, RECEIVED PRENATAL CARE IN 1ST TRIMESTER */
IF H00075 IN (1,2) THEN DO;                                     /*   Pregnant in last
12 months   */
   IF H00076B = 4 THEN HP_PRNTL = 1;                            /*   Yes   */
      ELSE IF (H00076A = 1 AND H00076B = 1) THEN HP_PRNTL = .;    /* <3 months pregnant
now */
      ELSE IF H00076B IN (1,2,3) THEN HP_PRNTL = 2;               /*   No */
END;

/* HP_MAMOG--FOR WOMEN AGE 40 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS */
```

```
IF XSEXA = 2 AND FIELDAGE  >= 40 THEN DO;
   IF H00073B IN (5, 4) THEN HP_MAMOG = 1;            /* Yes */
   ELSE IF H00073B IN (1, 2, 3) THEN HP_MAMOG = 2;    /* No */
END;

/* HP_MAM50--FOR WOMEN AGE 50 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS */
IF XSEXA = 2 AND FIELDAGE  >= 50 THEN DO;
   IF H00073B IN (5, 4) THEN HP_MAM50 = 1;            /* Yes */
   ELSE IF H00073B IN (1, 2, 3) THEN HP_MAM50 = 2;    /* No */
END;

/* HP_PAP--FOR ALL WOMEN, HAD PAP SMEAR IN LAST 3 YEARS */
IF XSEXA = 2 THEN DO;
   IF H00072 IN (4, 5) THEN HP_PAP = 1;               /* Yes */
   ELSE IF H00072 IN (1, 2, 3) THEN HP_PAP = 2;       /* No  */
END;

/* HP_BP--HAD BLOOD PRESSURE SCREENING IN LAST 2 YEARS AND KNOW RESULT */
IF H00062 IN (2,3) AND H00063 IN (1,2) THEN HP_BP = 1;   /* Yes     */
   ELSE IF H00062 = 1 THEN HP_BP = 2;                    /* No      */
   ELSE IF H00062 < 0 OR H00063 < 0 THEN HP_BP = .;      /* Unknown */
   ELSE HP_BP = 2;                                       /* No      */

/* HP_FLU--FOR PERSON AGE 65 OR OVER, HAD FLU SHOT IN LAST 12 MONTHS */
IF FIELDAGE >= 65 THEN DO;
   IF H00065 = 4 THEN HP_FLU = 1;                     /*   Yes */
   ELSE IF H00065 IN (1, 2, 3) THEN HP_FLU = 2;       /*   No  */
END;

/* HP_PROS--FOR MEN AGE 50 AND OVER, HAD PROSTRATE EXAM W/IN PAST 12 MONTHS */
IF XSEXA = 1 AND FIELDAGE  >= 50 THEN DO;
   IF H00071 = 5 THEN HP_PROS = 1;                    /*   Yes */
   ELSE IF H00071 IN (1, 2, 3, 4) THEN HP_PROS = 2;   /*   No  */
END;

/* HP_GP--EXCEPT WHEN SICK OR PREGNANT, GENERAL PHYSICAL EXAM W/IN PAST 12 MONTHS */
IF H00061 = 5 THEN HP_GP = 1;                        /*   Yes    */
   ELSE IF H00061 IN (1, 2, 3, 4) THEN HP_GP = 2;    /*   No     */

/* HP_CHOL--HAD CHOLESTEROL SCREENING IN PAST 5 YEARS */
IF H00064 IN (3, 4, 5) THEN HP_CHOL = 1;             /*    Yes   */
   ELSE IF H00064 IN (1, 2) THEN HP_CHOL = 2;        /*    No    */

/* HP_SMOKE--ADVISED TO QUIT SMOKING IN PAST 12 MONTHS */
IF H00069 IN (2, 3, 4, 5) THEN HP_SMOKE = 1;         /*   Yes   */
   ELSE IF H00069 = 1 THEN HP_SMOKE = 2;             /*   No    */

/* HP_BRST--BREAST EXAM IN PAST 12 MONTHS */
IF XSEXA=2 AND FIELDAGE >= 40 THEN DO;
   IF H00074 = 5 THEN HP_BRST = 1;                   /*   Yes   */
   ELSE IF H00074 IN (1, 2, 3, 4) THEN HP_BRST = 2;  /*   No    */
END;

/* KCIVINS--IS BENEFICIARY COVERED BY CIVILIAN INSURANCE */
IF H00003G=1 OR H00003I=1 OR H00003J=1 THEN KCIVINS=1;           /* YES  */  /*NJ_Q2*/
   ELSE KCIVINS=2;                                               /* NO   */

/* KMEDIGAP--IS BENEFICIARY COVERED BY MEDIGAP */
IF H00003F=1 THEN KMEDIGAP=1;                        /*  YES */
   ELSE KMEDIGAP=2;                                  /*  NO  */

/* KCOST_2--OUT OF POCKET COSTS FOR OFFICE VISITS GREATER THAN $500 */
IF H00059 IN (3, 4, 5) THEN KCOST_2 = 1;             /* YES */
   ELSE IF H00059 IN (1, 2) THEN KCOST_2=2;          /* NO  */

/* KBRSTCR--WOMEN 40>=, EVER HAD MAMMOGRAM & EVER HAD BREAST EXAM */
IF XSEXA = 2 AND FIELDAGE  >= 40 THEN DO;
   IF (H00073B IN (5, 4, 3, 2) AND H00074 IN (5, 4, 3, 2)) THEN KBRSTCR = 1;   /* Yes */
   ELSE IF (H00073B = 1 OR H00074=1)  THEN KBRSTCR = 2;                        /* No */
END;
```

```
/* OUTCATCH -- OUT OF CATCHMENT AREA */
IF CACSMPL > 9900 THEN OUTCATCH=1;     /* Out of catchment area */
   ELSE OUTCATCH=0;                    /* Catchment area        */

*******************************************************************************************
**
* Collapse/Recode the DEERS dependent suffix for each possible range of values
*******************************************************************************************
**;
IF      "01" LE LEGDDSCD LE "19" THEN LEGDDSCD = "01"; * 01-19 = 'Dependent Child';
ELSE IF "30" LE LEGDDSCD LE "39" THEN LEGDDSCD = "30"; * 30-39 = 'Spouse of Sponsor';
ELSE IF "40" LE LEGDDSCD LE "44" THEN LEGDDSCD = "40"; * 40-44 = 'Mother of Sponsor';
ELSE IF "45" LE LEGDDSCD LE "49" THEN LEGDDSCD = "45"; * 45-49 = 'Father of Sponsor';
ELSE IF "50" LE LEGDDSCD LE "54" THEN LEGDDSCD = "50"; * 50-54 = 'Mother in law of
Sponsor';
ELSE IF "55" LE LEGDDSCD LE "59" THEN LEGDDSCD = "55"; * 55-59 = 'Father in law of
Sponsor';
ELSE IF "60" LE LEGDDSCD LE "69" THEN LEGDDSCD = "60"; * 60-69 = 'Chidren where # > 19';


DATA CONVARQ2;
   SET CONVARQ;
   WHERE FNSTATUS=11;
RUN;

/* CHECK RECONSTRUCTED 2000 VARIABLES */
PROC FREQ DATA=CONVARQ2;
 TABLES XENRLLMT XENR_PCM XINS_COV XQENROLL XREGION ENBGSMPL XBNFGRP
        KDISENRL KMILOFFC KCIVOFFC KBGPRB1 KBGPRB2
        KMILOPQY KCIVOPQY HP_PRNTL HP_MAMOG HP_MAM50 HP_PAP HP_BP HP_FLU KBRSTCR
        HP_PROS HP_GP HP_CHOL HP_SMOKE HP_BRST KCIVINS KMEDIGAP KCOST_2 KPRSCPTN OUTCATCH
LEGDDSCD
        / MISSING LIST;
 TITLE3 'ONE WAY FREQUENCIES ON 2000 RECONSTRUCTED VARIABLES';
 RUN;

/* CROSSTABS TO CHECK RECONSTRUCTION OF 2000 VARIABLES */
/* COLLAPSE AGE FOR CROSSTABS */
   PROC FORMAT;
     VALUE $AGE
             "018" -< "065" = "LESS THAN 65"
             "065" -< "120" = "65 OR OLDER"
             "O"      = "Out of range err"
             " "      = "Missing/unknown" ;
             RUN ;


   PROC FREQ DATA=CONVARQ2;
    TABLES FIELDAGE*ENBGSMPL*XENRLLMT
           FIELDAGE*ENBGSMPL*XENR_PCM
           FIELDAGE*XENRLLMT*H00001*XINS_COV
           FIELDAGE*H00010*H00011*ENBGSMPL*XQENROLL
           XENR_PCM*XQENROLL             /* compare enrollment by pcm & questionnaire */
           XREGION*CACSMPL
           FIELDAGE*ENBGSMPL*XBNFGRP
        /* H00058*KENRINTN */
           H00057*KDISENRL
        /* H99037*H99042*KMILWAT1*KCIVWAT1  Variables not used in Quarter 1 2000 */
           H00042*H00030*KMILOFFC*KCIVOFFC
           H00014*KBGPRB1
           H00028*KBGPRB2
           H00042*H00027*KMILOPQY
           H00042*H00027*KCIVOPQY
           H00041*KPRSCPTN
           H00075*H00076A*H00076B*HP_PRNTL
           XSEXA*FIELDAGE*H00073B*HP_MAMOG
           XSEXA*FIELDAGE*H00073B*HP_MAM50
           XSEXA*FIELDAGE*H00073B*H00074*KBRSTCR
           XSEXA*H00072*HP_PAP
           H00062*H00063*HP_BP
           FIELDAGE*H00065*HP_FLU
```

```
          XSEXA*FIELDAGE*H00071*HP_PROS
          H00061*HP_GP
          H00064*HP_CHOL
          H00066*H00067*H00068*H00069*HP_SMOKE
          FIELDAGE*XSEXA*H00074*HP_BRST
          H00003I*H00003J*KCIVINS
          H00003F*KMEDIGAP
          H00059*KCOST_2
          OUTCATCH*CACSMPL
          / MISSING LIST;
          FORMAT FIELDAGE $AGE.;
     TITLE3 'CROSSTABS ON ALL NEW VARIABLES';
           RUN;

   PROC FREQ DATA=CONVARQ2;
      tables XREGION*CACSMPL
          / MISSING LIST;
      format _all_;
   run;

/* COLLAPSE FOR MAMMOGRAPHY AND PROSTRATE XTAB*/
/*     PROC FORMAT ;
        VALUE AGE2_
             18 - 49 = "LESS THAN 50"
             50-HIGH = "50 OR OLDER"
             .O      = "Out of range err"
             .       = "Missing/unknown" ;
             RUN ;

         PROC FREQ DATA=CONVARQ2;
             TABLES XSEXA*FIELDAGE*H00073B*HP_MAMOG
                    XSEXA*FIELDAGE*H00071*HP_PROS
                    /MISSING LIST;
                    FORMAT FIELDAGE  AGE2_.;
         RUN;   */

   PROC CONTENTS DATA=IN.CONVARQ;
   RUN;
```

QUARTER IV ONLY

```
/*******************************************************************************
Project: 2000 Health Care Survey of DoD Beneficiaries Study
Program: CONVARSF.SAS
Purpose: The purpose of this program is to create the SF-8 (Health Status)
         variables as outlined in the SF-8 Manual.
         Variables created include:

         USE S* VARIABLES TO COMPUTE AVERAGE OF SCALES (NONMISSING VALUES):
         SF8PF, SF8RP, SF8RE, SF8VT, SF8MH, SF8SF, SF8BP, SF8GH

         Create physical health and mental health summary variables:
         PCS_8 MCS_8

         Create health status variables based on norms for general US
         population by age group: KMID_H, KMID_MH

         COMPUTE PHYSICAL HEALTH SUMMARY MEASURE (SF8PCS)
         AND MENTAL HEALTH SUMMARY MEASURE (SF8MCS).
         INTERMEDIATE VARIABLES CREATED HERE HAVE THE SAME NAMES AS THOSE
         IN SF-8 MANUAL

Date     :12/19/01
Author   :Natalie Justh
Input    : ...\DATA\AFINAL\SELECTQ.SD2
Output   : ...\DATA\AFINAL\CONVARSF.SD2
*******************************************************************************/
LIBNAME IN '...\DATA\AFINAL';
LIBNAME LIBRARY '...\DATA\AFINAL\FMTLIB';
LIBNAME OUT '...\DATA\AFINAL';

/*******************************************************************************/
```

```
/* RECODE AND RENAME VARIABLES INCLUDED IN Q4 QUESTIONNAIRE FOR SF8                 */
/*********************************************************************************/

DATA OUT.CONVARSF(KEEP=MPRID SF8PF SF8RP SF8BP SF8GH SF8VT SF8SF SF8RE SF8MH PCS_8 MCS_8
KMID_H KMID_MH);
   SET IN.SELECTQ;

   LENGTH SF8PF SF8RP SF8BP SF8GH SF8VT SF8SF SF8RE SF8MH KMID_H KMID_MH 8;
   LENGTH PCS_8 MCS_8 8;
   /* Physical Functioning - SF8PF */

   IF S00S02=5 THEN SF8PF=21.46;
      ELSE IF S00S02=4 THEN SF8PF=30.31;
      ELSE IF S00S02=3 THEN SF8PF=40.07;
      ELSE IF S00S02=2 THEN SF8PF=48.33;
      ELSE IF S00S02=1 THEN SF8PF=54.05;
      ELSE SF8PF=.;

   /* Role Physical - SF8RP */

   IF S00S03=5 THEN SF8RP=23.01;
      ELSE IF S00S03=4 THEN SF8RP=28.32;
      ELSE IF S00S03=3 THEN SF8RP=38.71;
      ELSE IF S00S03=2 THEN SF8RP=46.92;
      ELSE IF S00S03=1 THEN SF8RP=53.98;
      ELSE SF8RP=.;

   /* Bodily Pain - SF8BP */

   IF S00S04=6 THEN SF8BP=25.45;
      ELSE IF S00S04=5 THEN SF8BP=31.48;
      ELSE IF S00S04=4 THEN SF8BP=40.07;
      ELSE IF S00S04=3 THEN SF8BP=47.67;
      ELSE IF S00S04=2 THEN SF8BP=53.35;
      ELSE IF S00S04=1 THEN SF8BP=60.77;
      ELSE SF8BP=.;

   /* General Health - SF8GH */

   IF S00S01=6 THEN SF8GH=22.81;
      ELSE IF S00S01=5 THEN SF8GH=32.56;
      ELSE IF S00S01=4 THEN SF8GH=38.41;
      ELSE IF S00S01=3 THEN SF8GH=46.43;
      ELSE IF S00S01=2 THEN SF8GH=52.83;
      ELSE IF S00S01=1 THEN SF8GH=59.45;
      ELSE SF8GH=.;

   /* Vitality - SF8VT */

   IF S00S05=5 THEN SF8VT=28.14;
      ELSE IF S00S05=4 THEN SF8VT=35.81;
      ELSE IF S00S05=3 THEN SF8VT=45.16;
      ELSE IF S00S05=2 THEN SF8VT=55.62;
      ELSE IF S00S05=1 THEN SF8VT=61.83;
      ELSE SF8VT=.;

   /* Social Functioning - SF8SF */

   IF S00S06=5 THEN SF8SF=23.44;
      ELSE IF S00S06=4 THEN SF8SF=29.53;
      ELSE IF S00S06=3 THEN SF8SF=40.41;
      ELSE IF S00S06=2 THEN SF8SF=49.47;
      ELSE IF S00S06=1 THEN SF8SF=55.25;
      ELSE SF8SF=.;

   /* Role Emotional - SF8RE */

   IF S00S08=5 THEN SF8RE=21.66;
      ELSE IF S00S08=4 THEN SF8RE=29.25;
      ELSE IF S00S08=3 THEN SF8RE=38.09;
      ELSE IF S00S08=2 THEN SF8RE=45.66;
```

```
      ELSE IF S00S08=1 THEN SF8RE=52.42;
      ELSE SF8RE=.;

   /* Mental Health - SF8MH */

   IF S00S07=5 THEN SF8MH=21.40;
      ELSE IF S00S07=4 THEN SF8MH=31.62;
      ELSE IF S00S07=3 THEN SF8MH=41.53;
      ELSE IF S00S07=2 THEN SF8MH=49.59;
      ELSE IF S00S07=1 THEN SF8MH=56.79;
      ELSE S00S07=.;

/*********************************************************************************/
/* CREATE WEIGHTED PCS-8 AND MCS-8 SUMMARY MEASURES - PCS_8 AND MCS_8              */
/*********************************************************************************/

   IF (SF8PF>0 AND SF8RP>0 AND SF8BP>0 AND SF8GH>0 AND SF8VT>0 AND SF8SF>0 AND SF8RE>0
AND SF8MH>0)
   THEN DO;

      PCS_8 = (0.30544*SF8PF) + (0.49395*SF8RP) + (0.33962*SF8BP) + (0.20007*SF8GH) +
(0.10304*SF8VT) +
              (0.01253*SF8SF) + (0.03484*SF8RE) + (-0.29206*SF8MH) + (-9.36839);

      MCS_8 = (-0.19183*SF8PF) + (-0.17030*SF8RP) + (-0.02507*SF8BP) + (0.03625*SF8GH) +
(0.25699*SF8VT) +
              (0.21312*SF8SF) + (0.37965*SF8RE) + (0.71838*SF8MH) + (-10.11675);
   END;

/*********************************************************************************/
/* CREATE BINARY MEASURES BASED ON AGE, GENDER, AND NORMS FOR U.S. POPULATION      */
/*********************************************************************************/

/****************************************/
/* BELOW MEDIAN PHYSICAL HEALTH - ALL    */
/* TABLES 6.9 & 6.10 STARTING ON PAGE 56 */
/****************************************/
   IF (FIELDAGE < 18 OR XSEXA < 0 OR PCS_8 = .) THEN KMID_H=.;
/* BELOW MEDIAN PHYSICAL HEALTH - MALES */
      ELSE IF (18 <= FIELDAGE <= 24 AND XSEXA = 1 AND PCS_8 < 54.69) THEN KMID_H=1;
      ELSE IF (25 <= FIELDAGE <= 29 AND XSEXA = 1 AND PCS_8 < 54.41) THEN KMID_H=1;
      ELSE IF (30 <= FIELDAGE <= 34 AND XSEXA = 1 AND PCS_8 < 53.32) THEN KMID_H=1;
      ELSE IF (35 <= FIELDAGE <= 39 AND XSEXA = 1 AND PCS_8 < 53.71) THEN KMID_H=1;
      ELSE IF (40 <= FIELDAGE <= 44 AND XSEXA = 1 AND PCS_8 < 53.32) THEN KMID_H=1;
      ELSE IF (45 <= FIELDAGE <= 49 AND XSEXA = 1 AND PCS_8 < 51.89) THEN KMID_H=1;
      ELSE IF (50 <= FIELDAGE <= 54 AND XSEXA = 1 AND PCS_8 < 51.33) THEN KMID_H=1;
      ELSE IF (55 <= FIELDAGE <= 59 AND XSEXA = 1 AND PCS_8 < 52.02) THEN KMID_H=1;
      ELSE IF (60 <= FIELDAGE <= 64 AND XSEXA = 1 AND PCS_8 < 51.74) THEN KMID_H=1;
      ELSE IF (65 <= FIELDAGE <= 69 AND XSEXA = 1 AND PCS_8 < 50.81) THEN KMID_H=1;
      ELSE IF (70 <= FIELDAGE <= 74 AND XSEXA = 1 AND PCS_8 < 51.00) THEN KMID_H=1;
      ELSE IF (FIELDAGE >= 75 AND XSEXA = 1 AND PCS_8 < 48.74) THEN KMID_H=1;
/* BELOW MEDIAN PHYSICAL HEALTH - FEMALES */
      ELSE IF (18 <= FIELDAGE <= 24 AND XSEXA = 2 AND PCS_8 < 52.28) THEN KMID_H=1;
      ELSE IF (25 <= FIELDAGE <= 29 AND XSEXA = 2 AND PCS_8 < 52.47) THEN KMID_H=1;
      ELSE IF (30 <= FIELDAGE <= 34 AND XSEXA = 2 AND PCS_8 < 51.73) THEN KMID_H=1;
      ELSE IF (35 <= FIELDAGE <= 39 AND XSEXA = 2 AND PCS_8 < 51.96) THEN KMID_H=1;
      ELSE IF (40 <= FIELDAGE <= 44 AND XSEXA = 2 AND PCS_8 < 51.25) THEN KMID_H=1;
      ELSE IF (45 <= FIELDAGE <= 49 AND XSEXA = 2 AND PCS_8 < 49.22) THEN KMID_H=1;
      ELSE IF (50 <= FIELDAGE <= 54 AND XSEXA = 2 AND PCS_8 < 49.16) THEN KMID_H=1;
      ELSE IF (55 <= FIELDAGE <= 59 AND XSEXA = 2 AND PCS_8 < 49.92) THEN KMID_H=1;
      ELSE IF (60 <= FIELDAGE <= 64 AND XSEXA = 2 AND PCS_8 < 49.82) THEN KMID_H=1;
      ELSE IF (65 <= FIELDAGE <= 69 AND XSEXA = 2 AND PCS_8 < 49.37) THEN KMID_H=1;
      ELSE IF (70 <= FIELDAGE <= 74 AND XSEXA = 2 AND PCS_8 < 49.31) THEN KMID_H=1;
      ELSE IF (FIELDAGE >= 75 AND XSEXA = 2 AND PCS_8 < 45.60) THEN KMID_H=1;
/****************************************/
      ELSE KMID_H=2;


/*************************************/
/* BELOW MEDIAN MENTAL HEALTH - ALL   */
/*************************************/
```

```
   IF (FIELDAGE < 18 OR XSEXA < 0 OR PCS_8 = .) THEN KMID_MH=.;
/* BELOW MEDIAN MENTAL HEALTH - MALES */
      ELSE IF (18 <= FIELDAGE <= 24 AND XSEXA = 1 AND MCS_8 < 49.45) THEN KMID_MH=1;
      ELSE IF (25 <= FIELDAGE <= 29 AND XSEXA = 1 AND MCS_8 < 50.22) THEN KMID_MH=1;
      ELSE IF (30 <= FIELDAGE <= 34 AND XSEXA = 1 AND MCS_8 < 50.37) THEN KMID_MH=1;
      ELSE IF (35 <= FIELDAGE <= 39 AND XSEXA = 1 AND MCS_8 < 52.45) THEN KMID_MH=1;
      ELSE IF (40 <= FIELDAGE <= 44 AND XSEXA = 1 AND MCS_8 < 52.16) THEN KMID_MH=1;
      ELSE IF (45 <= FIELDAGE <= 49 AND XSEXA = 1 AND MCS_8 < 52.16) THEN KMID_MH=1;
      ELSE IF (50 <= FIELDAGE <= 54 AND XSEXA = 1 AND MCS_8 < 52.76) THEN KMID_MH=1;
      ELSE IF (55 <= FIELDAGE <= 59 AND XSEXA = 1 AND MCS_8 < 53.72) THEN KMID_MH=1;
      ELSE IF (60 <= FIELDAGE <= 64 AND XSEXA = 1 AND MCS_8 < 55.55) THEN KMID_MH=1;
      ELSE IF (65 <= FIELDAGE <= 69 AND XSEXA = 1 AND MCS_8 < 55.63) THEN KMID_MH=1;
      ELSE IF (70 <= FIELDAGE <= 74 AND XSEXA = 1 AND MCS_8 < 55.09) THEN KMID_MH=1;
      ELSE IF (FIELDAGE >= 75 AND XSEXA = 1 AND MCS_8 < 54.76) THEN KMID_MH=1;
/* BELOW MEDIAN MENTAL HEALTH - FEMALES */
      ELSE IF (18 <= FIELDAGE <= 24 AND XSEXA = 2 AND MCS_8 < 46.30) THEN KMID_MH=1;
      ELSE IF (25 <= FIELDAGE <= 29 AND XSEXA = 2 AND MCS_8 < 47.35) THEN KMID_MH=1;
      ELSE IF (30 <= FIELDAGE <= 34 AND XSEXA = 2 AND MCS_8 < 47.51) THEN KMID_MH=1;
      ELSE IF (35 <= FIELDAGE <= 39 AND XSEXA = 2 AND MCS_8 < 48.86) THEN KMID_MH=1;
      ELSE IF (40 <= FIELDAGE <= 44 AND XSEXA = 2 AND MCS_8 < 50.35) THEN KMID_MH=1;
      ELSE IF (45 <= FIELDAGE <= 49 AND XSEXA = 2 AND MCS_8 < 48.88) THEN KMID_MH=1;
      ELSE IF (50 <= FIELDAGE <= 54 AND XSEXA = 2 AND MCS_8 < 50.32) THEN KMID_MH=1;
      ELSE IF (55 <= FIELDAGE <= 59 AND XSEXA = 2 AND MCS_8 < 52.16) THEN KMID_MH=1;
      ELSE IF (60 <= FIELDAGE <= 64 AND XSEXA = 2 AND MCS_8 < 52.54) THEN KMID_MH=1;
      ELSE IF (65 <= FIELDAGE <= 69 AND XSEXA = 2 AND MCS_8 < 53.41) THEN KMID_MH=1;
      ELSE IF (70 <= FIELDAGE <= 74 AND XSEXA = 2 AND MCS_8 < 53.12) THEN KMID_MH=1;
      ELSE IF (FIELDAGE >= 75 AND XSEXA = 2 AND MCS_8 < 55.22) THEN KMID_MH=1;
/****************************************/
      ELSE KMID_MH=2;

LABEL
   SF8PF = "SF8 Variable - Physical Functioning"
   SF8RP = "SF8 Variable - Role Physical"
   SF8BP = "SF8 Variable - Bodily Pain"
   SF8GH = "SF8 Variable - General Health"
   SF8VT = "SF8 Variable - Vitality"
   SF8SF = "SF8 Variable - Social Functioning"
   SF8RE = "SF8 Variable - Role Emotional"
   SF8MH = "SF8 Variable - Mental Health"
   PCS_8 = "Physical Health Summary"
   MCS_8 = "Mental Health Summary"
   KMID_H = "Below Median Physical Health"
   KMID_MH = "Below Median Mental Health"
   ;

FORMAT
   KMID_H HAYNN.
   KMID_MH HAYNN.
   ;
RUN;

PROC CONTENTS DATA=OUT.CONVARSF POSITION;RUN;

PROC PRINT DATA=OUT.CONVARSF(OBS=100);
RUN;
```

5. MERGE CONSTRUCTED VARIABLES ONTO DATA FILE

```
*******************************************************************************
* PROGRAM:   MERGE.SAS
* WRITTEN:   1/28/00 BY KELLY WHITE
* MODIFIED:  3/1/00 BY NATALIE JUSTH
* MODIFIED:  11/16/00 BY JOAN JAMES
* MODIFIED:  1/30/01 BY NATALIE JUSTH
* MODIFIED:  6/6/01 BY NATALIE JUSTH FOR Q2 UPDATES
* MODIFIED:  8/20/01 BY NATALIE JUSTH FOR Q3 UPDATES
* MODIFIED: 12/13/01 BY NATALIE JUSTH FOR Q4 UPDATES
* PURPOSE:   TO MERGE FINAL FILES TOGETHER AND REORDER BY VARIABLE TYPE
*            To reorder variables within the record use a
*             LENGTH statement before the SET statement.
*             Make sure that MPRID is the first variable in the
*             record followed by:
```

```
*                            1)  other sampling variables
*                            2)  DEERS variables
*                            3)  Post-stratification vars
*                            4)  questionnaire responses
*                            5)  DRC variables
*                            6)  recoded questionnaire responses
*                            3)  coding scheme flags
*                            8)  constructed variables
*                            9)  weights  (NOT AVAILABLE FOR PRELIMINARY DATA)
* INPUT:     ...\DATA\AFINAL\SELECTQ.SD2
* INPUT:     ...\DATA\AFINAL\CONVARQ.SD2
* INPUT:     ...\DATA\AFINAL\CONVARSF.SD2
* OUTPUT:    ...\DATA\AFINAL\MERGEQ.SD2
* INCLUDE:   SERVAFF.SAS
             TO MERGE ON VARIABLE SERVAFF
*******************************************************************************
*;
LIBNAME IN '...\DATA\AFINAL';
LIBNAME OUT '...\DATA\AFINAL';
LIBNAME LIBRARY '...\DATA\AFINAL\FMTLIB';

OPTIONS PS=78 LS=124 ERRORS=2 COMPRESS=YES ; *MPRINT;

%INCLUDE SERVAFF;

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

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

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

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

PROC FREQ DATA=SERVAFF;
   TABLES SERVAFF;
RUN;

DATA MERGEQ(DROP=   H00000_O H00001_O H00002_O H00003AO H00003BO H00003CO
                    H00003FO H00003GO H00003HO H00003IO H00003JO H00003KO H00003LO
                    H00003MO H00004_O H00006_O H00007_O H00008_O H00009_O H00010_O
                    H00011_O H00012_O H00013_O H00014_O H00015_O H00016_O H00017_O
                    H00018_O H00019_O H00020_O H00021_O H00022_O H00023_O H00024_O
                    H00025_O H00026_O H00027_O H00028_O H00029_O H00030_O H00031_O
                    H00032_O H00033_O H00034_O H00035_O H00036_O H00037_O H00038_O
                    H00039_O H00040_O H00041_O H00042_O H00043_O H00044_O H00045_O
                    H00046_O H00047_O H00048_O H00049_O H00050_O H00051_O H00052_O
                    H00053_O H00054_O H00055_O H00056_O H00057_O H00059_O
                    H00061_O H00062_O H00063_O H00064_O H00065_O H00066_O
                    H00067_O H00068_O H00069_O H00070_O H00071_O H00072_O H00073AO
                    H00073BO H00074_O H00075_O H00076AO H00076BO SREDA_O
                    H00079_O SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O
                    H00083AO H00083BO H00083CO H00083DO H00083EO H00083FO H00083GO
                    H00083HO H00083IO H00084_O H00085AO H00085BO H00085CO H00085DO
                    H00085EO H00085FO H00085GO H00085HO H00085IO H00085JO
                    S00I01_O S00I02_O S00I03_O S00S01_O S00S02_O S00S03_O S00S04_O
                    S00S05_O S00S06_O S00S07_O S00S08_O S00S09_O DMIS_ID
                    )  ;

   MERGE SELECTQ(in=hcsdb) CONVARQ CONVARSF SERVAFF;
   BY MPRID;
   if hcsdb;

FORMAT
```

```
   SERVAFF  $SERVAFF.
   ENBGSMPL $ENBGS.
   XREGION  CREG.
   CONUS    CONUSMHS.
   CACSMPL  $CAC.
   DBENCAT  $BENCAT.
   DMEDELG  $MEDELG.
   DSPONSVC $SPONSVC.
   FLAG_FIN $FINAL.
   FNSTATUS FNSTATS.
   MBRRELCD $MBRREL.
   MEDTYPE  $MEDTYP.
   MRTLSTAT $MSTATUS.
   PATCAT   $AGGBCAT.
   MISS_1   HAMISS.
   MISS_4   HAMISS.
   MISS_5   HAMISS.
   MISS_6   HAMISS.
   MISS_7   HAMISS.
   MISS_8   HAMISS.
   MISS_9   HAMISS.
   MISS_TOT HAMISS.
   PCM      $PCM.
   PNLCATCD $PNLCAT.
   PNSEXCD  $SEXCD.
   RACEETHN $RACECD.
   SEXSMPL  SEX.
   SUBDEMO  $SUBDEMO.
   SVCSMPL  SVCSMPL.
   TSPSITE  $TSPSITE.
   XSEXA    HASEX.
   SERVAREA $SRVAREA.
   MPCSMPL  MPCSMPL.
   MPRID    $8.         /*Remove extra format space ($43) provided by NRC*/
   ;
LABEL
   ENBGSMPL = "Enrollment by beneficiary category"
   SERVAFF  = "Service Affiliation"
   MPCSMPL  = "MPCSMPL - Military Personnel Category"
   ;

RUN;

PROC CONTENTS DATA=MERGEQ;
RUN;

PROC FREQ DATA=MERGEQ;
   TABLES SERVAFF MPCSMPL;
RUN;

PROC FREQ DATA=MERGEQ;
   TABLES XREGION*CACSMPL
   / LIST MISSING;
RUN;

DATA OUT.MERGEQ;

     LENGTH

       MPRID       $ 8         /* ID                */
       SVCSMPL       8         /* sampling variable */
       SEXSMPL       8         /* sampling variable */
       STRATUM     $ 7         /* sampling variable */
       CACSMPL     $ 4         /* sampling variable */
       ENBGSMPL    $ 2         /* sampling variable */
       MPCSMPL       8         /* sampling variable */
       NHFF          8         /* sampling variable */
       SUBDEMO     $ 3         /* sampling variable */
       SERVAREA    $ 2         /* sampling variable */
       QUARTER     $ 7         /* sampling variable */
```

```
SERVAFF     $ 1
MRTLSTAT    $ 1         /* DEERS variable    */
RACEETHN    $ 1         /* DEERS variable    */
PNSEXCD     $ 1         /* DEERS variable    */
LEGDDSCD    $ 2         /* DEERS variable    */
DAGEQY      $ 3         /* DEERS variable    */
FIELDAGE    $ 3         /* DEERS variable    */
PCM         $ 3         /* DEERS variable    */
TSPSITE    $ 10         /* DEERS variable    */
DBENCAT     $ 3         /* DEERS variable    */
DMEDELG     $ 1         /* DEERS variable    */
DSPONSVC    $ 1         /* DEERS variable    */
MBRRELCD    $ 1         /* DEERS variable    */
MEDTYPE     $ 1         /* DEERS variable    */
PATCAT      $ 7         /* DEERS variable    */
PNLCATCD    $ 1         /* DEERS variable    */
FNSTATUS      8         /* DEERS variable    */
KEYCOUNT      8         /* DEERS variable    */
E1          $ 1         /* DEERS variable    */
E2          $ 1         /* DEERS variable    */
E3          $ 1         /* DEERS variable    */
E4          $ 1         /* DEERS variable    */

H00000        4         /* questionnaire     */
H00001        4         /* questionnaire     */
H00002        4         /* questionnaire     */
H00003A       4         /* questionnaire     */
H00003B       4         /* questionnaire     */
H00003C       4         /* questionnaire     */
H00003F       4         /* questionnaire     */
H00003G       4         /* questionnaire     */
H00003H       4         /* questionnaire     */
H00003I       4         /* questionnaire     */
H00003J       4         /* questionnaire     */
H00003K       4         /* questionnaire     */
H00003L       4         /* questionnaire     */
H00003M       4         /* questionnaire     */
H00004        4         /* questionnaire     */
H00006        4         /* questionnaire     */
H00007        4         /* questionnaire     */
H00008        4         /* questionnaire     */
H00009        4         /* questionnaire     */
H00010        4         /* questionnaire     */
H00011        4         /* questionnaire     */
H00012        4         /* questionnaire     */
H00013        4         /* questionnaire     */
H00014        4         /* questionnaire     */
H00015        4         /* questionnaire     */
H00016        4         /* questionnaire     */
H00017        4         /* questionnaire     */
H00018        4         /* questionnaire     */
H00019        4         /* questionnaire     */
H00020        4         /* questionnaire     */
H00021        4         /* questionnaire     */
H00022        4         /* questionnaire     */
H00023        4         /* questionnaire     */
H00024        4         /* questionnaire     */
H00025        4         /* questionnaire     */
H00026        4         /* questionnaire     */
H00027        4         /* questionnaire     */
H00028        4         /* questionnaire     */
H00029        4         /* questionnaire     */
H00030        4         /* questionnaire     */
H00031        4         /* questionnaire     */
H00032        4         /* questionnaire     */
H00033        4         /* questionnaire     */
H00034        4         /* questionnaire     */
H00035        4         /* questionnaire     */
H00036        4         /* questionnaire     */
H00037        4         /* questionnaire     */
H00038        4         /* questionnaire     */
```

```
H00039        4         /* questionnaire     */
H00040        4         /* questionnaire     */
H00041        4         /* questionnaire     */
H00042        4         /* questionnaire     */
H00043        4         /* questionnaire     */
H00044        4         /* questionnaire     */
H00045        4         /* questionnaire     */
H00046        4         /* questionnaire     */
H00047        4         /* questionnaire     */
H00048        4         /* questionnaire     */
H00049        4         /* questionnaire     */
H00050        4         /* questionnaire     */
H00051        4         /* questionnaire     */
H00052        4         /* questionnaire     */
H00053        4         /* questionnaire     */
H00054        4         /* questionnaire     */
H00055        4         /* questionnaire     */
H00056        4         /* questionnaire     */
H00057        4         /* questionnaire     */
H00059        4         /* questionnaire     */
H00061        4         /* questionnaire     */
H00062        4         /* questionnaire     */
H00063        4         /* questionnaire     */
H00064        4         /* questionnaire     */
H00065        4         /* questionnaire     */
H00066        4         /* questionnaire     */
H00067        4         /* questionnaire     */
H00068        4         /* questionnaire     */
H00069        4         /* questionnaire     */
H00070        4         /* questionnaire     */
H00071        4         /* questionnaire     */
H00072        4         /* questionnaire     */
H00073A       4         /* questionnaire     */
H00073B       4         /* questionnaire     */
H00074        4         /* questionnaire     */
H00075        4         /* questionnaire     */
H00076A       4         /* questionnaire     */
H00076B       4         /* questionnaire     */
H00077        4         /* recode of S00s01  */
SREDA         4         /* questionnaire     */
H00079        4         /* questionnaire     */
SRRACEA       4         /* questionnaire     */
SRRACEB       4         /* questionnaire     */
SRRACEC       4         /* questionnaire     */
SRRACED       4         /* questionnaire     */
SRRACEE       4         /* questionnaire     */
SRAGE         4         /* questionnaire     */
H00083A       4         /* questionnaire     */
H00083B       4         /* questionnaire     */
H00083C       4         /* questionnaire     */
H00083D       4         /* questionnaire     */
H00083E       4         /* questionnaire     */
H00083F       4         /* questionnaire     */
H00083G       4         /* questionnaire     */
H00083H       4         /* questionnaire     */
H00083I       4         /* questionnaire     */
H00084        4         /* questionnaire     */
H00085A       4         /* questionnaire     */
H00085B       4         /* questionnaire     */
H00085C       4         /* questionnaire     */
H00085D       4         /* questionnaire     */
H00085E       4         /* questionnaire     */
H00085F       4         /* questionnaire     */
H00085G       4         /* questionnaire     */
H00085H       4         /* questionnaire     */
H00085I       4         /* questionnaire     */
H00085J       4         /* questionnaire     */

S00I01        4         /* supplemental      */
S00I02        4         /* supplemental      */
S00I03        4         /* supplemental      */
```

```
        S00S01        4         /* supplemental      */
        S00S02        4         /* supplemental      */
        S00S03        4         /* supplemental      */
        S00S04        4         /* supplemental      */
        S00S05        4         /* supplemental      */
        S00S06        4         /* supplemental      */
        S00S07        4         /* supplemental      */
        S00S08        4         /* supplemental      */
        S00S09        4         /* supplemental      */

        FLAG_FIN    $ 5         /* DRC variable      */
        DUPFLAG     $ 3         /* DRC variable      */

        N1            8         /* CS flag variable     */
        N2            8         /* CS flag variable     */
        N3            8         /* CS flag variable     */
        N4            8         /* CS flag variable     */
        N5            8         /* CS flag variable     */
        N6            8         /* CS flag variable     */
        N7            8         /* CS flag variable     */
        N8            8         /* CS flag variable     */
        N9            8         /* CS flag variable     */
        N10           8         /* CS flag variable     */
        N11           8         /* CS flag variable     */
        N12           8         /* CS flag variable     */
        N13           8         /* CS flag variable     */
        N14           8         /* CS flag variable     */
        N15           8         /* CS flag variable     */
        N24           8         /* CS flag variable     */
        N25A          8         /* CS flag variable     */
        N25B          8         /* CS flag variable     */
        N25C          8         /* CS flag variable     */
        N26           8         /* CS flag variable     */
        N27           8         /* CS flag variable     */

        MISS_1        8         /* CS Count             */
        MISS_4        8         /* CS Count             */
        MISS_5        8         /* CS Count             */
        MISS_6        8         /* CS Count             */
        MISS_7        8         /* CS Count             */
        MISS_8        8         /* CS Count             */
        MISS_9        8         /* CS Count             */
        MISS_TOT      8         /* CS Count             */

        XENRLLMT      8         /* constructed       */
        XENR_PCM      8         /* constructed       */
        XINS_COV      8         /* constructed       */
        XQENROLL      8         /* constructed       */
        XREGION       3         /* constructed       */
        CONUS         3         /* constructed       */
        OUTCATCH      8         /* constructed       */
        XSEXA         8         /* constructed       */
        XBNFGRP       8         /* constructed       */
/*      KENRINTN      8 */      /* constructed       */
        KDISENRL      8         /* constructed       */
        KMILOFFC      8         /* constructed       */
        KCIVOFFC      8         /* constructed       */
        KBGPRB1       8         /* constructed       */
        KBGPRB2       8         /* constructed       */
        KMILOPQY      8         /* constructed       */
        KCIVOPQY      8         /* constructed       */
        KCIVINS       8         /* constructed       */
        KCOST_2       8         /* constructed       */
        KMEDIGAP      8         /* constructed       */
        KPRSCPTN      8         /* constructed       */
        KBRSTCR       8         /* constructed       */
        HP_PRNTL      8         /* constructed       */
        HP_MAMOG      8         /* constructed       */
        HP_MAM50      8         /* constructed       */
        HP_PAP        8         /* constructed       */
        HP_BP         8         /* constructed       */
```

```
       HP_FLU        8         /* constructed       */
       HP_PROS       8         /* constructed       */
       HP_GP         8         /* constructed       */
       HP_BRST       8         /* constructed       */
       HP_CHOL       8         /* constructed       */
       HP_SMOKE      8         /* constructed       */
       SF8PF         3         /* constructed       */
       SF8RP         3         /* constructed       */
       SF8BP         3         /* constructed       */
       SF8GH         3         /* constructed       */
       SF8VT         3         /* constructed       */
       SF8SF         3         /* constructed       */
       SF8RE         3         /* constructed       */
       SF8MH         3         /* constructed       */
       PCS_8         4         /* constructed       */
       MCS_8         4         /* constructed       */
       KMID_H        3         /* constructed       */
       KMID_MH       3         /* constructed       */
      ;

     SET MERGEQ;

     RUN;

PROC CONTENTS DATA=OUT.MERGEQ POSITION;
   title  "HCSDB for 2000, ordered by variable type";
   RUN;

/*****************************************************************************/
/* PROJECT: 8687-100 (DOD QUARTERLY 2001)                                    */
/* AUTHOR:  NATALIE JUSTH                                                    */
/* DATE:    APRIL 24, 2001                                                   */
/* UPDATED: JUNE 5, 2001 FOR QUARTER 2                                       */
/* UPDATED: AUGUST 20, 2001 FOR QUARTER 3                                    */
/* UPDATED: DECEMBER 13, 2001 FOR QUARTER 4                                  */
/* UPDATED: JANUARY 23, 2002 FOR MOVE TO DOD COMPUTER                        */
/* PURPOSE: MERGE VARIABLE SERVAFF TO QUARTERLY DATASET                      */
/* INPUT:   ...\DATA\AFINAL\SA2001Q2.SD2                                     */
/*          ...\DATA\AFINAL\SAMPLA02.SD2                                     */
/* OUTPUT:  ...\DATA\AFINAL\SERVAFF.SD2                                      */
/*****************************************************************************/

LIBNAME DATA  '...\DATA\AFINAL';

/* Create new DMIS merge variable              */
/* First use ENRID, then ULOCDMIS, then DCATCH */

DATA SAMPLA02(KEEP=DMIS_ID MPRID);
   SET DATA.SAMPLA02;
   LENGTH DMIS_ID $9;
   DMIS_ID=ENRID;
   IF DMIS_ID=' ' THEN DO;
      IF ULOCDMIS NE ' ' THEN DMIS_ID=ULOCDMIS;
      ELSE DMIS_ID=DCATCH;
   END;
RUN;

PROC PRINT DATA=SAMPLA02(OBS=50);
RUN;

PROC SORT DATA=SAMPLA02;
   BY DMIS_ID;
RUN;

PROC SORT DATA=DATA.SA2001Q2 OUT=SA2001Q2;
   BY DMIS_ID;
RUN;

DATA IN.SERVAFF(RENAME=(FACILITY=SERVAFF));
   MERGE SAMPLA02(IN=IN1)
         SA2001Q2;
```

```
   BY DMIS_ID;
   IF IN1;
RUN;

PROC PRINT DATA=IN.SERVAFF(OBS=200);
RUN;

PROC CONTENTS DATA=IN.SERVAFF; RUN;
```

6. RESPONSE RATE CALCULATIONS

```
*************************************************************************
*
* PROGRAM: TABLE02.SAS
* TASK:    2000 DOD HEALTH CARE SURVEY ANALYSIS (8687-610)
* 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.
*
* INCLUDES: 1) TABLE02.IN1
*           2) TABLE02.IN2
*
*************************************************************************;

%LET PERIOD = DOD\Q4_2000;

LIBNAME IN   "J:\&PERIOD\DATA\AFINAL";
OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=0 NOCENTER NOFMTERR;

%MACRO PROCESS(INPT,FORM,LIB);
*LIBNAME LIBRARY &LIB;
************************************************************************
* Process OVERALL Summary of response rates
************************************************************************
;
DATA _NULL_;
   SET IN.&INPT END=FINISHED;
   IF _N_ = 1 THEN DO;
      SN    = 0;
      SN1   = 0;
      SN11  = 0;
      SN12  = 0;
      SN2   = 0;
      SN3   = 0;
      SN4   = 0;
      SN41  = 0;
      SN42  = 0;
      WN   = 0;
      WN1  = 0;
      WN11 = 0;
      WN12 = 0;
      WN2  = 0;
      WN3  = 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 = 30 THEN DO;
   SN3 + 1;
   WN3 + 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
   SN3
   SN4
   SN41
   SN42
   WN
   WN1
   WN11
   WN12
   WN2
   WN3
   WN4
   WN41
   WN42
  ;

   IF FINISHED THEN GO TO FINISHED;

   RETURN;

FINISHED:
   FILE "D:\KEITH\&PERIOD\RES-RATE\TABLE02&FORM..OUT" LRECL=132;
```

```
   PUT; PUT;
   PUT @001 "TABLE 2: OVERALL RESPONSE RATES SUMMARY";
   PUT @001 "WRITTEN BY KEITH RATHBUN, 12-14-2000, TASK: 8687-610";
   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 "D:\KEITH\&PERIOD\WEIGHTING\TABLE02.IN2";
RUN;
%MEND PROCESS;

************************************************************************
* Process Single Domain where domain1 is the variable of interest
************************************************************************;

%MACRO PROCESS1(DOMAIN1,INPT,FORM,LIB);

*LIBNAME LIBRARY &LIB;

PROC SORT DATA=IN.&INPT OUT=&INPT TAGSORT; BY &DOMAIN1; RUN;

DATA _NULL_;
   SET &INPT;
   BY &DOMAIN1;
   FILE "D:\KEITH\&PERIOD\RES-RATE\&DOMAIN1..OUT" LRECL=132;
   LENGTH VARNAME1 $8;
   LENGTH VARIABLE $30;
   CALL VNAME(&DOMAIN1,VARNAME1);
   VARIABLE = VARNAME1;
   %INCLUDE "D:\KEITH\&PERIOD\WEIGHTING\TABLE02.IN1";
   IF LAST.&DOMAIN1 THEN DO;
      PUT @001 &DOMAIN1 @;
      %INCLUDE "D:\KEITH\&PERIOD\WEIGHTING\TABLE02.IN2";
   END; * DOMAIN;
RUN;
%MEND PROCESS1;

*************************************************************************
* Process Double Domain where domain1/domain2 are the variables of interest
*************************************************************************
;
%MACRO PROCESS2(DOMAIN1,DOMAIN2,INPT,FORM,LIB);

*LIBNAME LIBRARY &LIB;

PROC SORT DATA=IN.&INPT OUT=&INPT TAGSORT; BY &DOMAIN1 &DOMAIN2; RUN;

DATA _NULL_;
   SET &INPT;
   BY &DOMAIN1 &DOMAIN2;
   FILE "D:\KEITH\&PERIOD\RES-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 "D:\KEITH\&PERIOD\WEIGHTING\TABLE02.IN1";
   IF LAST.&DOMAIN2 THEN DO;
      PUT @001 &DOMAIN1 @;
```

```
      PUT @025 &DOMAIN2 @;
      %INCLUDE "D:\KEITH\&PERIOD\WEIGHTING\TABLE02.IN2";
      SN    = 0;
      SN1   = 0;
      SN11  = 0;
      SN12  = 0;
      SN2   = 0;
      SN3   = 0;
      SN4   = 0;
      SN41  = 0;
      SN42  = 0;
      WN   = 0;
      WN1  = 0;
      WN11 = 0;
      WN12 = 0;
      WN2  = 0;
      WN3  = 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,LIB);

*LIBNAME LIBRARY &LIB;

PROC SORT DATA=IN.&INPT OUT=&INPT TAGSORT; BY &DOMAIN1 &DOMAIN2 &DOMAIN3; RUN;

DATA _NULL_;
   SET &INPT;
   BY &DOMAIN1 &DOMAIN2 &DOMAIN3;
   FILE "D:\KEITH\&PERIOD\RES-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 "D:\KEITH\&PERIOD\WEIGHTING\TABLE02.IN1";
   IF LAST.&DOMAIN3 THEN DO;
      PUT @001 &DOMAIN1 @;
      PUT @015 &DOMAIN2 @;
      PUT @035 &DOMAIN3 @;
      %INCLUDE "D:\KEITH\&PERIOD\WEIGHTING\TABLE02.IN2";
      SN    = 0;
      SN1   = 0;
      SN11  = 0;
      SN12  = 0;
      SN2   = 0;
      SN3   = 0;
      SN4   = 0;
      SN41  = 0;
      SN42  = 0;
      WN   = 0;
      WN1  = 0;
      WN11 = 0;
      WN12 = 0;
      WN2  = 0;
      WN3  = 0;
      WN4  = 0;
      WN41 = 0;
      WN42 = 0;
   END; * DOMAIN;
```

```
RUN;
%MEND PROCESS3;

*********************************************************
* PROCESS OVERALL RESPONSE RATE TABULATION - FORM A
*********************************************************
;
%PROCESS(MERGEQ, A, "J:\&PERIOD\DATA\AFINAL\FMTLIB");

*********************************************************
* PROCESS SINGLE DOMAIN RESPONSE RATE TABULATION - FORM A
*********************************************************
;
%PROCESS1(CONUS,    MERGEQ, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
%PROCESS1(ENBGSMPL, MERGEQ, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
%PROCESS1(CACSMPL,  MERGEQ, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
%PROCESS1(XREGION,  MERGEQ, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
%PROCESS1(SEXSMPL,  MERGEQ, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
%PROCESS1(RACEETHN, MERGEQ, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");

*********************************************************
* PROCESS DOUBLE DOMAIN RESPONSE RATE TABULATION - FORM A
*********************************************************
;
%PROCESS2(ENBGSMPL, SEXSMPL, MERGEQ, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
%PROCESS2(ENBGSMPL, SVCSMPL, MERGEQ, "FORM A",
         "J:\&PERIOD\DATA\AFINAL\FMTLIB");
%PROCESS2(ENBGSMPL, RACEETHN,MERGEQ, "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");

*****************************************************************************
*
* PROGRAM: TABLE02.IN1
* TASK:    1998 DOD HEALTH CARE SURVEY ANALYSIS (8574-002)
* PURPOSE: COMMON CODE INCLUDE FILE USED TO BUILD
*          TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY
*          1998 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 "WRITTEN BY KEITH RATHBUN, 12-14-2000, TASK: 8687-610";
   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;
   SN3   = 0;
   SN4   = 0;
   SN41  = 0;
   SN42  = 0;
   WN   = 0;
   WN1  = 0;
   WN11 = 0;
   WN12 = 0;
   WN2  = 0;
   WN3  = 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 = 30 THEN DO;
   SN3 + 1;
   WN3 + 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
   SN3
   SN4
   SN41
   SN42
   WN
   WN1
   WN11
   WN12
   WN2
   WN3
   WN4
   WN41
   WN42
  ;

*****************************************************************************
*
* PROGRAM: TABLE02.IN2
* TASK:    QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (8687-430)
* 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.
*
*****************************************************************************
*;
   *Interim Response Rate;
   IRR1 = ((SN1 + SN2 + SN3)/SN)*(SN1/(SN1 + SN2));
   IRR2 = ((WN1 + WN2 + WN3)/WN)*(WN1/(WN1 + WN2));

   *Final Response Rate;
   FRR1 = ((SN1 + SN2 + SN3)/SN)*(SN1/(SN1+SN2))*(SN11/SN1);
   FRR2 = ((WN1 + WN2 + WN3)/WN)*(WN1/(WN1+WN2))*(WN11/WN1);

   *Final Location Rate;
   L = ((SN1 + SN2)/(SN1 + SN2 + SN3))*SN41;
   WL = ((WN1 + WN2)/(WN1 + WN2 + WN3))*WN41;
   FLR1 = (SN1 + SN2 + L)/(SN1 + SN2 + SN4*((SN1 + SN2)/(SN1 + SN2 + SN3)));
   FLR2 = (WN1 + WN2 + WL)/(WN1 + WN2 + WN4*((WN1 + WN2)/(WN1 + WN2 + WN3)));

   *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
      ;
```

7. DEVELOPMENT OF WEIGHTS

A. QUARTERLY VERSION

```
*******************************************************************************
*                                                                             *
* PROGRAM: BWT.SAS                                                            *
* TASK:    2000 DoD Health Care Survey, Quarterly Sampling (8687-420)         *
* PURPOSE: Construct Sampling Weight for 2000 Quarterly DoD Survey Form A     *
*                                                                             *
* WRITTEN: 12/26/2000 by Darryl V. Creel                                      *
*                                                                             *
* INPUTS:  FRAMEA.SD2 - Frame for 2000 Quarterly DoD Survey                   *
*          SAMPLE.SD2 - Sample for 2000 Quarterly DoD Survey                  *
*                                                                             *
* OUTPUTS: BWT.SD2 - Sampling Weight for 2000 Quarterly DOD Survey Form A     *
*                                                                             *
*                                                                             *
*******************************************************************************;

options ls=132 ps=79 nocenter compress=yes;


title1 'Construct the Sampling Weight, BWT.SD2';
title2 'from the 2000 Quarterly DoD Files, FRAMEA.SD2 and SAMPLE.SD2';
title3 'Program: BWT.SAS by Darryl V. Creel';


***** Set up the input and output paths. *****;

libname in  'd:\projects\8687-420\data';
libname out 'd:\projects\8687-420\data';


***** Check the files. *****;

proc contents data=in.framea;
run;

proc contents data=in.sample;
run;

***** Create the numerator and denominator for the sampling weight. *****;

proc freq data=in.framea;
table stratum / list missing out=frame;
run;

data frame (rename = (count = numer));
set frame (keep = stratum count);
run;

proc freq data=in.sample;
table stratum / list missing out=sample;
run;

data sample (rename = (count = denom));
set sample (keep = stratum count);
run;

***** Merge the data sets and construct the sampling weight. *****;
```

```
proc sort data=frame;
by stratum;
run;

proc sort data=sample;
by stratum;
run;

data weight;
merge frame sample;
by stratum;
bwt = numer / denom;
run;

proc print data=weight;
var stratum numer denom bwt;
sum numer denom;
run;

***** Append the sampling weight to the SAMPLE.SD2 file. *****;

data wt;
set weight (keep = stratum bwt);
run;

proc sort data=wt out=wt;
by stratum;
run;

proc sort data=in.sample out=sample;
by stratum;
run;

data bwt (drop = bwt00 count enbgs01 - enbgs11 i j
                 popsize zone1 - zone5) wonly sonly error;
merge wt (in=inw) sample (in=ins);
by stratum;
if pnsexcd = "M" then sexsmpl = 1;
   else if pnsexcd = "F" then sexsmpl = 2;
   else if pnsexcd = "Z" then sexsmpl = 1;
   else sexsmpl = 3;
if svccd = "A" then svcsmpl = 1;
   else if svccd = "N" then svcsmpl = 2;
   else if svccd = "M" then svcsmpl = 3;
   else if svccd = "F" then svcsmpl = 4;
   else if svccd = "C" then svcsmpl = 5;
   else svcsmpl = 6;
if inw = 1 and ins = 1 then output bwt;
   else if inw = 1 and ins = 0 then output wonly;
   else if inw = 0 and ins = 1 then output sonly;
   else output error;
run;

proc contents data=bwt;
run;

proc freq data=bwt;
tables pnsexcd*sexsmpl svccd*svcsmpl / list missing;
run;

proc means data=bwt n sum;
var bwt;
run;

proc means data=bwt n sum;
class stratum;
var bwt;
run;
```

```
title5 'Checks from BWT Data Set';

data out.bwt;
set bwt;
run;

proc means data=in.bwt n sum;
var bwt;
run;

proc means data=in.bwt n sum;
class stratum;
var bwt;
output out=bwtchk  n = sampcnt sum = bwtsum;
run;

data bwtchk;
set bwtchk;
where _type_ = 1;
run;

proc sort data=bwtchk;
by stratum;
run;

proc sort data=frame;
by stratum;
run;

data finalchk;
merge bwtchk frame(rename = (numer = pop));
by stratum;
diff = pop - bwtsum;
run;

proc print data=finalchk;
var stratum sampcnt bwtsum pop diff;
sum sampcnt bwtsum pop diff;
run;

title5 'Checks for Keith Rathbun';

proc means data=in.bwt n sum;
class enbgsmpl;
var bwt;
output out=bwt_chk n=n sum=sum;
run;

proc printto print='D:\Projects\8687-420\Weight\bwt_chk.txt' new;
run;

proc print data=bwt_chk;
run;

proc printto print=print;
run;

*****************************************************************
***
*** Project:        DoD Quarterly Sampling - Nonresponse adjustments
*** Project Number: 8687
*** Task Number:    610
***
*** Program: D:\projects\dod\trickle\y2000q4\wrwt.sas,
***
***
*** TASK:    2000 QUARTERLY DOD HEALTH CARE SURVEY
*** PURPOSE: CALCULATE THE FINAL WEIGHT WITH TRICKLES.
***          WEIGHTS FOR DOD SURVEY.
***          DOD HEALTH CARE SURVEY FILE.
***          REQUESTED BY DON JANG.
```

```
*** WRITTEN: 11/09/1999 BY KEITH RATHBUN
*** Updated: 06/05/2001 by Darryl V. Creel
*** Updated: 09/06/2001 by Nancy Clusen
*** Updated: 12/17/2001 by Esther M. Friedman
***
*** INPUTS:  q4mergeq.SD2
***                FRAMEA.SD2
***
*** OUTPUTS: wrwt.SD2
***
***
*****************************************************************************
*;

LIBNAME IN_f  "D:\projects\dod\trickle\y2000q4";
LIBNAME IN  "D:\projects\dod\trickle\y2000q4";
LIBNAME OUT "D:\projects\dod\trickle\y2000q4";
libname library "j:\dod\q4_2000\data\afinal\fmtlib";

OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=0 NOCENTER mprint mlogic symbolgen;

title1 'DoD Quarterly Survey of Health Beneficiaries with trickles';
title2 'Calculate the Final Weights';
title3 'Program: WRWT.SAS ';

*****************************************************************************
* Calculate final weight based on user-specified domains.
*****************************************************************************;

%MACRO PROCESS(DOMAIN,FORM,INPT);

   *** Initial Information. ***;

   title5 'FRAMEA.SD2 Count';

   proc freq data=in_f.framea;
   table enbgsmpl / list missing;
   run;

   title5 'q4mergeq.SD2 Counts Using BWT as the Weight';

   proc freq data=in.&inpt.;
   table enbgsmpl fnstatus / list missing;
   weight bwt;
   run;

   title5 'q4mergeq.SD2 Counts';

   proc freq data=in.&inpt.;
   table enbgsmpl fnstatus / list missing;
   run;

   *** Create the adjustment cells for nonresponse. ***;

   data &inpt.;
   set in.&inpt.(KEEP = MPRID FNSTATUS BWT enbgsmpl com_geo stratum cacsmpl);

  %include "D:\projects\dod\trickle\y2000\cac_coll.inc";
   run;

PROC SORT DATA=&inpt. OUT=&INPT.;
BY &DOMAIN.;
RUN;

*****************************************************************************
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
*****************************************************************************;
Data  cellsa1 (keep=sumbwt sumg1-sumg3 a1 cellcnt cntg1-cntg3 &domain.)
      mpridsa1 (keep=mprid fnstatus bwt &domain. enbgsmpl com_geo cacsmpl)
    ;
```

```
   SET &INPT.;
   BY &DOMAIN;

   IF FIRST.&DOMAIN. THEN DO;
      CELLCNT = 0;
      cntg1   = 0;
      cntg2   = 0;
      cntg3   = 0;
      SUMBWT  = 0.0;
      SUMG1   = 0.0;
      SUMG2   = 0.0;
      SUMG3   = 0.0;
      A1 = 0.0;
   END;
   CELLCNT + 1;

   ******************************************************
   * Accumulate total weight sum
   ******************************************************;

   SUMBWT + BWT;

   ******************************************************
   * Accumulate group 1 weight sum
   ******************************************************;

   IF FNSTATUS IN (11,12) THEN
      do;
         SUMG1 + BWT;
         cntg1 + 1;
      end;

   ******************************************************
   * Accumulate group 2 weight sum
   ******************************************************;

   ELSE IF FNSTATUS in (20,30) THEN
      do;
         SUMG2 + BWT;
         cntg2 + 1;
      end;

   ******************************************************
   * Accumulate group 3 weight sum
   ******************************************************;

   ELSE IF FNSTATUS in (41,42) THEN
      do;
         SUMG3 + BWT;
         cntg3 + 1;
      end;

   RETAIN SUMBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 MPRID;

   IF LAST.&DOMAIN. THEN DO;
      A1 = SUMBWT/(SUMG1 + SUMG2);
      OUTPUT CELLSA1;
   END;

   OUTPUT MPRIDSA1;

RUN;


title5 'Check for CELLSA1 Data Set';

proc print data=cellsa1;
var com_samp cntg1-cntg3 cellcnt sumg1-sumg3 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 sumbwt sumg1 sumg2 sumg3;
run;
```

```
proc print data=cellsa1;
where ( a1 > 7 ) or ( cntg1 + cntg2 < 10 );
var com_samp cntg1-cntg3 cellcnt sumg1-sumg3 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 sumbwt sumg1 sumg2 sumg3;
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 (11,12,20,30) then adj1 = a1;
   else adj1 = 0;
adj_wt1 = adj1 * bwt;
run;

title5 'Checks for ADJ_ONE Data Set';

proc freq data=adj_one;
table com_samp*fnstatus*adj1 / list missing;
run;

proc means data=adj_one n sum;
class fnstatus;
var adj_wt1;
run;

proc means data=adj_one n sum;
class enbgsmpl;
var adj_wt1;
run;


*****************************************************************************
* Calculate adjustment factor A2 for each cell.
* This is the Nonresponse adjustment and creates the final weight (wrwt).
*****************************************************************************;

proc sort data=adj_one;
by &domain.;
run;

DATA CELLSA2 (KEEP= &domain. NUMER DENOM numercnt denomcnt A2);
   set adj_one ;
   BY &domain.;

   IF FIRST.&domain. THEN DO;
      A2 = 0.0;
      NUMER = 0.0;
      DENOM = 0.0;
      numercnt = 0;
      denomcnt = 0;
   END;


   RETAIN NUMER DENOM A2 numercnt denomcnt;

   IF FNSTATUS IN (11,12,20) THEN
      do;
         NUMER + BWT*A1;
         numercnt + 1;
```

```
      end;

   IF FNSTATUS = 11 THEN
      do;
         DENOM + BWT*A1;
         denomcnt + 1;
      end;

   IF LAST.&domain. THEN DO;
      A2 = NUMER/DENOM;
      OUTPUT CELLSA2;
   END;

RUN;

title5 'Check for CELLSA2 Data Set';

proc print data=cellsa2;
var &domain. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

proc print data=cellsa2;
where ( a2 > 7 ) or ( denomcnt < 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 = 30 then adj2 = 1;
   else adj2 = 0;
adjwt = adj2 * adj_wt1;
label adjwt = 'Adjusted Weight';
KEEP MPRID fnstatus adj1 adj2 adjwt com_samp enbgsmpl;
run;

title5 'Check for ADJ_TWO Data Set';

proc freq data=adj_two;
table com_samp*fnstatus*adj2 / list missing;
run;

proc means data=adj_two n sum;
class fnstatus;
var adjwt;
run;

proc means data=adj_two n sum;
class enbgsmpl;
var adjwt;
run;

data adj_two;
set adj_two(drop=fnstatus enbgsmpl);
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=in.adjwt n sum;
class fnstatus;
var adjwt;
run;

proc means data=in.adjwt n sum;
class com_samp;
var bwt adjwt;
run;

proc sort data=in.adjwt out=chk;
by com_samp fnstatus;
run;

data sub_chk;
set chk(keep = com_samp fnstatus bwt adj1 adj2 adjwt);
by com_samp 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 com_samp fnstatus bwt adj1 adj2 prodadjs adjwt cellcnt sumadjwt;
sum cellcnt sumadjwt;
run;

proc univariate data=sub_chk normal plot;
where prodadjs ne 0;
var prodadjs;
run;

proc univariate data=sub_chk normal plot;
where adjwt ne 0;
var adjwt;
```

```
run;

************************************;
*** Calculate the Design Effects ***;
************************************;

*** For Catchment Area ***;

title5 'Design Effects for com_geo';

proc sort data=in.adjwt out=adjwt;
by com_geo fnstatus;
run;

data deff_c;
set adjwt;
by com_geo fnstatus;
retain n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r;
if first.com_geo = 1 then
   do;
      n_s = 1;
      sum_w_s = bwt;
      sumsqw_s = bwt * bwt;
      if fnstatus = 11 then
         do;
            n_r = 1;
            sum_w_r = adjwt;
            sumsqw_r = adjwt * adjwt;
            n_nr = 0;
         end;
      else
         do;
            n_r = 0;
            sum_w_r = 0;
            sumsqw_r = 0;
            n_nr = 1;
         end;
   end;
   else
      do;
        n_s = n_s + 1;
        sum_w_s = sum_w_s + bwt;
        sumsqw_s = sumsqw_s + (bwt * bwt);
        if fnstatus = 11 then
           do;
              n_r = n_r + 1;
              sum_w_r = sum_w_r + adjwt;
              sumsqw_r = sumsqw_r + (adjwt * adjwt);
              n_nr = n_nr + 0;
           end;
           else n_nr = n_nr + 1;
      end;
deff_s = (n_s * sumsqw_s) / (sum_w_s * sum_w_s);
deff_r = (n_r * sumsqw_r) / (sum_w_r * sum_w_r);
deff_d = deff_s - deff_r;
deff_f = deff_s / deff_r;
if last.com_geo = 1 then output deff_c;
run;

proc print data=deff_c;
var com_geo n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r deff_s deff_r deff_d deff_f;
sum n_s n_r n_nr sum_w_s sum_w_r;
run;

proc print data=deff_c;
format _all_;
var com_geo n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r deff_s deff_r deff_d deff_f;
sum n_s n_r n_nr sum_w_s sum_w_r;
run;
```

```
*** For Enrollee/Beneficiary Groups ***;

title5 'Design Effects for ENBGSMPL';

proc sort data=adjwt out=adjwt;
by enbgsmpl fnstatus;
run;

data deff_e;
set adjwt;
by enbgsmpl fnstatus;
retain n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r;
if first.enbgsmpl = 1 then
   do;
      n_s = 1;
      sum_w_s = bwt;
      sumsqw_s = bwt * bwt;
      if fnstatus = 11 then
         do;
            n_r = 1;
            sum_w_r = adjwt;
            sumsqw_r = adjwt * adjwt;
            n_nr = 0;
         end;
      else
         do;
            n_r = 0;
            sum_w_r = 0;
            sumsqw_r = 0;
            n_nr = 1;
         end;
   end;
   else
      do;
        n_s = n_s + 1;
        sum_w_s = sum_w_s + bwt;
        sumsqw_s = sumsqw_s + (bwt * bwt);
        if fnstatus = 11 then
           do;
              n_r = n_r + 1;
              sum_w_r = sum_w_r + adjwt;
              sumsqw_r = sumsqw_r + (adjwt * adjwt);
              n_nr = n_nr + 0;
           end;
           else n_nr = n_nr + 1;
      end;
deff_s = (n_s * sumsqw_s) / (sum_w_s * sum_w_s);
deff_r = (n_r * sumsqw_r) / (sum_w_r * sum_w_r);
deff_d = deff_s - deff_r;
deff_f = deff_s / deff_r;
if last.enbgsmpl = 1 then output deff_e;
run;

proc print data=deff_e;
var enbgsmpl n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r deff_s deff_r deff_d deff_f;
sum n_s n_r n_nr sum_w_s sum_w_r;
run;

*** Overall ***;

title5 'Design Effects';

data deff_o;
set adjwt;
retain n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r 0;
n_s = n_s + 1;
sum_w_s = sum_w_s + bwt;
sumsqw_s = sumsqw_s + (bwt * bwt);
if fnstatus = 11 then
   do;
      n_r = n_r + 1;
```

```
      sum_w_r = sum_w_r + adjwt;
      sumsqw_r = sumsqw_r + (adjwt * adjwt);
      n_nr = n_nr + 0;
   end;
   else n_nr = n_nr + 1;
deff_s = (n_s * sumsqw_s) / (sum_w_s * sum_w_s);
deff_r = (n_r * sumsqw_r) / (sum_w_r * sum_w_r);
deff_d = deff_s - deff_r;
deff_f = deff_s / deff_r;
if _n_ = 45000 then output deff_o;
run;

proc print data=deff_o;
var n_s n_r n_nr sum_w_s sumsqw_s sum_w_r sumsqw_r deff_s deff_r deff_d deff_f;
sum n_s n_r n_nr sum_w_s sum_w_r;
run;

title5 'Checks for Keith Rathbun';
title6 'Where FNSTATUS = 11';

proc means data=in.adjwt n sum;
where fnstatus = 11;
class enbgsmpl;
var adjwt;
output out=adjwtchk n=n sum=sum;
run;


***proc printto print="D:\Projects\8687-610\Y2000q4\Weighting\adjwtchk.txt" new;
***run;

proc print data=adjwtchk;
run;

***proc printto print=print;
***run;

%MEND PROCESS;

*****************************************************************************
* Calculate final weight based on user-specified parameters.
*****************************************************************************;

%PROCESS(com_samp,A,q4mergeq);


RUN;

*****************************************************************************
*** Project:        DoD trickle cell collapsment for annual weighting
*** Project Number: 8687
*** Task Number:    610
***
*** Purpose: Collapse "cacsampl"s so that they are consistent for all quarters in 2000
***
*** Client:     Donsig Jang
*** Date:       December 20, 2001
*** Due Date:
*** Programmer: Esther M Friedman
***
*** Program: D:\projects\dod\20000\trickle\y2000\cac_coll.sas
***
*** Inputs:  use quarterly mergeq file with trickles
***
*** Outputs: none
***
*****************************************************************************;
********************Create New Com_Geo Var**********************************;
*************************STEP 1*********************************************;
******This section of general collapsing rules was obtained from q3 2000***;
*****************************************************************************;
```

```
select (cacsmpl);
  when ('0252') com_geo= '0033';
  when ('0378') com_geo= '0124';
  when ('0387') com_geo= '0124';
  when ('0508') com_geo= '0124';
  when ('0511') com_geo= '0103';
  when ('0534') com_geo= '0052';
  when ('1587') com_geo= '0109';
  when ('1592') com_geo= '0110';
  when ('1646') com_geo= '0125';
  when ('6201') com_geo= '0123';
  when ('7143') com_geo= '0089';
  when ('7236') com_geo= '0110';
  when ('7286') com_geo= '0089';
  when ('7293') com_geo= '0032';
  when ('7294') com_geo= '0089';
otherwise;
end;

com_samp = '0'||com_geo||enbgsmpl;
if '1000000' < stratum < '2000000' then com_samp = stratum;

*********************************************************************;
***************************STEP 2************************************;
*******************COLLAPSE ACROSS ENBGSMPL***************************;
*********************************************************************;
*          '01' = "Active duty"                                     *;
*          '02' = "Active duty fam,Prime,civ PCM"                   *;
*          '03' = "Active duty fam,Prime,mil PCM"                   *;
*          '04' = "Active duty fam,non-enrollee"                    *;
*          '05' = "Retired,<65,civ PCM"                             *;
*          '06' = "Retired,<65,mil PCM"                             *;
*          '07' = "Retired,<65,non-enrollee"                        *;
*          '08' = "Retired,65+,civ PCM"                             *;
*          '09' = "Retired,65+,mil PCM"                             *;
*          '10' = "Retired,65+,non-enrollee"                        *;
*********************************************************************;

****Collapsing all Prime military PCM and civilan PCM into one adjustment cell, Prime***;

else if substr(com_samp,6,2)='03' then do;
        a = com_samp;
        substr(a,6,2)='02';
        put a;
        com_samp = a;
end;

else if substr(com_samp,6,2)='06' then do;
        b = com_samp;
        substr(b,6,2)='05';
        put b;
        com_samp = b;
end;

*********************************************************************;
***************************STEP 3************************************;
*********Collapsing out of catchment areas into super regions**********;
*********************************************************************;

if substr(com_samp,2,4)='9901' or substr(com_samp,2,4)='9902' or
substr(com_samp,2,4)='9905' then do;
        c = com_samp;
        substr(c,2,4)='9991';
        put c;
        com_samp = c;
end;

else if substr(com_samp,2,4)='9906' or substr(com_samp,2,4)='9909' or
substr(com_samp,2,4)='9910' or
```

```
        substr(com_samp,2,4)='9911' or substr(com_samp,2,4)='9912' or
substr(com_samp,2,4)='9916' then do;
        d = com_samp;
        substr(d,2,4)= '9992';
        put d;
        com_samp = d;
end;

else if substr(com_samp,2,4)='9903' or substr(com_samp,2,4)='9904' or
substr(com_samp,2,4)='9907' or
        substr(com_samp,2,4)='9908' then do;
        e = com_samp;
        substr(e,2,4)='9993';
        put e;
        com_samp = e;
end;

else if substr(com_samp,2,4)='9913' or substr(com_samp,2,4)='9914'or
substr(com_samp,2,4)='9915' or substr(com_samp,2,4)='9999' then do;
        f = com_samp;
        substr(f,2,4)='9990';
        put f;
        com_samp = f;
end;

*********************************************************************;
****************************STEP 4***************************************;
****************Additional Collapsement For Small Cells****************;
***********Where FNSTATUS 11+12 <10 in any of the 4 quarters;**********;
*********************************************************************;
*********************************************************************;


If substr(com_samp,2,4) in
(0003,0005,0006,0009,0014,0024,0028,0030,0032,0033,0037,0038,0039,0042,0045,0047,0048,004
9,

0052,0053,0055,0056,0057,0060,0061,0064,0066,0067,0073,0075,0078,0079,0086,0089,0092,0093
,0095,0098,0101,0103,0104,0105,0108,

0109,0110,0112,0113,0117,0120,0121,0125,0126,0127,0131,0606,0607,0609,0612,0616,0617,0620
,0621,0622,0633,0638,0640,0805,9990)
               and substr(com_samp,6,2) in ('02','03','04')
then do; x=com_samp;
         substr(x,6,2)='02';
         put x;
         com_samp = x;
end;

else If substr(com_samp,2,4) in
(0001,0005,0006,0008,0010,0015,0019,0026,0029,0035,0036,0037,0046,0049,0053,0057,0058,005
9,0060,0062,0064,0066,0069,

0073,0075,0083,0084,0090,0092,0093,0096,0098,0104,0112,0113,0120,0121,0122,0125,0126,0127
,0128,0131,0306,0356,0606,0607,0609,0612,0616,0617,0620,
        0621,0622,0633,0638,0640,0805,9914,
0280,0032,0109,0117,0004,0118,0321,0326,0117,0118,0129,0287)
       and substr(com_samp,6,2) in ('10')
then do; y=com_samp;
         substr(y,6,2)='07';
         put y;
         com_samp = y;
end;

If substr(com_samp,2,4) in
(0001,0005,0008,0010,0015,0019,0024,0026,0030,0035,0036,0046,0052,0056,0058,0059,0062,006
9,0083,0084,
0086,0090,0091,0092,0093,0096,0104,0108,0112,0122,0128,0131,0280,0287,0306,0326,0330,0356
,0606,0607,0609,0612,0616,0617,0620,
0621,0622,0633,0638,0640,0805,0806,0713,0991,0999, 0280,
0004,0118,0321,0326,0118,0129,0287)
```

```
         and substr(com_samp,6,2) in ('07','05')
then do; z=com_samp;
         substr(z,6,2)='05';
         put z;
         com_samp = z;
end;

If substr(com_samp,2,4) in
(0330,0607,0609,0621,0622,0638,0640,0806,0713,0014,0612,0617,0622,0805,0806,7139,0612,061
7,9990,0804)
         and substr(com_samp,6,2) in ('05','02')
then do; z2=com_samp;
         substr(z2,6,2)='02';
         put z2;
         com_samp = z2;
end;

drop a b c d e f x y z z2;
run;

*****************************************************************************
*
* PROGRAM: repwt.SAS
* TASK:    2000 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE REPLICATE WEIGHTS FOR DOD SURVEY.
*          REQUESTED BY DON JANG.
* WRITTEN: 12/30/1999 BY KEITH RATHBUN
* Updated: 10/16/2001 by Darryl V. Creel
* Updated: 12/17/2001 by Esther M Friedman
*
* INPUTS:  adjwt.SD2 - Final Weights file
*
* OUTPUTS: repwt.SD2 - Replicate Weights File
*          repwt.TXT - Summary Checks for Keith
*
*****************************************************************************
*;
LIBNAME IN   "D:\projects\dod\trickle\y2000q4";
LIBNAME OUT  "D:\projects\dod\trickle\y2000q4";
LIBNAME LIBRARY  "j:\dod\q4_2000\data\afinal\fmtlib";

OPTIONS PS=79 LS=132 COMPRESS=YES errors=0 NOCENTER mlogic mprint symbolgen;

proc contents data=in.adjwt;
run;


%MACRO PROCESS(DOMAIN1,DOMAIN2,reps);

*************************************************************************
* Sort the final weights file by user-specified domains
*************************************************************************;

PROC SORT DATA=IN.adjwt(KEEP=FNSTATUS MPRID BWT &DOMAIN1. &DOMAIN2. stratum) OUT=adjwt;
     BY stratum &DOMAIN2.;
RUN;


*************************************************************************
* Append SUBSET index (I) to each observation
*************************************************************************;
DATA SUBSETS;
   SET adjwt;
   BY stratum &DOMAIN2.;

   IF _N_ = 1 OR MOD(_N_-1,&reps.) = 0 THEN SUBSET = 1;
   ELSE SUBSET + 1;

   RETAIN SUBSET;
   BBWT = BWT * (&reps. / (&reps. - 1));
RUN;
```

```
************************************************************************
************************************************************************
* Generate JackKnife/replicated weights adjwt01-adjwt60
************************************************************************
************************************************************************;
%DO I = 1 %TO &reps.;

DATA SUBSET;
   SET SUBSETS;
   IF &I. = SUBSET THEN DELETE; *Remove the current subset;
RUN;

*************************************************************************
* Calculate adjustment factor A1 for each cell
*************************************************************************;

proc sort data=subset;
by &domain1.;
run;


*************************************************************************
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
*************************************************************************;
DATA CELLSA1  (KEEP=SUMBBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 &domain1.)
     MPRIDSA1 (KEEP=MPRID FNSTATUS BBWT &DOMAIN1.)
    ;
   SET subset;
   BY &DOMAIN1.;

   IF FIRST.&DOMAIN1. THEN DO;
      CELLCNT = 0;
      cntg1   = 0;
      cntg2   = 0;
      cntg3   = 0;
      SUMBBWT  = 0.0;
      SUMG1   = 0.0;
      SUMG2   = 0.0;
      SUMG3   = 0.0;
      A1 = 0.0;
   END;
   CELLCNT + 1;

   ****************************************************
   * Accumulate total weight sum
   ****************************************************;

   SUMBBWT + BBWT;

   ****************************************************
   * Accumulate group 1 weight sum
   ****************************************************;

   IF FNSTATUS IN (11,12) THEN
      do;
         SUMG1 + BBWT;
         cntg1 + 1;
      end;

   ****************************************************
   * Accumulate group 2 weight sum
   ****************************************************;

   ELSE IF FNSTATUS in (20,30) THEN
      do;
         SUMG2 + BBWT;
         cntg2 + 1;
      end;
```

```
   ****************************************************
   * Accumulate group 3 weight sum
   ****************************************************;

   ELSE IF FNSTATUS in (41,42) THEN
      do;
         SUMG3 + BBWT;
         cntg3 + 1;
      end;

   RETAIN SUMBBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 MPRID;

   IF LAST.&DOMAIN1. THEN DO;
      A1 = SUMBBWT/(SUMG1 + SUMG2);
      OUTPUT CELLSA1;
   END;

   OUTPUT MPRIDSA1;

RUN;

proc sort data=mpridsa1;
by &domain1.;
run;

proc sort data=cellsa1;
by &domain1.;
run;

data adj_one;
merge mpridsa1 cellsa1;
by &domain1.;
if fnstatus in (11,12,20,30) then adj1 = a1;
   else adj1 = 0;
adj_wt1 = adj1 * bbwt;
run;


*****************************************************************************
* Calculate adjustment factor A2 for each cell.
* This is the Nonresponse adjustment and creates the final weight (adjwt).
*****************************************************************************;

proc sort data=adj_one;
by &domain1.;
run;

DATA CELLSA2 (KEEP= &domain1. NUMER DENOM numercnt denomcnt A2);
   set adj_one;
   BY &domain1.;

   IF FIRST.&domain1. THEN DO;
      A2 = 0.0;
      NUMER = 0.0;
      DENOM = 0.0;
      numercnt = 0;
      denomcnt = 0;
   END;


   RETAIN NUMER DENOM A2 numercnt denomcnt;

   IF FNSTATUS IN (11,12,20) THEN
      do;
         NUMER + BBWT*A1;
         numercnt + 1;
      end;

   IF FNSTATUS = 11 THEN
      do;
         DENOM + BBWT*A1;
```

```
         denomcnt + 1;
      end;

   IF LAST.&domain1. THEN DO;
      A2 = NUMER/DENOM;
      OUTPUT CELLSA2;
   END;

RUN;

proc sort data=adj_one;
by &domain1.;
run;

proc sort data=cellsa2;
by &domain1.;
run;

data subset&i.;
merge adj_one cellsa2;
by &domain1.;
if fnstatus = 11 then adj2 = a2;
   else if fnstatus = 30 then adj2 = 1;
   else adj2 = 0;
jkweight = adj2 * adj_wt1;
subset = &i.;
KEEP MPRID subset jkweight;
run;

proc sort data=subset&i.;
by mprid;
run;

***************************************************************************
***************************************************************************
* End of JackKnife/replicated weights WRWT01-WRWT60 assignments
***************************************************************************
***************************************************************************;
%END;

***************************************************************************
* Combine all of the JackKnife weight subsets by MPRID
***************************************************************************;
DATA ALLSETS;
   SET SUBSET1   SUBSET2   SUBSET3   SUBSET4   SUBSET5
       SUBSET6   SUBSET7   SUBSET8   SUBSET9   SUBSET10
       SUBSET11  SUBSET12  SUBSET13  SUBSET14  SUBSET15
       SUBSET16  SUBSET17  SUBSET18  SUBSET19  SUBSET20
       SUBSET21  SUBSET22  SUBSET23  SUBSET24  SUBSET25
       SUBSET26  SUBSET27  SUBSET28  SUBSET29  SUBSET30
       SUBSET31  SUBSET32  SUBSET33  SUBSET34  SUBSET35
       SUBSET36  SUBSET37  SUBSET38  SUBSET39  SUBSET40
       SUBSET41  SUBSET42  SUBSET43  SUBSET44  SUBSET45
       SUBSET46  SUBSET47  SUBSET48  SUBSET49  SUBSET50
       SUBSET51  SUBSET52  SUBSET53  SUBSET54  SUBSET55
       SUBSET56  SUBSET57  SUBSET58  SUBSET59  SUBSET60
   ;
   BY MPRID;
   ARRAY JKWT(&reps.) wrwt1-wrwt&reps.; RETAIN wrwt1-wrwt&reps.;
   IF FIRST.MPRID THEN DO;
      DO I = 1 TO &reps.; DROP I;
         JKWT(I) = . ;
      END;
   END;
   JKWT(SUBSET) = JKWEIGHT;
   IF LAST.MPRID THEN OUTPUT;
   KEEP MPRID wrwt1-wrwt&reps.;
RUN;

***************************************************************************
* Sort the original data, get the final weight (WRWT), append the
```

```
* JackKnife/Replicated weights (WRWT1-WRWT60), and label variables.
*********************************************************************;
PROC SORT DATA=IN.adjwt
          OUT=adjwt;
     BY MPRID;
RUN;

proc sort data=allsets;
by mprid;
run;

DATA OUT.repwt ;
   MERGE adjwt ALLSETS;
   BY MPRID;

   LABEL
      MPRID  = 'MPR ID Number'
      WRWT1  = 'Replicated/JackKnife Weight 1'
      WRWT2  = 'Replicated/JackKnife Weight 2'
      WRWT3  = 'Replicated/JackKnife Weight 3'
      WRWT4  = 'Replicated/JackKnife Weight 4'
      WRWT5  = 'Replicated/JackKnife Weight 5'
      WRWT6  = 'Replicated/JackKnife Weight 6'
      WRWT7  = 'Replicated/JackKnife Weight 7'
      WRWT8  = 'Replicated/JackKnife Weight 8'
      WRWT9  = 'Replicated/JackKnife Weight 9'
      WRWT10 = 'Replicated/JackKnife Weight 10'
      WRWT11 = 'Replicated/JackKnife Weight 11'
      WRWT12 = 'Replicated/JackKnife Weight 12'
      WRWT13 = 'Replicated/JackKnife Weight 13'
      WRWT14 = 'Replicated/JackKnife Weight 14'
      WRWT15 = 'Replicated/JackKnife Weight 15'
      WRWT16 = 'Replicated/JackKnife Weight 16'
      WRWT17 = 'Replicated/JackKnife Weight 17'
      WRWT18 = 'Replicated/JackKnife Weight 18'
      WRWT19 = 'Replicated/JackKnife Weight 19'
      WRWT20 = 'Replicated/JackKnife Weight 20'
      WRWT21 = 'Replicated/JackKnife Weight 21'
      WRWT22 = 'Replicated/JackKnife Weight 22'
      WRWT23 = 'Replicated/JackKnife Weight 23'
      WRWT24 = 'Replicated/JackKnife Weight 24'
      WRWT25 = 'Replicated/JackKnife Weight 25'
      WRWT26 = 'Replicated/JackKnife Weight 26'
      WRWT27 = 'Replicated/JackKnife Weight 27'
      WRWT28 = 'Replicated/JackKnife Weight 28'
      WRWT29 = 'Replicated/JackKnife Weight 29'
      WRWT30 = 'Replicated/JackKnife Weight 30'
      WRWT31 = 'Replicated/JackKnife Weight 31'
      WRWT32 = 'Replicated/JackKnife Weight 32'
      WRWT33 = 'Replicated/JackKnife Weight 33'
      WRWT34 = 'Replicated/JackKnife Weight 34'
      WRWT35 = 'Replicated/JackKnife Weight 35'
      WRWT36 = 'Replicated/JackKnife Weight 36'
      WRWT37 = 'Replicated/JackKnife Weight 37'
      WRWT38 = 'Replicated/JackKnife Weight 38'
      WRWT39 = 'Replicated/JackKnife Weight 39'
      WRWT40 = 'Replicated/JackKnife Weight 40'
      WRWT41 = 'Replicated/JackKnife Weight 41'
      WRWT42 = 'Replicated/JackKnife Weight 42'
      WRWT43 = 'Replicated/JackKnife Weight 43'
      WRWT44 = 'Replicated/JackKnife Weight 44'
      WRWT45 = 'Replicated/JackKnife Weight 45'
      WRWT46 = 'Replicated/JackKnife Weight 46'
      WRWT47 = 'Replicated/JackKnife Weight 47'
      WRWT48 = 'Replicated/JackKnife Weight 48'
      WRWT49 = 'Replicated/JackKnife Weight 49'
      WRWT50 = 'Replicated/JackKnife Weight 50'
      WRWT51 = 'Replicated/JackKnife Weight 51'
      WRWT52 = 'Replicated/JackKnife Weight 52'
      WRWT53 = 'Replicated/JackKnife Weight 53'
      WRWT54 = 'Replicated/JackKnife Weight 54'
```

```
      WRWT55 = 'Replicated/JackKnife Weight 55'
      WRWT56 = 'Replicated/JackKnife Weight 56'
      WRWT57 = 'Replicated/JackKnife Weight 57'
      WRWT58 = 'Replicated/JackKnife Weight 58'
      WRWT59 = 'Replicated/JackKnife Weight 59'
      WRWT60 = 'Replicated/JackKnife Weight 60'
   ;
RUN;

TITLE1 "2000 DoD Quarterly Health Survey Final/Replicated Weights";
title2 "Checks for the Replicate Weights";
TITLE3 "Program Name: repwt.SAS By Darryl V. Creel";

PROC CONTENTS DATA=OUT.repwt;
run;

PROC MEANS DATA=OUT.repwt n sum;
VAR  adjwt WRWT1-WRWT&reps.;
RUN;

PROC SORT DATA=OUT.repwt;
BY MPRID;
RUN;

DATA OUT.repwt;
   SET OUT.repwt;
   BY MPRID;

   ARRAY WGTS(&reps.) WRWT1-WRWT&reps.;
   DO I = 1 TO &reps.; DROP I;
      IF WGTS(I) EQ . THEN WGTS(I) = 0;
   END;

   KEEP MPRID BWT adjwt WRWT1-WRWT&reps. fnstatus &domain1. com_geo;
RUN;

PROC MEANS DATA=OUT.repwt n sum;
VAR  adjwt wrwt1-wrwt&reps.;
output out=sums sum(adjwt wrwt1-wrwt&reps.) = adjwt wrwt1-wrwt&reps.;
RUN;

proc transpose data=sums out=t_sums;
var adjwt wrwt1-wrwt&reps.;
run;

proc univariate data=t_sums normal plot;
var col1;
run;

title5 'Checks for Keith Rathbun';
title6 'Where FNSTATUS = 11';

proc means data=in.repwt n sum;
where fnstatus = 11;
var adjwt wrwt1-wrwt&reps.;
output out=rpwt_chk sum(adjwt wrwt1-wrwt&reps.) = adjwt wrwt1-wrwt&reps.;
run;

proc printto print='D:\projects\dod\trickle\y2000q4\repwt.txt' new;
run;

proc print data=rpwt_chk;
run;

proc printto print=print;
run;

%MEND process;

%PROCESS(com_samp,mprid,60);
```

```
*****************************************************************************
* Rename adjwt to wrwt
*****************************************************************************;

data out.repwt (drop = adjwt);
set in.repwt;
wrwt = adjwt;
adj_cell=com_samp;
label adj_cell = 'final adjusted cell';
label wrwt = 'Final Weight';
run;

*****************************************************************************
*
* PROGRAM: ADDWGTS.SAS
* TASK:    2000 DOD HEALTH CARE SURVEY ANALYSIS (8687-610)
* PURPOSE: MERGE THE FINAL WEIGHTS FILE WITH THE FINAL
*          QUESTIONNAIRE/SAMPLE FILE
*
* WRITTEN: 02/02/2001 BY KEITH RATHBUN
*
* INPUTS:  1) REPWT.SD2  - Final/Replicated Weights file - FORM A
*          2) MERGEQ.SD2 - Final FORM A Questionnaire/Sample File
*
* OUTPUTS: 1) HCSyyq_n.SD2 - Final FORM A Questionnaire/Sample File
*             combined with Final/Replicated Weights file - FORM A
*             where  yy = Year
*                     q = Quarter Number
*                     n = Final Dataset Suffix/Version Number
*
*****************************************************************************
;
LIBNAME IN      "...\DATA\AFINAL";
LIBNAME OUT     "...\DATA\AFINAL";
LIBNAME LIBRARY "...\DATA\AFINAL\FMTLIB";

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

%MACRO PROCESS(DSNI_1=,DSNI_2=,DSNO=);
*****************************************************************************
* Merge the final weights file with the final Questionnaire/Sample file
*****************************************************************************;
PROC SORT DATA=IN.&DSNI_1 OUT=&DSNI_1; BY MPRID; RUN;
PROC SORT DATA=IN.&DSNI_2 OUT=&DSNI_2; BY MPRID; RUN;

DATA OUT.&DSNO;
   MERGE &DSNI_2(IN=IN2)
         &DSNI_1(IN=IN1);
   BY MPRID;
   IF FNSTATUS = 11;
   IF IN1 AND IN2;
   IF NOT (IN1 AND IN2) THEN PUT "ERROR: NO MATCHING MPRID WITH &DSNI_1..SD2 AND
&DSNI_2..SD2";
   LABEL KEYCOUNT = "# of Key Questions Answered";
   LABEL ADJ_CELL = "ADJ_CELL - Adjusted STRATUM cell";
   LABEL WRWT     = "Final Weight";
   DROP COM_SAMP;
RUN;

TITLE1 "2000 DOD Quarterly Health Care Survey (8687-610)";
TITLE2 "Program Name: ADDWGTS.SAS By Keith Rathbun";
TITLE3 "Program Inputs: &DSNI_1..SD2 -- &DSNI_2..SD2";
TITLE4 "Program Outputs: &DSNO..SD2";
PROC CONTENTS; RUN;

%MEND PROCESS;

%PROCESS(DSNI_1=REPWT, DSNI_2=MERGEQ, DSNO=HCS004_1);
```

B. ANNUAL VERSION

```
*****************************************************************************
```

```
* PROGRAM: REPWT.SAS
* TASK:    2000 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE ANNUAL REPLICATE WEIGHTS FOR DOD SURVEY.
*          REQUESTED BY DON JANG.
* Updated: 01/07/2002 by Esther M Friedman
*
* INPUTS:  repwt.SD2 for all quarters - Final Weights file for all quarters
*
* OUTPUTS: repwt.SD2 - Annual Replicate Weights File
*
*****************************************************************************
*;
LIBNAME IN1   "D:\projects\dod\trickle\y2000q1";
LIBNAME IN2   "D:\projects\dod\trickle\y2000q2";
LIBNAME IN3   "D:\projects\dod\trickle\y2000q3";
LIBNAME IN4   "D:\projects\dod\trickle\y2000q4";
LIBNAME OUT  "D:\projects\dod\trickle\y2000";
LIBNAME LIBRARY  "j:\dod\q4_2000\data\afinal\fmtlib";

OPTIONS PS=79 LS=132 COMPRESS=YES errors=0 NOCENTER mlogic mprint symbolgen;

*********************************************************************
* MERGE THE 4 NEW (with trickles) QUARTERLY WEIGHT FILES
*********************************************************************;

data repwtq1 (keep= fnstatus bwt mprid com_geo com_samp quarter wrwt wrwt1-wrwt60);
set in1.repwt;
quarter=1;
label quarter = 'Dod quarter indicator';
format _all_;
run;

data repwtq2 (keep= fnstatus bwt mprid com_geo com_samp quarter wrwt wrwt1-wrwt60);
set in2.repwt;
quarter=2;
label quarter = 'Dod quarter indicator';
format _all_;
run;

data repwtq3 (keep= fnstatus  bwt mprid com_geo com_samp quarter wrwt wrwt1-wrwt60);
set in3.repwt;
quarter=3;
label quarter = 'Dod quarter indicator';
format _all_;
run;

data repwtq4 (keep= fnstatus bwt mprid com_geo com_samp quarter wrwt wrwt1-wrwt60);
set in4.repwt;
quarter=4;
label quarter = 'Dod quarter indicator';
run;

*sort the new quarterly files;

proc sort data=repwtq1;
by mprid;

proc sort data=repwtq2;
by mprid;

proc sort data=repwtq3;
by mprid;

proc sort data=repwtq4;
by mprid;

*merge the new quarterly files;

data out.repwt;
set repwtq1 repwtq2 repwtq3 repwtq4;
by mprid;
```

```
*check new file;

proc freq data=out.repwt;
tables quarter com_geo com_samp
/list missing;
run;

*create annual weights ;

*method 1:  divide each quarterly weight by 4;

data repwt;
  set out.repwt;
  cwrwt=wrwt/4;
  label cwrwt= 'combined annual wt';

retain cwrwt1-cwrwt60;
 array wt(60) cwrwt1-cwrwt60;
 array wt2(60) wrwt1-wrwt60;
 DO I = 1 TO 60;
 wt(I) = Wt2(I)/4;
 end;

   KEEP MPRID quarter BWT wrwt cwrwt wrwt1-WRWT60 cwrwt1-cwrwt60 fnstatus com_samp
com_geo;
RUN;

data repwt;
set repwt;
label      CWRWT1  = 'Replicated/JackKnife Weight 1';
label      CWRWT2  = 'Replicated/JackKnife Weight 2';
label      CWRWT3  = 'Replicated/JackKnife Weight 3';
label      CWRWT4  = 'Replicated/JackKnife Weight 4';
label      CWRWT5  = 'Replicated/JackKnife Weight 5';
label      CWRWT6  = 'Replicated/JackKnife Weight 6';
label      CWRWT7  = 'Replicated/JackKnife Weight 7';
label      CWRWT8  = 'Replicated/JackKnife Weight 8';
label      CWRWT9  = 'Replicated/JackKnife Weight 9';
label      CWRWT10 = 'Replicated/JackKnife Weight 10';
label      CWRWT11 = 'Replicated/JackKnife Weight 11';
label      CWRWT12 = 'Replicated/JackKnife Weight 12';
label      CWRWT13 = 'Replicated/JackKnife Weight 13';
label      CWRWT14 = 'Replicated/JackKnife Weight 14';
label      CWRWT15 = 'Replicated/JackKnife Weight 15';
label      CWRWT16 = 'Replicated/JackKnife Weight 16';
label      CWRWT17 = 'Replicated/JackKnife Weight 17';
label      CWRWT18 = 'Replicated/JackKnife Weight 18';
label      CWRWT19 = 'Replicated/JackKnife Weight 19';
label      CWRWT20 = 'Replicated/JackKnife Weight 20';
label      CWRWT21 = 'Replicated/JackKnife Weight 21';
label      CWRWT22 = 'Replicated/JackKnife Weight 22';
label      CWRWT23 = 'Replicated/JackKnife Weight 23';
label      CWRWT24 = 'Replicated/JackKnife Weight 24';
label      CWRWT25 = 'Replicated/JackKnife Weight 25';
label      CWRWT26 = 'Replicated/JackKnife Weight 26';
label      CWRWT27 = 'Replicated/JackKnife Weight 27';
label      CWRWT28 = 'Replicated/JackKnife Weight 28';
label      CWRWT29 = 'Replicated/JackKnife Weight 29';
label      CWRWT30 = 'Replicated/JackKnife Weight 30';
label      CWRWT31 = 'Replicated/JackKnife Weight 31';
label      CWRWT32 = 'Replicated/JackKnife Weight 32';
label      CWRWT33 = 'Replicated/JackKnife Weight 33';
label      CWRWT34 = 'Replicated/JackKnife Weight 34';
label      CWRWT35 = 'Replicated/JackKnife Weight 35';
label      CWRWT36 = 'Replicated/JackKnife Weight 36';
label      CWRWT37 = 'Replicated/JackKnife Weight 37';
label      CWRWT38 = 'Replicated/JackKnife Weight 38';
label      CWRWT39 = 'Replicated/JackKnife Weight 39';
label      CWRWT40 = 'Replicated/JackKnife Weight 40';
label      CWRWT41 = 'Replicated/JackKnife Weight 41';
```

```
label      CWRWT42 = 'Replicated/JackKnife Weight 42';
label      CWRWT43 = 'Replicated/JackKnife Weight 43';
label      CWRWT44 = 'Replicated/JackKnife Weight 44';
label      CWRWT45 = 'Replicated/JackKnife Weight 45';
label      CWRWT46 = 'Replicated/JackKnife Weight 46';
label      CWRWT47 = 'Replicated/JackKnife Weight 47';
label      CWRWT48 = 'Replicated/JackKnife Weight 48';
label      CWRWT49 = 'Replicated/JackKnife Weight 49';
label      CWRWT50 = 'Replicated/JackKnife Weight 50';
label      CWRWT51 = 'Replicated/JackKnife Weight 51';
label      CWRWT52 = 'Replicated/JackKnife Weight 52';
label      CWRWT53 = 'Replicated/JackKnife Weight 53';
label      CWRWT54 = 'Replicated/JackKnife Weight 54';
label      CWRWT55 = 'Replicated/JackKnife Weight 55';
label      CWRWT56 = 'Replicated/JackKnife Weight 56';
label      CWRWT57 = 'Replicated/JackKnife Weight 57';
label      CWRWT58 = 'Replicated/JackKnife Weight 58';
label      CWRWT59 = 'Replicated/JackKnife Weight 59';
label      CWRWT60 = 'Replicated/JackKnife Weight 60';
RUN;

***********************
*check new annual weights
***********************;
proc freq data=repwt (obs=25);
 tables wrwt*cwrwt
  wrwt1*cwrwt1 wrwt2*cwrwt2 wrwt3*cwrwt3 wrwt4*cwrwt4 wrwt5*cwrwt5 wrwt6*cwrwt6
wrwt7*cwrwt7 wrwt8*cwrwt8 wrwt9*cwrwt9 wrwt10*cwrwt10 wrwt11*cwrwt11 wrwt12*cwrwt12
  wrwt13*cwrwt13 wrwt14*cwrwt14 wrwt15*cwrwt15 wrwt16*cwrwt16 wrwt17*cwrwt17
wrwt18*cwrwt18 wrwt19*cwrwt19 wrwt20*cwrwt20 wrwt21*cwrwt21 wrwt22*cwrwt22 wrwt23*cwrwt23
wrwt24*cwrwt24
  wrwt25*cwrwt25 wrwt26*cwrwt26 wrwt27*cwrwt27 wrwt28*cwrwt28 wrwt29*cwrwt29
wrwt30*cwrwt30 wrwt31*cwrwt31 wrwt32*cwrwt32 wrwt33*cwrwt33 wrwt34*cwrwt34 wrwt35*cwrwt35
wrwt36*cwrwt36
  wrwt37*cwrwt37 wrwt38*cwrwt38 wrwt39*cwrwt39 wrwt40*cwrwt40 wrwt41*cwrwt41
wrwt42*cwrwt42 wrwt43*cwrwt43 wrwt44*cwrwt44 wrwt45*cwrwt45 wrwt46*cwrwt46 wrwt47*cwrwt47
wrwt48*cwrwt48
  wrwt49*cwrwt49 wrwt50*cwrwt50 wrwt51*cwrwt51 wrwt52*cwrwt52 wrwt53*cwrwt53
wrwt54*cwrwt54 wrwt55*cwrwt55 wrwt56*cwrwt56 wrwt57*cwrwt57 wrwt58*cwrwt58 wrwt59*cwrwt59
wrwt60*cwrwt60
/list missing;
 run;

proc freq data=repwt;
tables fnstatus*quarter
/list missing;
weight wrwt;
run;

proc freq data=repwt;
tables fnstatus
/list missing;
weight cwrwt;
run;

proc sort data=repwt;
by quarter;
run;

proc means data=repwt n sum;
var WRWT WRWT1-WRWT60;
by quarter;
format _all_;
run;

PROC MEANS DATA=repwt n sum;
VAR  CWRWT CWRWT1-CWRWT60;
output out=sums sum(cwrwt cwrwt1-cwrwt60) = cwrwt cwrwt1-cwrwt60;
RUN;

proc transpose data=sums out=t_sums;
```

```
var cwrwt cwrwt1-cwrwt60;
run;

proc univariate data=t_sums normal plot;
var col1;
run;

****************
*change com_samp and com_geo to numeric vars
*for use with Sudaan as per Keith
****************;

data out.repwt;
set repwt;
com_sam2=input(com_samp, 7.);
com_ge2=input(com_geo, 4.);
run;

*******************
*rename com_samp and com_geo
******************;

proc freq data=out.repwt;
tables com_ge2*com_geo
/list missing;
run;

proc freq data=out.repwt;
tables com_sam2*com_samp
/list missing;
run;

data out.repwt (drop=com_samp com_geo);
set out.repwt;
rename com_ge2=cacsmpl;
rename com_sam2=adj_cell;
run;

proc contents data=out.repwt;
run;
```

8. ANNUAL FILE CREATION

```
*****************************************************************************
*
*  PROGRAM:  CAC98_99.SAS
*  TASK:     ANNUAL DOD HEALTH CARE SURVEY ANALYSIS (8687-210)
*  PURPOSE:  GENERATE CACSMPL WITH A CONSISTENT DEFINITION FOR 1998
*            AND 1999 DATASETS.  ADD THIS REVISED CACSMPL TO THE
*            EXISTING SAS DATASETS FROM PREVIOUS DOD CONTRACTS.
*            THE 4TH QUARTER 2000 DEFINITION IS USED TO DEFINE THE
*            REVISED 1998-1999 CACSMPL VARIABLE.
*
*  WRITTEN:  01/10/2002 BY KEITH RATHBUN.
*
*   INPUTS:  1) HCS98A_5.SD2 - 1998 Final Analysis File (8574)
*            2) HCS99A_5.SD2 - 1999 Final Analysis File (8687)
*            2) FY2001Q4.SD2 - Catchment Area Information
*
*   OUTPUT:  1) CAC98REV.SD2 - 1998 Final Analysis File with revised CACSMPL
*            2) CAC99REV.SD2 - 1999 Final Analysis File with revised CACSMPL
*
*    NOTES:  1) This program is derived from the Q4 2000 FRAMEA.SAS
*               program.  The CACSMPL parts were copied directly.  Macros
*               are used to allow for consistent variable names.
*
*****************************************************************************;
TITLE1 "Annual DOD Health Care Survey Database (8687-210)";
TITLE2 "Program Name: CAC98_00.SAS By Keith Rathbun";
TITLE3 "Program Inputs: HCS98A_5.SD2, HCS99A_5.SD2 - 1998 and 1999 Analysis files";
TITLE4 "Program Outputs: CAC98REV.SD2 and CAC99REV.SD2 - Revised CACSMPL files";
```

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

*************************************************************************
* GET AND MODIFY THE DOWNLOADED CATCHMENT INFORMATION DATA.
*************************************************************************;
LIBNAME IN  "....\2000\DATA"; *Library containing catchment information;
DATA FY2001Q4(KEEP = CELLP D_PAR D_FAC D_INSTAL D_HEALTH);
   SET IN.FY2001Q4 (RENAME = (FACILIT1=D_FAC INSTALLA=D_INSTAL));

   LENGTH D_PAR $4.;
   D_PAR = DMIS_PAR;

   LENGTH CELLP 8;
   CELLP = DMIS_ID;

   LENGTH D_HEALTH $2.;
   D_HEALTH = HEALTH_S;
RUN;
PROC SORT DATA=FY2001Q4; BY CELLP; RUN;

*************************************************************************
* MACRO PARAMETERS:
* 1)  ILIB     = Input library for original 1998 and 1999 datasets
* 2)  IDSN     = Input DSN
* 3)  OLIB     = Output library for revised CACSMPL files
* 4)  ODSN     = Output DSN
*************************************************************************;
%MACRO PROCESS(ILIB=,IDSN=,OLIB=,ODSN=);

LIBNAME IN  &ILIB;
LIBNAME OUT &OLIB;

DATA &ODSN;
   SET IN.&IDSN(KEEP=MPRID CELLP);
RUN;
PROC SORT DATA=&ODSN; BY CELLP; RUN;

*************************************************************************
* MERGE THE DOWNLOADED CATCHMENT INFORMATION DATA WITH THE ANALYSIS FILE
* AND UTILIZE CELLP TO RECACULATE CACSMPL ACCORDING TO THE Q4 2000
* CATCHMENT DEFINITION.
*************************************************************************;
DATA &ODSN;
   MERGE &ODSN(IN=IN1) FY2001Q4(IN=IN2);
   BY CELLP;

   LENGTH CACSMPL 8;
   ************************************************************************
   * Construct CACSMPL based on the geographic sampling cell (CELLP).
   ************************************************************************;
   SELECT (CELLP);
      ********************************************************************
      * FIRST ROUND OF COLLAPSING.
      ********************************************************************;
      WHEN (0002,0074)          CACSMPL=0001;
      WHEN (0203)               CACSMPL=0005;
      WHEN (0235)               CACSMPL=0014;
      WHEN (0250)               CACSMPL=0015;
      WHEN (0248,0213)          CACSMPL=0019;
      WHEN (0018)               CACSMPL=0026;
      WHEN (0100,0328,5401)     CACSMPL=0035;
      WHEN (0050)               CACSMPL=0039;
      WHEN (6203)               CACSMPL=0049;
      WHEN (0076)               CACSMPL=0058;
      WHEN (0338)               CACSMPL=0059;
      WHEN (0068,0413)          CACSMPL=0066;
      WHEN (5208)               CACSMPL=0067;
      WHEN (0111)               CACSMPL=0083;
      WHEN (0335)               CACSMPL=0089;
      WHEN (0094)               CACSMPL=0093;
      WHEN (0097)               CACSMPL=0098;
```

```
WHEN (0363)               CACSMPL=0109;
WHEN (0364)               CACSMPL=0112;
WHEN (0114)               CACSMPL=0117;
WHEN (7200)               CACSMPL=0129;
WHEN (0814)               CACSMPL=0633;
WHEN (0637)               CACSMPL=0638;
WHEN (0610)               CACSMPL=0640;
WHEN (0802)               CACSMPL=0620;
*********************************************************************
* SECOND ROUND OF COLLAPSING.
*********************************************************************;
WHEN (5208)               CACSMPL=0067;
WHEN (0041)               CACSMPL=0045;
WHEN (0077)               CACSMPL=0119;
WHEN (0106)               CACSMPL=0129;
WHEN (0615)               CACSMPL=0616;
WHEN (0624,0858)          CACSMPL=0617;
WHEN (0639)               CACSMPL=0640;
WHEN (0808)               CACSMPL=0609;
WHEN (0310)               CACSMPL=0321;
WHEN (0085,0111)          CACSMPL=0083;
WHEN (0077)               CACSMPL=0125;
WHEN (0130,0417,7044,7047) CACSMPL = 0005;
*********************************************************************
* THIRD ROUND OF COLLAPSING.
*********************************************************************;
WHEN(0034)                CACSMPL=0035;
WHEN(0416)                CACSMPL=0001;
WHEN(0418,0419)           CACSMPL=0014;
WHEN(0420)                CACSMPL=0037;
WHEN(0422,0361)           CACSMPL=0038; *1/14/2002 - KRR Add 361;
WHEN(0423)                CACSMPL=0064;
WHEN(0424)                CACSMPL=0067;
WHEN(0425,0426)           CACSMPL=0321;
WHEN(0428)                CACSMPL=0326;
WHEN(0430)                CACSMPL=0089;
WHEN(0431,0434)           CACSMPL=0125;
WHEN(0432,0433)           CACSMPL=0120;
WHEN(0435)                CACSMPL=0126;
WHEN(0449)                CACSMPL=9915;
WHEN(0618,0623,0629,0635,0815,0825,1170) CACSMPL=9913;
WHEN(3031)                CACSMPL=9903;
WHEN(5208)                CACSMPL=0067;
WHEN(7042)                CACSMPL=0616;
WHEN(7043)                CACSMPL=0052;
WHEN(0825,0653,1179,8931) CACSMPL=9913;
WHEN(7045)                CACSMPL=9911;
*********************************************************************
* FOURTH ROUND OF COLLAPSING.
*********************************************************************;
WHEN(6303)                CACSMPL=0029;
WHEN(6305)                CACSMPL=0035;
WHEN(6307)                CACSMPL=0039;
WHEN(6311)                CACSMPL=0091;
WHEN(6312)                CACSMPL=0092;
WHEN(6314)                CACSMPL=0103;
WHEN(6315)                CACSMPL=0104;
WHEN(6318)                CACSMPL=0126;
WHEN(6319)                CACSMPL=0127;
*********************************************************************
* ADDED SECOND QUARTER GEOGRAPHIC COLLAPSING.
*********************************************************************;
WHEN(0017)                CACSMPL=0028;
WHEN(0421,7048)           CACSMPL=0039;
WHEN(7083)                CACSMPL=0014;
WHEN(6301)                CACSMPL=0024;
WHEN(0190,0191,0198)      CACSMPL=0069; *1/11/2002 - KRR Add 191,198;
WHEN(0192)                CACSMPL=0064;
WHEN(0193)                CACSMPL=0326;
WHEN(0194)                CACSMPL=0125;
WHEN(0196,0197)           CACSMPL=0064; *1/11/2002 - KRR Add 197;
```

```
      WHEN(0199)                CACSMPL=0095; *1/11/2002 - KRR Add;
      ********************************************************************
      * ADDED FOURTH QUARTER.
      ********************************************************************;
      WHEN (0810) CACSMPL = 0638;
      OTHERWISE CACSMPL = D_PAR;
   END;

   IF D_FAC = 'NONCAT' THEN CACSMPL = '99'||D_HEALTH;
   IF CELLP IN (0000,0998,0999) THEN CACSMPL = 9999;

   ***************************************************************************
   * THIS SECTION OF GENERAL COLLAPSING RULES WAS OBTAINED FROM Q3 2000.
   ***************************************************************************;
   SELECT (CACSMPL);
      WHEN (0252) CACSMPL = 0033;
      WHEN (0378) CACSMPL = 0124;
      WHEN (0387) CACSMPL = 0124;
      WHEN (0508) CACSMPL = 0124;
      WHEN (0511) CACSMPL = 0103;
      WHEN (0534) CACSMPL = 0052;
      WHEN (1587) CACSMPL = 0109;
      WHEN (1592) CACSMPL = 0110;
      WHEN (1646) CACSMPL = 0125;
      WHEN (6201) CACSMPL = 0123;
      WHEN (7143) CACSMPL = 0089;
      WHEN (7236) CACSMPL = 0110;
      WHEN (7286) CACSMPL = 0089;
      WHEN (7293) CACSMPL = 0032;
      WHEN (7294) CACSMPL = 0089;
      OTHERWISE;
   END;

   IF IN1; * Keep all records in the analysis file;

   LABEL CACSMPL = "CACSMPL - Catchment Area (Q4 2000 defn)";
   KEEP MPRID CACSMPL;
RUN;

PROC SORT DATA=&ODSN; BY MPRID; RUN;

*****************************************************************************
* UPDATE THE FINAL ANALYSIS FILE WITH THE REVISED CACSMPL VARIABLE.
*****************************************************************************;
DATA OUT.&ODSN;
   MERGE IN.&IDSN(DROP=CACSMPL) &ODSN;
   BY MPRID;
RUN;

TITLE5 "CACSMPL recaculated from &IDSN..SD2";
PROC FREQ;
   TABLES CACSMPL /MISSING LIST;
RUN;

%MEND PROCESS;

%PROCESS(ILIB="J:\8574\DATA1998\FINAL",   IDSN=HCS98A_5,
         OLIB="....\1998\DATA",           ODSN=CAC98REV);
%PROCESS(ILIB="J:\8687\DATA1999\AFINAL",  IDSN=HCS99A_5,
         OLIB="....\1999\DATA",           ODSN=CAC99REV);

*****************************************************************************
*
*  PROGRAM:  COMB2000.SAS
*  TASK:     ANNUAL DOD HEALTH CARE SURVEY ANALYSIS (8687-100)
*  PURPOSE:  Combine quarterly datasets into one annual file.
*
*  WRITTEN:  12/18/2001 BY KEITH RATHBUN.
*
*   INPUTS:  1) MERGEQ.SD2 - Q1-Q4 DOD HCS Analysis files
*            2) SAMPLA02.SD2 - Q1-Q4 Sample files
```

```
*
*   OUTPUT:  1) COMB2000.SD2 - Combined quarterly datasets in one annual file
*
*    NOTES:  1) The output dataset produced by this program contains all
*               of the original quarterly responses plus additional
*               responses that "trickled" in after the end of the
*               fielding period. The variable called QUARTER can be used
*               to identify which version of the quarterly survey is
*               applicable to the respondent.
*            2) FIELDAGE is calculated for Q1-Q4 using PNBRTHDT from the
*               SAMPLA02.SD2 files.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME INQ1    "...\DATA\Q1_2000T";
LIBNAME INQ2    "...\DATA\Q2_2000T";
LIBNAME INQ3    "...\DATA\Q3_2000T";
LIBNAME INQ4    "....\Q4_2000\DATA\AFINAL";
LIBNAME OUT     "...\DATA";
LIBNAME LIBRARY "....\Q4_2000\DATA\AFINAL\FMTLIB";
OPTIONS COMPRESS=YES LS=132 PS=79 NOCENTER;

*************************************************************************
* Calculate FIELDAGE for Q1-Q4 using SAMPLA02.SD2 files.
*************************************************************************;
%MACRO PROCESS(QTR=);
LIBNAME IN "D:\KEITH\DOD\&QTR\DATA";
DATA &QTR;
   SET IN.SAMPLA02(KEEP=MPRID PNBRTHDT);
   ***********************************************************************
   * Define fielding start date so AGE can be recalculated based on DOB.
   ***********************************************************************;
   %IF      "&QTR" = "Q1_2000" %THEN %DO;
      %LET FIELDATE = 01012001; * mmddyyyy;
   %END;
   %ELSE %IF "&QTR" = "Q2_2000" %THEN %DO;
      %LET FIELDATE = 04012001; * mmddyyyy;
   %END;
   %ELSE %IF "&QTR" = "Q3_2000" %THEN %DO;
      %LET FIELDATE = 07012001; * mmddyyyy;
   %END;
   %ELSE %IF "&QTR" = "Q4_2000" %THEN %DO;
      %LET FIELDATE = 10012001; * mmddyyyy;
   %END;
   ***********************************************************************
   * 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.);
   IF FIELDAGE = "  ." THEN FIELDAGE = " ";

   KEEP MPRID FIELDAGE;
RUN;
%MEND PROCESS;

%PROCESS(QTR=Q1_2000);
%PROCESS(QTR=Q2_2000);
%PROCESS(QTR=Q3_2000);
%PROCESS(QTR=Q4_2000);

DATA FIELDAGE;
   SET Q1_2000 Q2_2000 Q3_2000 Q4_2000;
RUN;
PROC SORT DATA=FIELDAGE; BY MPRID; RUN;

*************************************************************************
```

```
* Combine quartely datasets with all of the "trickle" data into one file.
*************************************************************************;
DATA COMB2000;
   SET INQ1.MERGEQ
       INQ2.MERGEQ
       INQ3.MERGEQ
       INQ4.MERGEQ
      ;
   LABEL FIELDAGE = "Age at start of fielding period"
         DAGEQY   = "Age at time of data collection"
        ;
   ************************************************************************
   * Fix XINS_COV -- Insurance Coverage.
   ************************************************************************;
   IF XENRLLMT = 1 THEN XINS_COV = 1;                                 /* Prime <65-
Active Duty */
   ELSE IF '018' <= FIELDAGE  < '065' AND H00001 IN (1,2) THEN XINS_COV = 2; /* Prime
<65-Non-active Duty */
   ELSE IF H00001 = 3 THEN XINS_COV = 3;                              /* Standard/Extra
*/
   ELSE IF H00001 = 4 THEN XINS_COV = 4;                              /* Medicare A or
B*/
   ELSE IF H00001 IN (5, 6, 7, 8, 9) THEN XINS_COV = 5;               /* Other civilian
health insurance*/
   ELSE IF FIELDAGE >= '065' THEN DO;
      IF XENRLLMT = 5 AND H00001 IN (1,2) THEN XINS_COV = 6;          /* Prime, >= 65 */
   END;
   ************************************************************************
   * A new annual version of CACSMPL is provided in REPWT.SD2.  So, we
   * drop the quarterly version here.
   ************************************************************************;
   DROP CACSMPL;
RUN;

*************************************************************************
* Sort by MPRID and check for duplicates.  There should not be duplicates.
*************************************************************************;
PROC SORT DATA=COMB2000 NODUPKEY; BY MPRID; RUN;

DATA OUT.COMB2000;
   MERGE COMB2000 FIELDAGE;
   BY MPRID;
RUN;

TITLE1 "Annual DOD Health Care Survey Database (8687-100)";
TITLE2 "Program Name: COMB2000.SAS By Keith Rathbun";
TITLE3 "Program Inputs: SAMPLA02.SD2, MERGEQ.SD2 - Q1-Q4 DOD HCS Sample and Analysis
files";
TITLE4 "Program Output: COMB2000.SD2 - Combined quarterly datasets in one annual file";

PROC CONTENTS; RUN;

*************************************************************************
*
* PROGRAM:  ADDWGTS.SAS
* TASK:     2000 DOD HEALTH CARE SURVEY ANALYSIS (8687-610)
* PURPOSE:  MERGE THE FINAL WEIGHTS FILE WITH THE FINAL
*           QUESTIONNAIRE/SAMPLE FILE
*
* WRITTEN:  02/02/2001 BY KEITH RATHBUN
*
* MODIFIED: 1) 01/15/2002 BY KEITH RATHBUN: Updated to combine all quarterly
*           datasets including trickles with the annual weights file.
*
* INPUTS:   1) REPWT.SD2  - Final/Replicated Weights file - FORM A
*           2) COMB2000.SD2 - Combined Q1-Q4 FORM A Questionnaire/Sample File
*
* OUTPUTS:  1) HCSyyA_n.SD2 - Final FORM A Questionnaire/Sample File
*              combined with Final/Replicated Weights file - FORM A
*              where  yy = Year
*                      A = Form A - Annual
```

```
*                      n = Final Dataset Suffix/Version Number
*
* NOTES:    1) This program combines all of the quarterly input datasets
*              including trickles with the annual weights file.
*
*************************************************************************;
LIBNAME IN      "...\DATA";
LIBNAME OUT     "...\DATA";
LIBNAME LIBRARY "...\DATA\FMTLIB";

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

%MACRO PROCESS(DSNI_1=,DSNI_2=,DSNO=);
************************************************************************
* Merge the final weights file with the final Questionnaire/Sample file
*************************************************************************;
PROC SORT DATA=IN.&DSNI_1 OUT=&DSNI_1; BY MPRID; RUN;
PROC SORT DATA=IN.&DSNI_2 OUT=&DSNI_2; BY MPRID; RUN;

DATA &DSNO;
   MERGE &DSNI_2(IN=IN2)
         &DSNI_1(IN=IN1 DROP=QUARTER RENAME=(CACSMPL=XCACSMPL));
   BY MPRID;
   IF FNSTATUS = 11;
   IF IN1 AND IN2;
   IF NOT (IN1 AND IN2) THEN PUT "ERROR: NO MATCHING MPRID WITH &DSNI_1..SD2 AND
&DSNI_2..SD2";
   LABEL KEYCOUNT = "# of Key Questions Answered";
   LABEL ADJ_CELL = "ADJ_CELL - Adjusted STRATUM cell";
   LABEL CWRWT    = "Combined Annual Weight";
   ***********************************************************************
   * Change CACSMPL to be numeric datatype for future use with SUDAAN.
   ***********************************************************************;
   LABEL CACSMPL = "CACSMPL - Catchment Area";
   LENGTH CACSMPL 8;
   CACSMPL = XCACSMPL; DROP XCACSMPL;
   FORMAT CACSMPL CAC.;
RUN;

DATA OUT.&DSNO;
   ***********************************************************************
   * Reorder file for documentation purposes.
   ***********************************************************************;
   LENGTH
       MPRID       $ 8         /* ID                */
       SVCSMPL       8         /* sampling variable */
       SEXSMPL       8         /* sampling variable */
       STRATUM     $ 7         /* sampling variable */
       CACSMPL       8         /* sampling variable */
       ENBGSMPL    $ 2         /* sampling variable */
       STRSMPL     $ 7         /* sampling variable */
       MPCSMPL       8         /* sampling variable */
       NHFF          8         /* sampling variable */
       SUBDEMO     $ 3         /* sampling variable */
       SERVAREA    $ 2         /* sampling variable */
       BOTHSURV    $ 1         /* sampling variable */
       E1          $ 1         /* sampling variable */
       E2          $ 1         /* sampling variable */
       E3          $ 1         /* sampling variable */
       E4          $ 1         /* sampling variable */

       SERVAFF     $ 1         /* DEERS variable    */
       MRTLSTAT    $ 1         /* DEERS variable    */
       RACEETHN    $ 1         /* DEERS variable    */
       PNSEXCD     $ 1         /* DEERS variable    */
       LEGDDSCD    $ 2         /* DEERS variable    */
       DAGEQY      $ 3         /* DEERS variable    */
       PCM         $ 3         /* DEERS variable    */
       TSPSITE    $ 10         /* DEERS variable    */
       DBENCAT     $ 3         /* DEERS variable    */
       DMEDELG     $ 1         /* DEERS variable    */
```

```
DSPONSVC    $ 1         /* DEERS variable    */
MBRRELCD    $ 1         /* DEERS variable    */
MEDTYPE     $ 1         /* DEERS variable    */
PATCAT      $ 7         /* DEERS variable    */
PNARSNCD    $ 2         /* DEERS variable    */
PNLCATCD    $ 1         /* DEERS variable    */
FIELDAGE    $ 3         /* DEERS variable    */

FNSTATUS      8         /* Updated DEERS variable    */
KEYCOUNT      8         /* Updated DEERS variable    */

H00000        4         /* questionnaire     */
H00001        4         /* questionnaire     */
H00002        4         /* questionnaire     */
H00003A       4         /* questionnaire     */
H00003B       4         /* questionnaire     */
H00003C       4         /* questionnaire     */
H00003D       4         /* questionnaire     */
H00003E       4         /* questionnaire     */
H00003F       4         /* questionnaire     */
H00003G       4         /* questionnaire     */
H00003H       4         /* questionnaire     */
H00003I       4         /* questionnaire     */
H00003J       4         /* questionnaire     */
H00003K       4         /* questionnaire     */
H00003L       4         /* questionnaire     */
H00003M       4         /* questionnaire     */
H00004        4         /* questionnaire     */
H00005        4         /* questionnaire     */
H00006        4         /* questionnaire     */
H00007        4         /* questionnaire     */
H00008        4         /* questionnaire     */
H00009        4         /* questionnaire     */
H00010        4         /* questionnaire     */
H00011        4         /* questionnaire     */
H00012        4         /* questionnaire     */
H00013        4         /* questionnaire     */
H00014        4         /* questionnaire     */
H00015        4         /* questionnaire     */
H00016        4         /* questionnaire     */
H00017        4         /* questionnaire     */
H00018        4         /* questionnaire     */
H00019        4         /* questionnaire     */
H00020        4         /* questionnaire     */
H00021        4         /* questionnaire     */
H00022        4         /* questionnaire     */
H00023        4         /* questionnaire     */
H00024        4         /* questionnaire     */
H00025        4         /* questionnaire     */
H00026        4         /* questionnaire     */
H00027        4         /* questionnaire     */
H00028        4         /* questionnaire     */
H00029        4         /* questionnaire     */
H00030        4         /* questionnaire     */
H00031        4         /* questionnaire     */
H00032        4         /* questionnaire     */
H00033        4         /* questionnaire     */
H00034        4         /* questionnaire     */
H00035        4         /* questionnaire     */
H00036        4         /* questionnaire     */
H00037        4         /* questionnaire     */
H00038        4         /* questionnaire     */
H00039        4         /* questionnaire     */
H00040        4         /* questionnaire     */
H00041        4         /* questionnaire     */
H00042        4         /* questionnaire     */
H00043        4         /* questionnaire     */
H00044        4         /* questionnaire     */
H00045        4         /* questionnaire     */
H00046        4         /* questionnaire     */
H00047        4         /* questionnaire     */
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H00048        4         /* questionnaire     */
H00049        4         /* questionnaire     */
H00050        4         /* questionnaire     */
H00051        4         /* questionnaire     */
H00052        4         /* questionnaire     */
H00053        4         /* questionnaire     */
H00054        4         /* questionnaire     */
H00055        4         /* questionnaire     */
H00056        4         /* questionnaire     */
H00057        4         /* questionnaire     */
H00058        4         /* questionnaire     */
H00059        4         /* questionnaire     */
H00060        4         /* questionnaire     */
H00061        4         /* questionnaire     */
H00062        4         /* questionnaire     */
H00063        4         /* questionnaire     */
H00064        4         /* questionnaire     */
H00065        4         /* questionnaire     */
H00066        4         /* questionnaire     */
H00067        4         /* questionnaire     */
H00068        4         /* questionnaire     */
H00069        4         /* questionnaire     */
H00070        4         /* questionnaire     */
H00071        4         /* questionnaire     */
H00072        4         /* questionnaire     */
H00073A       4         /* questionnaire     */
H00073B       4         /* questionnaire     */
H00074        4         /* questionnaire     */
H00075        4         /* questionnaire     */
H00076A       4         /* questionnaire     */
H00076B       4         /* questionnaire     */
H00077        4         /* recode of S00s01  */
SREDA         4         /* questionnaire     */
H00079        4         /* questionnaire     */
SRRACEA       4         /* questionnaire     */
SRRACEB       4         /* questionnaire     */
SRRACEC       4         /* questionnaire     */
SRRACED       4         /* questionnaire     */
SRRACEE       4         /* questionnaire     */
SRAGE         4         /* questionnaire     */
H00082A       4         /* questionnaire     */
H00082B       4         /* questionnaire     */
H00083A       4         /* questionnaire     */
H00083B       4         /* questionnaire     */
H00083C       4         /* questionnaire     */
H00083D       4         /* questionnaire     */
H00083E       4         /* questionnaire     */
H00083F       4         /* questionnaire     */
H00083G       4         /* questionnaire     */
H00083H       4         /* questionnaire     */
H00083I       4         /* questionnaire     */
H00084        4         /* questionnaire     */
H00085A       4         /* questionnaire     */
H00085B       4         /* questionnaire     */
H00085C       4         /* questionnaire     */
H00085D       4         /* questionnaire     */
H00085E       4         /* questionnaire     */
H00085F       4         /* questionnaire     */
H00085G       4         /* questionnaire     */
H00085H       4         /* questionnaire     */
H00085I       4         /* questionnaire     */
H00085J       4         /* questionnaire     */
S00C01        4         /* questionnaire     */
S00C02        4         /* questionnaire     */
S00C03        4         /* questionnaire     */
S00C04        4         /* questionnaire     */
S00C05        4         /* questionnaire     */
S00C06        4         /* questionnaire     */
S00C07        4         /* questionnaire     */
S00C08        4         /* questionnaire     */
S00C09        4         /* questionnaire     */
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```
S00C10        4         /* questionnaire     */
S00C11        4         /* questionnaire     */
S00C12        4         /* questionnaire     */
S00C13        4         /* questionnaire     */
S00C14        4         /* questionnaire     */
S00C15        4         /* questionnaire     */
S00C16        4         /* questionnaire     */
S00C17        4         /* questionnaire     */
S00C18        4         /* questionnaire     */
S00C19        4         /* questionnaire     */
S00C20        4         /* questionnaire     */
S00C21        4         /* questionnaire     */
S00C22        4         /* questionnaire     */
S00M01        4         /* questionnaire     */
S00M02        4         /* questionnaire     */
S00M03        4         /* questionnaire     */
S00A01A       4         /* questionnaire     */
S00A01B       4         /* questionnaire     */
S00A01C       4         /* questionnaire     */
S00A01D       4         /* questionnaire     */
S00A01E       4         /* questionnaire     */
S00A01F       4         /* questionnaire     */
S00A01G       4         /* questionnaire     */
S00A01H       4         /* questionnaire     */
S00A01I       4         /* questionnaire     */
S00A01J       4         /* questionnaire     */
S00A01K       4         /* questionnaire     */
S00A01L       4         /* questionnaire     */
S00A01M       4         /* questionnaire     */
S00A01N       4         /* questionnaire     */
S00A01O       4         /* questionnaire     */
S00A01P       4         /* questionnaire     */
S00A01Q       4         /* questionnaire     */
S00A01R       4         /* questionnaire     */
S00A02        4         /* questionnaire     */
S00A03        4         /* questionnaire     */
S00A04        4         /* questionnaire     */
S00A05A       4         /* questionnaire     */
S00A05B       4         /* questionnaire     */
S00A05C       4         /* questionnaire     */
S00A05D       4         /* questionnaire     */
S00A05E       4         /* questionnaire     */
S00A05F       4         /* questionnaire     */
S00A05G       4         /* questionnaire     */
S00A05H       4         /* questionnaire     */
S00A06        4         /* questionnaire     */
S00A07        4         /* questionnaire     */
S00A08        4         /* questionnaire     */
S00A09        4         /* questionnaire     */
S00A10        4         /* questionnaire     */
S00A11A       4         /* questionnaire     */
S00A11B       4         /* questionnaire     */
S00A11C       4         /* questionnaire     */
S00A11D       4         /* questionnaire     */
S00A11E       4         /* questionnaire     */
S00A11F       4         /* questionnaire     */
S00A11G       4         /* questionnaire     */
S00A11H       4         /* questionnaire     */
S00A11I       4         /* questionnaire     */
S00A11J       4         /* questionnaire     */
S00A12        4         /* questionnaire     */
S00A13        4         /* questionnaire     */
S00H01        4         /* questionnaire     */
S00H02        4         /* questionnaire     */
S00H03        4         /* questionnaire     */
S00H04        4         /* questionnaire     */
S00H05        4         /* questionnaire     */
S00H06        4         /* questionnaire     */
S00H07        4         /* questionnaire     */
S00H08        4         /* questionnaire     */
S00H09A       4         /* questionnaire     */
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S00H09B       4          /* questionnaire     */
S00H09C       4          /* questionnaire     */
S00H09D       4          /* questionnaire     */
S00H09E       4          /* questionnaire     */
S00H09F       4          /* questionnaire     */
S00H09G       4          /* questionnaire     */
S00H10        4          /* questionnaire     */
S00H11A       4          /* questionnaire     */
S00H11B       4          /* questionnaire     */
S00H11C       4          /* questionnaire     */
S00H11D       4          /* questionnaire     */
S00H11E       4          /* questionnaire     */
S00H11F       4          /* questionnaire     */
S00H11G       4          /* questionnaire     */
S00H11H       4          /* questionnaire     */
S00H11I       4          /* questionnaire     */
S00H11J       4          /* questionnaire     */
S00H11K       4          /* questionnaire     */
S00H11L       4          /* questionnaire     */
S00H12        4          /* questionnaire     */
S00H13        4          /* questionnaire     */
S00H14        4          /* questionnaire     */
S00H15        4          /* questionnaire     */
S00I01        4          /* questionnaire     */
S00I02        4          /* questionnaire     */
S00I03        4          /* questionnaire     */
S00S01        4          /* questionnaire     */
S00S02        4          /* questionnaire     */
S00S03        4          /* questionnaire     */
S00S04        4          /* questionnaire     */
S00S05        4          /* questionnaire     */
S00S06        4          /* questionnaire     */
S00S07        4          /* questionnaire     */
S00S08        4          /* questionnaire     */
S00S09        4          /* questionnaire     */

FLAG_FIN    $ 5          /* DRC variable      */
DUPFLAG     $ 3          /* DRC variable      */


N1            8          /* CS flag variable     */
N2            8          /* CS flag variable     */
N3            8          /* CS flag variable     */
N4            8          /* CS flag variable     */
N5            8          /* CS flag variable     */
N6            8          /* CS flag variable     */
N7            8          /* CS flag variable     */
N8            8          /* CS flag variable     */
N9            8          /* CS flag variable     */
N10           8          /* CS flag variable     */
N11           8          /* CS flag variable     */
N12           8          /* CS flag variable     */
N13           8          /* CS flag variable     */
N14           8          /* CS flag variable     */
N15           8          /* CS flag variable     */
N16           8          /* CS flag variable     */
N17           8          /* CS flag variable     */
N18           8          /* CS flag variable     */
N18A          8          /* CS flag variable     */
N18B          8          /* CS flag variable     */
N18C          8          /* CS flag variable     */
N19           8          /* CS flag variable     */
N20           8          /* CS flag variable     */
N21           8          /* CS flag variable     */
N22           8          /* CS flag variable     */
N23           8          /* CS flag variable     */
N23A          8          /* CS flag variable     */
N23B          8          /* CS flag variable     */
N23C          8          /* CS flag variable     */
N24           8          /* CS flag variable     */
N25           8          /* CS flag variable     */
```

```
N25A          8         /* CS flag variable     */
N25B          8         /* CS flag variable     */
N25C          8         /* CS flag variable     */
N26           8         /* CS flag variable     */
N27           8         /* CS flag variable     */
N28           8         /* CS flag variable     */

MISS_1        8         /* CS Count             */
MISS_4        8         /* CS Count             */
MISS_5        8         /* CS Count             */
MISS_6        8         /* CS Count             */
MISS_7        8         /* CS Count             */
MISS_8        8         /* CS Count             */
MISS_9        8         /* CS Count             */
MISS_TOT      8         /* CS Count             */

QUARTER     $ 7         /* constructed       */
XENRLLMT      8         /* constructed       */
XENR_PCM      8         /* constructed       */
XINS_COV      8         /* constructed       */
XQENROLL      8         /* constructed       */
XREGION       3         /* constructed       */
CONUS         3         /* constructed       */
OUTCATCH      8         /* constructed       */
XSEXA         8         /* constructed       */
XBNFGRP       8         /* constructed       */
KENRINTN      8         /* constructed       */
KDISENRL      8         /* constructed       */
KMILOFFC      8         /* constructed       */
KCIVOFFC      8         /* constructed       */
KBGPRB1       8         /* constructed       */
KBGPRB2       8         /* constructed       */
KMILOPQY      8         /* constructed       */
KCIVOPQY      8         /* constructed       */
KCIVINS       8         /* constructed       */
KCOST_2       8         /* constructed       */
KMEDIGAP      8         /* constructed       */
KPRSCPTN      8         /* constructed       */
KBRSTCR       8         /* constructed       */
HP_PRNTL      8         /* constructed       */
HP_MAMOG      8         /* constructed       */
HP_MAM50      8         /* constructed       */
HP_PAP        8         /* constructed       */
HP_BP         8         /* constructed       */
HP_FLU        8         /* constructed       */
HP_PROS       8         /* constructed       */
HP_GP         8         /* constructed       */
HP_BRST       8         /* constructed       */
HP_CHOL       8         /* constructed       */
HP_SMOKE      8         /* constructed       */
SF8PF         3         /* constructed       */
SF8RP         3         /* constructed       */
SF8BP         3         /* constructed       */
SF8GH         3         /* constructed       */
SF8VT         3         /* constructed       */
SF8SF         3         /* constructed       */
SF8RE         3         /* constructed       */
SF8MH         3         /* constructed       */
PCS_8         4         /* constructed       */
MCS_8         4         /* constructed       */
KMID_H        3         /* constructed       */
KMID_MH       3         /* constructed       */

BWT           8         /* weights           */
ADJ_CELL      8         /* weights           */
WRWT          8         /* weights           */
WRWT1         8         /* weights           */
WRWT2         8         /* weights           */
WRWT3         8         /* weights           */
WRWT4         8         /* weights           */
WRWT5         8         /* weights           */
```

```
WRWT6          8          /* weights           */
WRWT7          8          /* weights           */
WRWT8          8          /* weights           */
WRWT9          8          /* weights           */
WRWT10         8          /* weights           */
WRWT11         8          /* weights           */
WRWT12         8          /* weights           */
WRWT13         8          /* weights           */
WRWT14         8          /* weights           */
WRWT15         8          /* weights           */
WRWT16         8          /* weights           */
WRWT17         8          /* weights           */
WRWT18         8          /* weights           */
WRWT19         8          /* weights           */
WRWT20         8          /* weights           */
WRWT21         8          /* weights           */
WRWT22         8          /* weights           */
WRWT23         8          /* weights           */
WRWT24         8          /* weights           */
WRWT25         8          /* weights           */
WRWT26         8          /* weights           */
WRWT27         8          /* weights           */
WRWT28         8          /* weights           */
WRWT29         8          /* weights           */
WRWT30         8          /* weights           */
WRWT31         8          /* weights           */
WRWT32         8          /* weights           */
WRWT33         8          /* weights           */
WRWT34         8          /* weights           */
WRWT35         8          /* weights           */
WRWT36         8          /* weights           */
WRWT37         8          /* weights           */
WRWT38         8          /* weights           */
WRWT39         8          /* weights           */
WRWT40         8          /* weights           */
WRWT41         8          /* weights           */
WRWT42         8          /* weights           */
WRWT43         8          /* weights           */
WRWT44         8          /* weights           */
WRWT45         8          /* weights           */
WRWT46         8          /* weights           */
WRWT47         8          /* weights           */
WRWT48         8          /* weights           */
WRWT49         8          /* weights           */
WRWT50         8          /* weights           */
WRWT51         8          /* weights           */
WRWT52         8          /* weights           */
WRWT53         8          /* weights           */
WRWT54         8          /* weights           */
WRWT55         8          /* weights           */
WRWT56         8          /* weights           */
WRWT57         8          /* weights           */
WRWT58         8          /* weights           */
WRWT59         8          /* weights           */
WRWT60         8          /* weights           */
CWRWT          8          /* weights           */
CWRWT1         8          /* weights           */
CWRWT2         8          /* weights           */
CWRWT3         8          /* weights           */
CWRWT4         8          /* weights           */
CWRWT5         8          /* weights           */
CWRWT6         8          /* weights           */
CWRWT7         8          /* weights           */
CWRWT8         8          /* weights           */
CWRWT9         8          /* weights           */
CWRWT10        8          /* weights           */
CWRWT11        8          /* weights           */
CWRWT12        8          /* weights           */
CWRWT13        8          /* weights           */
CWRWT14        8          /* weights           */
CWRWT15        8          /* weights           */
```

```
      CWRWT16       8         /* weights          */
      CWRWT17       8         /* weights          */
      CWRWT18       8         /* weights          */
      CWRWT19       8         /* weights          */
      CWRWT20       8         /* weights          */
      CWRWT21       8         /* weights          */
      CWRWT22       8         /* weights          */
      CWRWT23       8         /* weights          */
      CWRWT24       8         /* weights          */
      CWRWT25       8         /* weights          */
      CWRWT26       8         /* weights          */
      CWRWT27       8         /* weights          */
      CWRWT28       8         /* weights          */
      CWRWT29       8         /* weights          */
      CWRWT30       8         /* weights          */
      CWRWT31       8         /* weights          */
      CWRWT32       8         /* weights          */
      CWRWT33       8         /* weights          */
      CWRWT34       8         /* weights          */
      CWRWT35       8         /* weights          */
      CWRWT36       8         /* weights          */
      CWRWT37       8         /* weights          */
      CWRWT38       8         /* weights          */
      CWRWT39       8         /* weights          */
      CWRWT40       8         /* weights          */
      CWRWT41       8         /* weights          */
      CWRWT42       8         /* weights          */
      CWRWT43       8         /* weights          */
      CWRWT44       8         /* weights          */
      CWRWT45       8         /* weights          */
      CWRWT46       8         /* weights          */
      CWRWT47       8         /* weights          */
      CWRWT48       8         /* weights          */
      CWRWT49       8         /* weights          */
      CWRWT50       8         /* weights          */
      CWRWT51       8         /* weights          */
      CWRWT52       8         /* weights          */
      CWRWT53       8         /* weights          */
      CWRWT54       8         /* weights          */
      CWRWT55       8         /* weights          */
      CWRWT56       8         /* weights          */
      CWRWT57       8         /* weights          */
      CWRWT58       8         /* weights          */
      CWRWT59       8         /* weights          */
      CWRWT60       8         /* weights          */
    ;
   SET &DSNO;
RUN;

TITLE1 "2000 DOD Quarterly Health Care Survey (8687-610)";
TITLE2 "Program Name: ADDWGTS.SAS By Keith Rathbun";
TITLE3 "Program Inputs: &DSNI_1..SD2 -- &DSNI_2..SD2";
TITLE4 "Program Outputs: &DSNO..SD2";
PROC CONTENTS; RUN;

%MEND PROCESS;

%PROCESS(DSNI_1=REPWT, DSNI_2=COMB2000, DSNO=HCS00A_1);
```