NOTE: Copyright (c) 2002-2008 by SAS Institute Inc., Cary, NC, USA.
NOTE: SAS (r) Proprietary Software 9.2 (TS1M0)
      Licensed to SOCIAL & SCIENTIFIC SYSTEMS INC/AHRQ/NIH/HRSA, Site 0070021279.
NOTE: This session is executing on the XP_PRO  platform.



NOTE: SAS initialization used:
      real time           0:01.47
      user cpu time       0:00.18
      system cpu time     0:01.51
      Memory                         2554k
      OS Memory                      3292k
      Timestamp              12/16/2008  1:06:07 PM


NOTE: AUTOEXEC processing beginning; file is C:\PROGRA~1\SAS92\SASFOU~1\9.2\autoexec.sas.


NOTE: AUTOEXEC processing completed.

```
1          ************************************************************************
2
3          PROGRAM:      C:\MEPS\PROG\E6.SAS
4
5          DESCRIPTION:  THIS PROGRAM GENERATES THE FOLLOWING ESTIMATES FOR 2005
6                        PERCENTAGE DISTRIBUTION OF HEALTH CARE SPENDING, BY TYPE OF SERVICE,
7                        FOR THE U.S. CIVILIAN NONINSTITUTIONALIZED POPULATION
8                        AS REFERENCED IN FIGURE 1 OF THE MEPS STAT BRIEF #193
9                        THE PROGRAM USES 2005 MEPS DATA.
10
11                        TYPE OF SERVICE CATEGORIES:
12                          HOSPITAL INPATIENT
13                          OFFICE-BASED VISITS
14                          PRESCRIBED MEDICINES
15                          HOSPITAL OUTPATIENT
16                          DENTAL VISITS
17                          EMERGENCY ROOM
18                          HOME HEALTH CARE (AGENCY & NON-AGENCY)
19                          OTHER (TOTAL EXPENDITURES - ABOVE EXPENDITURE CATEGORIES)
20
21                        NOTE: EXPENSES INCLUDE BOTH FACILITY AND PHYSICIAN EXPENSES.
22
23          INPUT FILE:   C:\MEPS\DATA\H97.SAS7BDAT (2005 FULL-YEAR FILE)
24
25          ************************************************************************
26          ;
27
28          FOOTNOTE 'PROGRAM: C:\MEPS\PROG\E6.SAS';
29
30          LIBNAME CDATA 'C:\MEPS\DATA';
NOTE: Libref CDATA was successfully assigned as follows:
      Engine:        V9
      Physical Name: C:\MEPS\DATA
31
32          TITLE1 'AHRQ MEPS DATA USERS WORKSHOP -- SEPTEMBER 2008';
33
34
35          /* Read in data from 2005 Consolidated Data File (HC-097) */
36
37          DATA PUF97 (KEEP= TOTAL HOSPITAL_INPATIENT OFFICE_BASED PRESCRIBED_MEDICINES
38                            HOSPITAL_OUTPATIENT DENTAL EMERGENCY_ROOM HOME_HEALTH
39                            OTHER
40                            X_ANYSVCE X_HOSPITAL_INPATIENT X_OFFICE_BASED X_PRESCRIBED_MEDICINES
41                            X_HOSPITAL_OUTPATIENT X_DENTAL X_EMERGENCY_ROOM X_HOME_HEALTH X_OTHER
42                            VARSTR VARPSU PERWT05F);
43
44            SET CDATA.H97 (KEEP= TOTEXP05 IPDEXP05 IPFEXP05 OBVEXP05 RXEXP05
45                                 OPDEXP05 OPFEXP05 DVTEXP05 ERDEXP05 ERFEXP05
46                                 HHAEXP05 HHNEXP05 OTHEXP05 VARSTR VARPSU PERWT05F);
47
48          IF PERWT05F>0;
49
50
51          /* Define expenditure variables by type of service  */
52
53          TOTAL = TOTEXP05;
```

```
54          HOSPITAL_INPATIENT   = IPDEXP05 + IPFEXP05;
55          OFFICE_BASED         = OBVEXP05;
56          PRESCRIBED_MEDICINES = RXEXP05;
57          HOSPITAL_OUTPATIENT  = OPDEXP05 + OPFEXP05;
58          DENTAL               = DVTEXP05;
59          EMERGENCY_ROOM       = ERDEXP05 + ERFEXP05;
60          HOME_HEALTH          = HHAEXP05 + HHNEXP05;
61          OTHER                = TOTAL - (HOSPITAL_INPATIENT + OFFICE_BASED + PRESCRIBED_MEDICINES +
62                                          HOSPITAL_OUTPATIENT + DENTAL + EMERGENCY_ROOM + HOME_HEALTH);
63
64
65          /* Create Flag (1/0) variables for persons with an expense, by type of service  */
66
67          ARRAY EXX  (9) TOTAL HOSPITAL_INPATIENT OFFICE_BASED PRESCRIBED_MEDICINES
68                         HOSPITAL_OUTPATIENT DENTAL EMERGENCY_ROOM HOME_HEALTH OTHER;
69
70          ARRAY ANYX (9) X_ANYSVCE X_HOSPITAL_INPATIENT X_OFFICE_BASED X_PRESCRIBED_MEDICINES
71                         X_HOSPITAL_OUTPATIENT X_DENTAL X_EMERGENCY_ROOM X_HOME_HEALTH X_OTHER;
72
73        DO I=1 TO 9;
74          IF EXX(I)>0 THEN ANYX(I)=1;
75          ELSE ANYX(I)=0;
76        END;
77
78      RUN;

NOTE: There were 33961 observations read from the data set CDATA.H97.
NOTE: The data set WORK.PUF97 has 32320 observations and 21 variables.
NOTE: DATA statement used (Total process time):
      real time           0:00.87
      user cpu time       0:00.07
      system cpu time     0:00.25
      Memory                        681k
      OS Memory                    4316k
      Timestamp           12/16/2008  1:06:09 PM


79
80      TITLE2 'HEALTHCARE SPENDING, 2005 (MEPS STAT BRIEF #193, 2005 DATA)';
81      TITLE3 'FIGURE 1: DISTRIBUTION BY TYPE OF SERVICE';
82      PROC SURVEYMEANS DATA= PUF97 MEAN STDERR SUM STD;
83            STRATUM VARSTR;
84            CLUSTER VARPSU;
85            WEIGHT PERWT05F;
86            VAR   HOSPITAL_INPATIENT OFFICE_BASED PRESCRIBED_MEDICINES HOSPITAL_OUTPATIENT
87                  DENTAL EMERGENCY_ROOM HOME_HEALTH OTHER TOTAL;
88            RATIO HOSPITAL_INPATIENT OFFICE_BASED PRESCRIBED_MEDICINES HOSPITAL_OUTPATIENT
89                  DENTAL EMERGENCY_ROOM HOME_HEALTH OTHER / TOTAL;
90      RUN;

NOTE: The PROCEDURE SURVEYMEANS printed page 1.
NOTE: PROCEDURE SURVEYMEANS used (Total process time):
      real time           0:03.03
      user cpu time       0:01.20
      system cpu time     0:00.18
      Memory                       15742k
      OS Memory                    19796k
      Timestamp           12/16/2008  1:06:12 PM


91
92
93      TITLE3 'FIGURE 2: PERCENTAGE OF PERSONS WITH AN EXPENSE, BY TYPE OF SERVICE';
94      PROC SURVEYMEANS DATA= PUF97 MEAN STDERR SUM STD;
95            STRATUM VARSTR;
96            CLUSTER VARPSU;
97            WEIGHT PERWT05F;
98            VAR X_ANYSVCE X_HOSPITAL_INPATIENT X_OFFICE_BASED X_PRESCRIBED_MEDICINES
99                X_HOSPITAL_OUTPATIENT X_DENTAL X_EMERGENCY_ROOM X_HOME_HEALTH X_OTHER;
100     RUN;

NOTE: The PROCEDURE SURVEYMEANS printed page 2.
NOTE: PROCEDURE SURVEYMEANS used (Total process time):
      real time           0:00.23
      user cpu time       0:00.21
      system cpu time     0:00.01
      Memory                       4081k
```

```
     OS Memory                      9244k
     Timestamp           12/16/2008  1:06:12 PM


101

NOTE: SAS Institute Inc., SAS Campus Drive, Cary, NC USA 27513-2414
NOTE: The SAS System used:
     real time           0:06.48
     user cpu time       0:01.68
     system cpu time     0:02.23
     Memory                        18590k
     OS Memory                     19796k
     Timestamp           12/16/2008  1:06:12 PM
```

HEALTHCARE SPENDING, 2005 (MEPS STAT BRIEF #193, 2005 DATA)
FIGURE 1: DISTRIBUTION BY TYPE OF SERVICE


The SURVEYMEANS Procedure


Data Summary


Number of Strata                203
Number of Clusters              452
Number of Observations        32320
Sum of Weights            296185002


Statistics


|                      |             | Std Error |              |             |
|----------------------|-------------|-----------|--------------|-------------|
| Variable             | Mean        | of Mean   | Sum          | Std Dev     |
| HOSPITAL_INPATIENT   | 1067.815868 | 50.164978 | 316271045334 | 16045954910 |
| OFFICE_BASED         | 764.179220  | 23.615305 | 226338424169 | 8541923069  |
| PRESCRIBED_MEDICINES | 719.706248  | 23.592363 | 213166196663 | 8158097742  |
| HOSPITAL_OUTPATIENT  | 324.282393  | 16.909557 | 96047581248  | 5311049645  |
| DENTAL               | 244.699799  | 6.922308  | 72476410585  | 2480075819  |
| EMERGENCY_ROOM       | 112.594623  | 4.455403  | 33348838770  | 1405156479  |
| HOME_HEALTH          | 151.150009  | 43.927522 | 44768365672  | 13046432984 |
| OTHER                | 72.071848   | 2.628124  | 21346600509  | 921140026   |
| TOTAL                | 3456.500008 | 90.433709 | 1.0237635E12 | 33630954198 |


Ratio Analysis


| Numerator            | Denominator | Ratio    | Std Err  |
|----------------------|-------------|----------|----------|
| HOSPITAL_INPATIENT   | TOTAL       | 0.308930 | 0.010406 |
| OFFICE_BASED         | TOTAL       | 0.221085 | 0.006373 |
| PRESCRIBED_MEDICINES | TOTAL       | 0.208218 | 0.006246 |
| HOSPITAL_OUTPATIENT  | TOTAL       | 0.093818 | 0.004722 |
| DENTAL               | TOTAL       | 0.070794 | 0.002490 |
| EMERGENCY_ROOM       | TOTAL       | 0.032575 | 0.001352 |
| HOME_HEALTH          | TOTAL       | 0.043729 | 0.012162 |
| OTHER                | TOTAL       | 0.020851 | 0.000800 |

               HEALTHCARE SPENDING, 2005 (MEPS STAT BRIEF #193, 2005 DATA)
            FIGURE 2: PERCENTAGE OF PERSONS WITH AN EXPENSE, BY TYPE OF SERVICE


                           The SURVEYMEANS Procedure


                                Data Summary

                    Number of Strata                203
                    Number of Clusters              452
                    Number of Observations        32320
                    Sum of Weights            296185002


                                Statistics

                                    Std Error
         Variable               Mean       of Mean            Sum        Std Dev
         ----------------------------------------------------------------------------

         X_ANYSVCE             0.846737    0.003597      250790828       6008795
         X_HOSPITAL_INPATIENT  0.074989    0.001892       22210658        719365
         X_OFFICE_BASED        0.713248    0.004568      211253481       5081191
         X_PRESCRIBED_MEDICINES 0.631376   0.004900      187004001       4547417
         X_HOSPITAL_OUTPATIENT 0.158426    0.003880       46923340       1467954
         X_DENTAL              0.422839    0.005951      125238518       3262374
         X_EMERGENCY_ROOM      0.129222    0.002792       38273570       1143315
         X_HOME_HEALTH         0.021636    0.001123        6408181        343816
         X_OTHER               0.214358    0.003665       63489584       1726309
         ----------------------------------------------------------------------------