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NOTE: This session is executing on the XP_PRO platform.

NOTE: SAS initialization used:

```
real time          0:01.46
user cpu time      0:00.28
system cpu time    0:00.67
Memory             2554k
OS Memory          3292k
Timestamp          12/16/2008 2:00:49 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\M5.SAS
4
5          DESCRIPTION:  THIS EXAMPLE SHOWS THE DIFFERENCE BETWEEN TWO USES OF
6                        THE TERM "PRIORITY CONDITION" IN MEPS.
7
8                        THE MEPS SUPPLEMENTAL PRIORITY CONDITIONS (PC) SECTION
9                        ASKS (IN ROUNDS 2/4), FOR EACH PERSON, ABOUT THE
10                       EXISTENCE OF CERTAIN PRIORITY CONDITIONS (SEE PAGES C-56 -
11                       C-60 OF THE HC-097 DOCUMENTATION FILE).
12                       INFORMATION COLLECTED IN THE PC SECTION OF THE MEPS
13                       IS DISTINCT FROM THAT INCLUDED IN THE CONDITION
14                       ROSTER. THESE CONDITIONS ARE NOT PART OF THE CONDITION
15                       ROSTER UNLESS THEY ARE MENTIONED ELSEWHERE IN THE
16                       INTERVIEW. NOTE THAT PC QUESTIONS ARE OF THE FORM,
17                       "HAS PERSON *EVER* BEEN TOLD BY A DOCTOR OR OTHER
18                       HEALTH PROFESSIONAL THAT THEY HAVE (CONDITION)?"
19                       THE VARIABLES ASSOCIATED WITH THESE PC SECTION
20                       QUESTIONS ARE ON THE FULL-YEAR FILE (HC-097 FOR 2005).
21
22                       THE CONDITIONS FILE ALSO HAS A SET OF CONDITIONS
23                       FLAGGED AS PRIORITY BY THE VARIABLE PRIOLIST (SEE APPENDIX
24                       4 OF THE CONDITIONS FILE DOCUMENTATION). THESE
25                       CONDITIONS MIGHT COME FROM A REPORT OF BEING BOTHERED BY THE
26                       CONDITION DURING THE YEAR, FROM AN ASSOCIATED
27                       EVENT OR PRESCRIPTION MEDICINE IN THE YEAR, FROM BEING
28                       ASSOCIATED WITH A DISABILITY DAY DURING THE YEAR, OR AS A
29                       FOLLOW-UP QUESTION FOR A PREVIOUSLY REPORTED CONDITION WHERE
30                       THE PRIORITY LIST FLAG IS SET (PRIOLIST=1). SETTING THE
31                       PRIORITY LIST FLAG IS A MANUAL PROCESS AND MAY NOT HAVE BEEN
32                       SET FOR ALL ELIGIBLE CONDITIONS.
33
34          INPUT FILES:  (1) C:\MEPS\DATA\H96.SAS7BDAT (2005 MEDICAL CONDITIONS FILE)
35                       (2) C:\MEPS\DATA\H97.SAS7BDAT (2005 FULL-YEAR DATA FILE)
36
37          \*****/
38
39          FOOTNOTE 'PROGRAM: C:\MEPS\PROG\M5.SAS';
40
41          LIBNAME CDATA 'C:\MEPS\DATA' ;
NOTE: Libref CDATA was successfully assigned as follows:
Engine:          V9
Physical Name:   C:\MEPS\DATA
43
44          TITLE1 'AHRQ MEPS DATA USERS WORKSHOP -- SEPTEMBER 2008';
45          TITLE2 'TWO DIFFERENT SETS OF PRIORITY CONDITIONS';
46
47          PROC FORMAT;
48              VALUE $ICD9F
49                  '250' = 'DIABETES MELLITUS*'
50                  '401' = 'ESSENTIAL HYPERTENSION'
51                  '492' = 'EMPHYSEMA*'
52                  '493' = 'ASTHMA';
NOTE: Format $ICD9F has been output.
```

```

53          VALUE YESNOF
54          -1 = '-1 INAPPLICABLE'
55          1 = '1 YES'
56          0 = '0 NO';
NOTE: Format YESNOF has been output.
57          VALUE PRIOF
58          1 = '1 YES'
59          2 = '2 NO';
NOTE: Format PRIOF has been output.
60          RUN;

```

```

NOTE: PROCEDURE FORMAT used (Total process time):
real time          0:00.12
user cpu time      0:00.00
system cpu time    0:00.06
Memory             145k
OS Memory          3548k
Timestamp          12/16/2008 2:00:50 PM

```

```

61
62          *READ 2005 CONDITIONS FILE AND SELECT THE FOLLOWING CONDITIONS -
63          DIABETES MELLITUS, ESSENTIAL HYPERTENSION, EMPHYSEMA, ASTHMA;
64          DATA COND2005;
65          SET CDATA.H96 (KEEP= DUPERSID CONDDIX ICD9CODX PRIOLIST);
66          WHERE ICD9CODX IN ('250', '401', '492', '493');
67          RUN;

```

```

NOTE: There were 9413 observations read from the data set CDATA.H96.
WHERE ICD9CODX in ('250', '401', '492', '493');
NOTE: The data set WORK.COND2005 has 9413 observations and 4 variables.
NOTE: DATA statement used (Total process time):

```

```

real time          0:00.98
user cpu time      0:00.03
system cpu time    0:00.09
Memory             650k
OS Memory          4344k
Timestamp          12/16/2008 2:00:51 PM

```

```

68
69          TITLE3 'VARIABLES FROM 2005 COND FILE';
70          TITLE4 'CONDITION LEVEL';
71
72          PROC FREQ DATA= COND2005;
73          TABLES ICD9CODX
74          ICD9CODX*PRIOLIST / LIST MISSING;
75          FORMAT ICD9CODX $ICD9F. PRIOLIST PRIOF. ;
76          RUN;

```

```

NOTE: There were 9413 observations read from the data set WORK.COND2005.
NOTE: The PROCEDURE FREQ printed page 1.
NOTE: PROCEDURE FREQ used (Total process time):

```

```

real time          0:00.22
user cpu time      0:00.03
system cpu time    0:00.04
Memory             1412k
OS Memory          5112k
Timestamp          12/16/2008 2:00:51 PM

```

```

77
78          PROC SORT DATA= COND2005;
79          BY DUPERSID;
80          RUN;

```

```

NOTE: There were 9413 observations read from the data set WORK.COND2005.
NOTE: The data set WORK.COND2005 has 9413 observations and 4 variables.
NOTE: PROCEDURE SORT used (Total process time):

```

```

real time          0:00.03
user cpu time      0:00.00
system cpu time    0:00.03
Memory             648k
OS Memory          5340k
Timestamp          12/16/2008 2:00:51 PM

```

```

81
82 * CREATE INDICATORS FOR EACH TYPE OF PRIORITY CONDITION;
83 DATA CONDPERS (KEEP= DUPERSID C_DIABETES C_HYPERTENSION
84                 C_EMPHYSEMA C_ASTHMA);
85     SET COND2005;
86     BY DUPERSID;
87     ARRAY CONDS{4} C_DIABETES C_HYPERTENSION C_EMPHYSEMA C_ASTHMA;
88     RETAIN C_DIABETES C_HYPERTENSION C_EMPHYSEMA C_ASTHMA;
89     IF FIRST.DUPERSID
90     THEN
91         DO XX = 1 TO 4;
92             CONDS{XX} = 0;
93         END;
94     IF ICD9CODX = '250'
95     THEN C_DIABETES = 1;
96     ELSE IF ICD9CODX = '401'
97     THEN C_HYPERTENSION = 1;
98     ELSE IF ICD9CODX = '492'
99     THEN C_EMPHYSEMA = 1;
100    ELSE IF ICD9CODX = '493'
101    THEN C_ASTHMA = 1;
102    IF LAST.DUPERSID
103    THEN
104        DO;
105            DO YY = 1 TO 4;
106                IF CONDS{YY} NE 1
107                THEN CONDS{YY} = 0;
108            END;
109            OUTPUT CONDPERS;
110        END;
111    RUN;

```

NOTE: There were 9413 observations read from the data set WORK.COND2005.

NOTE: The data set WORK.CONDPERS has 7376 observations and 5 variables.

NOTE: DATA statement used (Total process time):

| | | |
|-----------------|------------|------------|
| real time | 0:00.03 | |
| user cpu time | 0:00.00 | |
| system cpu time | 0:00.01 | |
| Memory | | 260k |
| OS Memory | | 5340k |
| Timestamp | 12/16/2008 | 2:00:51 PM |

```

112
113 TITLE3 'VARIABLES FROM 2005 CONDITIONS FILE';
114 TITLE4 'PERSON LEVEL';
115
116 PROC FREQ DATA= CONDPERS;
117     TABLES C_DIABETES
118             C_ASTHMA
119             C_HYPERTENSION
120             C_EMPHYSEMA
121             / LIST MISSING;
122     FORMAT C_DIABETES C_ASTHMA C_HYPERTENSION C_EMPHYSEMA YESNOF. ;
123     RUN;

```

NOTE: There were 7376 observations read from the data set WORK.CONDPERS.

NOTE: The PROCEDURE FREQ printed page 2.

NOTE: PROCEDURE FREQ used (Total process time):

| | | |
|-----------------|------------|------------|
| real time | 0:00.01 | |
| user cpu time | 0:00.00 | |
| system cpu time | 0:00.01 | |
| Memory | | 506k |
| OS Memory | | 5624k |
| Timestamp | 12/16/2008 | 2:00:51 PM |

```

124
125 PROC SORT DATA= COND2005 NODUPKEY;
126     BY DUPERSID ICD9CODX;
127     RUN;

```

NOTE: There were 9413 observations read from the data set WORK.COND2005.

NOTE: 311 observations with duplicate key values were deleted.

NOTE: The data set WORK.COND2005 has 9102 observations and 4 variables.

NOTE: PROCEDURE SORT used (Total process time):

| | |
|-----------|---------|
| real time | 0:00.03 |
|-----------|---------|

```

user cpu time      0:00.01
system cpu time    0:00.01
Memory             677k
OS Memory          5340k
Timestamp          12/16/2008  2:00:51 PM

```

```

128
129      *READ 2005 CONSOLIDATED FULL YEAR FILE;
130      *CREATE INDICATORS FOR EACH OF THE 4 PRIORITY CONDITIONS;
131      DATA FY2005 (KEEP= DUPERSID PC_DIABETES PC_ASTHMA PC_HYPERTENSION PC_EMPHYSEMA);
132          SET CDATA.H97 (KEEP= DUPERSID DIABDX53 ASTHDX53 HIBPDX53
133              EMPHDX53 VARPSU VARSTR PERWT05F
134              RENAME=(DIABDX53=PC_DIABETES
135                  ASTHDX53=PC_ASTHMA
136                  HIBPDX53=PC_HYPERTENSION
137                  EMPHDX53=PC_EMPHYSEMA));
138      ARRAY CONDS{4} PC_DIABETES PC_ASTHMA PC_HYPERTENSION PC_EMPHYSEMA;
139      DO XX = 1 TO 4;
140          IF ((CONDS{XX} = 2) OR (CONDS{XX} LT -1))
141              THEN CONDS{XX} = 0;
142      END;
143      RUN;

```

NOTE: There were 33961 observations read from the data set CDATA.H97.
NOTE: The data set WORK.FY2005 has 33961 observations and 5 variables.
NOTE: DATA statement used (Total process time):

```

real time          0:01.78
user cpu time      0:00.03
system cpu time    0:00.14
Memory             545k
OS Memory          5852k
Timestamp          12/16/2008  2:00:53 PM

```

```

144
145      PROC SORT DATA= FY2005;
146          BY DUPERSID;
147      RUN;

```

NOTE: There were 33961 observations read from the data set WORK.FY2005.
NOTE: The data set WORK.FY2005 has 33961 observations and 5 variables.
NOTE: PROCEDURE SORT used (Total process time):

```

real time          0:00.03
user cpu time      0:00.01
system cpu time    0:00.00
Memory             1511k
OS Memory          6620k
Timestamp          12/16/2008  2:00:53 PM

```

```

148
149      TITLE3 'VARIABLES FROM 2005 FULL-YEAR FILE';
150      TITLE4 'PERSON-LEVEL';
151
152      PROC FREQ DATA= FY2005;
153          TABLES PC_DIABETES
154              PC_ASTHMA
155              PC_HYPERTENSION
156              PC_EMPHYSEMA
157              / LIST MISSING;
158      FORMAT PC_DIABETES PC_ASTHMA PC_HYPERTENSION PC_EMPHYSEMA YESNOF. ;
159      RUN;

```

NOTE: There were 33961 observations read from the data set WORK.FY2005.
NOTE: The PROCEDURE FREQ printed page 3.
NOTE: PROCEDURE FREQ used (Total process time):

```

real time          0:00.03
user cpu time      0:00.01
system cpu time    0:00.00
Memory             507k
OS Memory          6648k
Timestamp          12/16/2008  2:00:53 PM

```

```

160
161      *MERGE CONDITIONS AND FULL YEAR FILES TO COMPARE THE PRIORITY CONDITIONS INFORMATION;

```

```

162 DATA FYCOND05;
163 MERGE CONDPERS (IN= A) FY2005 (IN= B) END= ITSOVER;
164 BY DUPERSID;
165 ARRAY CONDS{4} C_DIABETES C_HYPERTENSION C_EMPHYSEMA C_ASTHMA;
166 DO XX = 1 TO 4;
167 IF CONDS{XX} = .
168 THEN CONDS{XX} = 0;
169 END;
170 IF A AND B
171 THEN BOTH+1;
172 ELSE IF A
173 THEN JUSTA+1;
174 ELSE IF B
175 THEN JUSTB+1;
176 IF ITSOVER
177 THEN PUT BOTH= JUSTA= JUSTB= ;
178 DROP XX;
179 IF B;
180 RUN;

```

BOTH=7376 JUSTA=0 JUSTB=26585

NOTE: There were 7376 observations read from the data set WORK.CONDPERS.

NOTE: There were 33961 observations read from the data set WORK.FY2005.

NOTE: The data set WORK.FYCOND05 has 33961 observations and 12 variables.

NOTE: DATA statement used (Total process time):

| | | |
|-----------------|------------|------------|
| real time | 0:00.04 | |
| user cpu time | 0:00.01 | |
| system cpu time | 0:00.03 | |
| Memory | | 363k |
| OS Memory | | 6364k |
| Timestamp | 12/16/2008 | 2:00:53 PM |

```

181
182 TITLE3 'VARIABLES FROM COMBINED FILE';
183 TITLE4 'PERSON-LEVEL';
184 TITLE5 'C_variables FROM COND FILE, PC_variables FROM FULL YEAR FILE';
185
186 PROC FREQ DATA= FYCOND05;
187 TABLES C_DIABETES*PC_DIABETES
188 C_ASTHMA*PC_ASTHMA
189 C_HYPERTENSION*PC_HYPERTENSION
190 C_EMPHYSEMA*PC_EMPHYSEMA
191 / LIST MISSING;
192 FORMAT C_DIABETES C_ASTHMA C_HYPERTENSION C_EMPHYSEMA
193 PC_DIABETES PC_ASTHMA PC_HYPERTENSION PC_EMPHYSEMA YESNOF. ;
194 RUN;

```

NOTE: There were 33961 observations read from the data set WORK.FYCOND05.

NOTE: The PROCEDURE FREQ printed page 4.

NOTE: PROCEDURE FREQ used (Total process time):

| | | |
|-----------------|------------|------------|
| real time | 0:00.04 | |
| user cpu time | 0:00.01 | |
| system cpu time | 0:00.03 | |
| Memory | | 634k |
| OS Memory | | 6648k |
| Timestamp | 12/16/2008 | 2:00:53 PM |

195
196
197
198
199
200

NOTE: SAS Institute Inc., SAS Campus Drive, Cary, NC USA 27513-2414

NOTE: The SAS System used:

| | | |
|-----------------|------------|------------|
| real time | 0:05.26 | |
| user cpu time | 0:00.46 | |
| system cpu time | 0:01.32 | |
| Memory | | 5342k |
| OS Memory | | 6648k |
| Timestamp | 12/16/2008 | 2:00:53 PM |

The FREQ Procedure

ICD-9-CM CODE FOR CONDITION - EDITED

| ICD9CODX | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|------------------------|-----------|---------|-------------------------|-----------------------|
| DIABETES MELLITUS* | 2172 | 23.07 | 2172 | 23.07 |
| ESSENTIAL HYPERTENSION | 5211 | 55.36 | 7383 | 78.43 |
| EMPHYSEMA* | 161 | 1.71 | 7544 | 80.14 |
| ASTHMA | 1869 | 19.86 | 9413 | 100.00 |

| ICD9CODX | PRIOLIST | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|------------------------|----------|-----------|---------|-------------------------|-----------------------|
| DIABETES MELLITUS* | 1 YES | 1926 | 20.46 | 1926 | 20.46 |
| DIABETES MELLITUS* | 2 NO | 246 | 2.61 | 2172 | 23.07 |
| ESSENTIAL HYPERTENSION | 1 YES | 4569 | 48.54 | 6741 | 71.61 |
| ESSENTIAL HYPERTENSION | 2 NO | 642 | 6.82 | 7383 | 78.43 |
| EMPHYSEMA* | 1 YES | 153 | 1.63 | 7536 | 80.06 |
| EMPHYSEMA* | 2 NO | 8 | 0.08 | 7544 | 80.14 |
| ASTHMA | 1 YES | 1534 | 16.30 | 9078 | 96.44 |
| ASTHMA | 2 NO | 335 | 3.56 | 9413 | 100.00 |

The FREQ Procedure

| C_DIABETES | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|------------|-----------|---------|-------------------------|-----------------------|
| 0 NO | 5327 | 72.22 | 5327 | 72.22 |
| 1 YES | 2049 | 27.78 | 7376 | 100.00 |

| C_ASTHMA | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|----------|-----------|---------|-------------------------|-----------------------|
| 0 NO | 5583 | 75.69 | 5583 | 75.69 |
| 1 YES | 1793 | 24.31 | 7376 | 100.00 |

| C_HYPERTENSION | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|----------------|-----------|---------|-------------------------|-----------------------|
| 0 NO | 2274 | 30.83 | 2274 | 30.83 |
| 1 YES | 5102 | 69.17 | 7376 | 100.00 |

| C_EMPHYSEMA | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------------|-----------|---------|-------------------------|-----------------------|
| 0 NO | 7218 | 97.86 | 7218 | 97.86 |
| 1 YES | 158 | 2.14 | 7376 | 100.00 |

The FREQ Procedure

DIABETES DIAGNOSIS - RD 5/3

| PC_DIABETES | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----------------|-----------|---------|-------------------------|-----------------------|
| -1 INAPPLICABLE | 393 | 1.16 | 393 | 1.16 |
| 0 NO | 31565 | 92.94 | 31958 | 94.10 |
| 1 YES | 2003 | 5.90 | 33961 | 100.00 |

ASTHMA DIAGNOSIS - RD 5/3

| PC_ASTHMA | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----------------|-----------|---------|-------------------------|-----------------------|
| -1 INAPPLICABLE | 393 | 1.16 | 393 | 1.16 |
| 0 NO | 30441 | 89.64 | 30834 | 90.79 |
| 1 YES | 3127 | 9.21 | 33961 | 100.00 |

HIGH BLOOD PRESSURE DIAG (>17) - RD 5/3

| PC_HYPERTENSION | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----------------|-----------|---------|-------------------------|-----------------------|
| -1 INAPPLICABLE | 10470 | 30.83 | 10470 | 30.83 |
| 0 NO | 17279 | 50.88 | 27749 | 81.71 |
| 1 YES | 6212 | 18.29 | 33961 | 100.00 |

EMPHYSEMA DIAGNOSIS (>17) - RD 5/3

| PC_EMPHYSEMA | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----------------|-----------|---------|-------------------------|-----------------------|
| -1 INAPPLICABLE | 10470 | 30.83 | 10470 | 30.83 |
| 0 NO | 23177 | 68.25 | 33647 | 99.08 |
| 1 YES | 314 | 0.92 | 33961 | 100.00 |

TWO DIFFERENT SETS OF PRIORITY CONDITIONS
 VARIABLES FROM COMBINED FILE
 PERSON-LEVEL
 C_variables FROM COND FILE, PC_variables FROM FULL YEAR FILE

The FREQ Procedure

| C_DIABETES | PC_DIABETES | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|------------|-----------------|-----------|---------|----------------------|--------------------|
| 0 NO | -1 INAPPLICABLE | 332 | 0.98 | 332 | 0.98 |
| 0 NO | 0 NO | 31429 | 92.54 | 31761 | 93.52 |
| 0 NO | 1 YES | 151 | 0.44 | 31912 | 93.97 |
| 1 YES | -1 INAPPLICABLE | 61 | 0.18 | 31973 | 94.15 |
| 1 YES | 0 NO | 136 | 0.40 | 32109 | 94.55 |
| 1 YES | 1 YES | 1852 | 5.45 | 33961 | 100.00 |

| C_ASTHMA | PC_ASTHMA | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|----------|-----------------|-----------|---------|----------------------|--------------------|
| 0 NO | -1 INAPPLICABLE | 381 | 1.12 | 381 | 1.12 |
| 0 NO | 0 NO | 30254 | 89.08 | 30635 | 90.21 |
| 0 NO | 1 YES | 1533 | 4.51 | 32168 | 94.72 |
| 1 YES | -1 INAPPLICABLE | 12 | 0.04 | 32180 | 94.76 |
| 1 YES | 0 NO | 187 | 0.55 | 32367 | 95.31 |
| 1 YES | 1 YES | 1594 | 4.69 | 33961 | 100.00 |

| C_HYPERTENSION | PC_HYPERTENSION | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|----------------|-----------------|-----------|---------|----------------------|--------------------|
| 0 NO | -1 INAPPLICABLE | 10333 | 30.43 | 10333 | 30.43 |
| 0 NO | 0 NO | 17025 | 50.13 | 27358 | 80.56 |
| 0 NO | 1 YES | 1501 | 4.42 | 28859 | 84.98 |
| 1 YES | -1 INAPPLICABLE | 137 | 0.40 | 28996 | 85.38 |
| 1 YES | 0 NO | 254 | 0.75 | 29250 | 86.13 |
| 1 YES | 1 YES | 4711 | 13.87 | 33961 | 100.00 |

| C_EMPHYSEMA | PC_EMPHYSEMA | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------------|-----------------|-----------|---------|----------------------|--------------------|
| 0 NO | -1 INAPPLICABLE | 10457 | 30.79 | 10457 | 30.79 |
| 0 NO | 0 NO | 23164 | 68.21 | 33621 | 99.00 |
| 0 NO | 1 YES | 182 | 0.54 | 33803 | 99.53 |
| 1 YES | -1 INAPPLICABLE | 13 | 0.04 | 33816 | 99.57 |
| 1 YES | 0 NO | 13 | 0.04 | 33829 | 99.61 |
| 1 YES | 1 YES | 132 | 0.39 | 33961 | 100.00 |