**Supplemental Material 3.** File 3: NHATSNSOC_Dementia Status and interview_simple_061521.sav

```
/*Run NHATS data format statements   */

/* NHATS_Round_1_Combined_PROC_FORMAT_Statement.sas */

PROC FORMAT;

    VALUE dosfacd /* FOR FQ1dosfacd  */
        -8 = "-8 DK"
        -1 = "-1 INAPPLICABLE"
         1 = " 1 FREE STANDING NURSING HOME"
         2 = " 2 FREE STANDING ASSISTED LIVING FACILITY / RESIDENTIAL CARE
FACILITY"
         3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
         4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
         5 = " 5 ADULT FAMILY CARE HOME"
         6 = " 6 GROUP HOME"
         7 = " 7 BOARD AND CARE HOME / PERSONAL CARE HOME"
         8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
         9 = " 9 INDEPENDENT LIVING"
        10 = " 10 ASSISTED AND INDEPENDENT/RETIREMENT (NO NURSING HOME)"
        11 = " 11 HOUSING (APT, CONDO, ETC.)";
         ;
    VALUE dosfaca /* FOR FQ1dosfaca */
        -8 = "-8 DK"
        -1 = "-1 INAPPLICABLE"
         1 = " 1 INDEPENDENT LIVING / HOUSING / RETIREMENT "
         2 = " 2 ASSISTED LIVING / PERSONAL CARE"
         3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
         4 = " 4 NURSING HOME"    ;

     VALUE DLOCSP /* FOR FQ1DLOCSP2 */
       -1 = "-1 INAPPLICABLE"
        1 = " 1 INDEPENDENT LIVING "
        2 = " 2 ASSISTED LIVING "
        3 = " 3 SPECIAL CARE UNIT"
        8 = " 8 NOT REPORTED"    ;

      VALUE CODE60_64B /*FOR CODE60_64B*/
       -1 = "-1 INAPPLICABLE"
        1 = " 1 INDEPENDENT LIVING "
        2 = " 2 ASSISTED LIVING, SCU, NOT REPORTED";

     VALUE DLOCSP2F /* FOR FQ1DLOCSP */
       -1 = "-1 Inapplicable"
        1 = " 1 Independent living"
        2 = " 2 Assisted living"
        3 = " 3 Special care unit"
        4 = " 4 Nursing Home"
        8 = " 8 Not reported";
/* used in creation of op1dhrsmth   */
      value gt0f
        -7,-8 = "-7,-8:DK/RF"
        -1 = "-1:Inapp.   "
```

```
      -9 = "-9:Missing "
       1-high = ">0";
     VALUE schedf
       1    = "1:Regular"
       2    = "2:Varied"
      -7,-8 = "-7,-8:DK/RF"
      -1    = "-1:Inapp."
      -9    = "-9:Missing" ;
     VALUE ynf
       1    = "1:Yes"
       2    = "2:No"
      -7,-8 = "-7,-8:DK/RF"
      -1    = "-1:Inapp."
      -9    = "-9:Missing"   ;
     value gt0hours
      -12= "-12:valid skip/staff"
      -11= "-11:hours missing"
      -10= "-10:days missing"
      -9 = "-9:days+hrs missing"
      -1 = "-1:Inapp."
       0 = "0:<1 hour/day"
       1-744=">0"
       9999="Not codeable, <1 hour/day";
 value hoursf /*with categories for distribution checking*/
      -12= "-12:valid skip/staff"
      -11= "-11:hours missing"
      -10= "-10:days missing"
      -9 = "-9:days+hrs missing"
      -1 = "-1:Inapp."
       0-<1  ="<1"
       1-<10 =" 1-<10"
      10-<20 ="10-<20"
      20-<30 ="20-<30"
      30-<40 ="30-40"
      40-<60 ="40-60"
      60-<120 ="60-120"
      120-<180="120-180"
      180-744="180-744(24/7)"
      9999="Not codeable, <1 hour/day";
*****;
     VALUE release
       1 = '1 - Main Sample'
       2 = '2 - Reserve Sample'
       9 = '9 - New Release Sample';
     VALUE dchntinhh
       1 = '1 - Child identified in interview but not enumerated to OP File'
      -1 = '-1 - inapplicable';

     VALUE dmissadd
       1 =  ' 1 no flags and added at CL section'
       2 =  ' 2 no flags and added at DT section'
       3 =  ' 3 no flags and added at EW section'
       4 =  ' 4 no flags and added at HA section'
       5 =  ' 5 no flags and added at HO section'
       6 =  ' 6 no flags and added at MC section'
       7 =  ' 7 no flags and added at MO section'
       8 =  ' 8 no flags and added at PA section'
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```
        9 = '9 no flags and added at PE section'
        10 = '10 no flags and added at SC section'
        11 = '11 no flags and added at SN section'
        -1 = '-1 not applicable';


    VALUE dnsoc
        1 = '1 eligible and interviewed'
        2 = '2 eligible and not interviewed'
        -1 = '-1 inapplicable';

/* FORMATS FOR MDS */
    VALUE INDEP
        1 = '1 Independent'
        2 = '2 Supervision or help'
        3 = '3 Total dependence'
        4 = '4 Activity occurred 2 or fewer times'
        -1 = '-1 inapplicable (not nursing home resident)'
        -8 = '-8 DK';

    VALUE CANE
        1 = '1 normally uses cane'
        2 = '2 no indication normally uses cane'
        -8 = '-8 DK'
        -1 = '-1 inapplicable (not nursing home resident)';

    VALUE WALKER
        1 = '1 normally uses walker'
        2 = '2 no indication normally uses walker'
        -8 = '-8 DK'
        -1 = '-1 inapplicable (not nursing home resident)';

    VALUE WHEELCH
    1 = '1 normally uses wheelchair'
    2 = '2 no indication normally uses wheelchair'
    -8  ='-8 DK'
    -1 = '-1 inapplicable (not nursing home resident)';

      VALUE CS1D_F
            1= '1 Yes'
            2= '2 Yes corrected by NHATS'
            3= '3 No'
            4= '4 Yes but missing OP records for child outside household '
            -1= '-1 Inapplicable'
            -7= '-7 RF'
            -8= '-8 DK'
            -9= '-9 Missing';

    VALUE FQ_4F
        1='1 YES'
        2='2 NO';

    VALUE GENDER
        1 = '1 MALE'
        2 = '2 FEMALE';

    VALUE RFDK
```

```
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable (nursing home resident or residential care no FQ)'
-9 = '-9 Missing';

VALUE RFDK_F
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';

VALUE RFDK_Y
 1 = ' 1 Yes'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';

VALUE RFDK_YN
 1 = ' 1 Yes'
 2 = ' 2 No'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';

VALUE DMGETHLP
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
997 = '997 Help Since Birth/Entire Life';

VALUE CENDIV /* RE1DCENSDIV */
1 =  '1 Northeast Region: New England Division'
2 =  '2 Northeast Region: Middle Atlantic Division'
3 =  '3 Midwest Region: East North Central Division'
4 =  '4 Midwest Region: West North Central Division'
5 =  '5 South Region: South Atlantic Division'
6 =  '6 South Region: East South Central Division'
7 =  '7 South Region: West South Central Division'
8 =  '8 West Region: Mountain Division'
9 =  '9 West Region: Pacific Division'
-9 = '-9 Not Ascertained (error Missing)';

VALUE INAPMISS
    -1 = '-1 Inapplicable'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -9 = '-9 Missing'        ;

VALUE INAPMI_S
    -1 = '-1 Inapplicable'
    -9 = '-9 Children outside SP Household and OP records missing'     ;

VALUE HT1DRESC
  1 = ' 1 NURSING HOME'
```

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      2 = ' 2 GROUP HOME/ASSTLVNG/CCRC'
      3 = ' 3 RESIDENTIAL CARE'
      4 = ' 4 NOT RESIDENTIAL CARE'
     -7 = '-7 RF'
     -8 = '-8 DK';

   VALUE R1DRESID
     1 = '1 Community '
     2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
     3 = '3 Residential Care Resident not nursing home (FQ only)'
     4 = '4 Nursing Home Resident';

   VALUE R1DRES_R
     1 = ' 1 Case recoded from nursing home resident to other residential
care'
    -1 = '-1 Inapplicable';


   VALUE HT1DLVNG
     1 = '1 Alone'
     2 = '2 With spouse/partner only [spouse/partner in household]'
     3 = '3 With spouse/partner and with others'
     4 = '4 With others only'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'  ;

   VALUE DLVNGARR
1 ='1 Alone '
2 ='2 With spouse/partner only [spouse/partner in household]'
3= '3 With spouse/partner and with others'
4= '4 With others only '
-1 = '-1 Inapplicable '
 -9= '-9 Missing ';

   VALUE WORDLIST
     1 = ' 1 YES'
     2 = ' 2 NO'
     3 = ' 3 NO WORDS REMEMBERED'
     4 = ' 4 REFUSED'
    -1 = '-1 Inapplicable (nursing home resident or residential care FQ
only)'
    -9 = '-9 Missing'       ;

   VALUE WORDREC
       1 = ' 1 LIST 1'
       2 = ' 2 LIST 2'
       3 = ' 3 LIST 3'
      -1 = '-1 Inapplicable '
      -9 = '-9 Missing';

   VALUE WORDRECO
        1 = ' 1 NO WORDS REMEMBERED'
        2 = ' 2 NO'
       -1 = '-1 Inapplicable '
       -2 = '-2 Proxy says cannot ask SP'
       -3 = '-3 Proxy says can ask SP but SP unable to answer'
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```
         -7 = '-7 SP refused activity'
         -9 = '-9 Missing';

    VALUE WORDRECP
        1  = '1 REFUSED WORD RECALL TASK'
        2  = '2 NO'
        -1 = '-1 Inapplicable '
        -2 = '-2 Proxy says cannot ask SP'
        -3 = '-3 Proxy says can ask SP but SP unable to answer'
        -7 = '-7 SP refused activity'
        -9 = '-9 Missing';

    VALUE WORDRECN
         1 = ' 1 YES'
         2 = ' 2 NO'
        -1 = '-1 Inapplicable '
        -2 = '-2 Proxy says cannot ask SP'
        -3 = '-3 Proxy says can ask SP but SP unable to answer'
        -7 = '-7 SP refused activity'
        -9 = '-9 Missing';

    VALUE WORDRE_N
        -1 = '-1 Inapplicable'
        -2 = '-2 Proxy says cannot ask SP'
        -3 = '-3 Proxy says can ask SP but SP unable to answer'
        -7 = '-7 SP refused activity'
        -9 = '-9 Missing';

    VALUE WORDRE_P
         1 = ' 1 YES'
         2 = ' 2 NO'
        -1 = '-1 Inapplicable'
        -2 = '-2 Proxy says cannot ask SP'
        -3 = '-3 Proxy says can ask SP but SP unable to answer'
        -7 = '-7 SP refused activity'
        -9 = '-9 Missing';

    VALUE WORDRECC
        -1 = '-1 Inapplicable '
        -2 = '-2 Proxy says cannot ask SP'
        -3 = '-3 Proxy says can ask SP but SP unable to answer'
        -7 = '-7 SP refused activity'
        -9 = '-9 Missing';

    VALUE CLOCKSC
        -1 = '-1 Inapplicable'
        -2 = '-2 Proxy says cannot ask SP'
        -3 = '-3 Proxy says can ask SP but SP unable to answer'
        -4 = '-4 SP did not attempt to draw clock'
        -7 = '-7 SP refused to draw clock'
        -9 = '-9 Missing';

    VALUE MDOUTSLF
     1 = " 1 Did not do by self in last month"
     2 = " 2 Did by self in last month/no difficulty"
     3 = " 3 Did by self in last month/difficulty"
     4 = " 4 DKRF did by self in last month/no difficulty"
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```
   5 = " 5 DKRF did by self in  last month/difficulty"
   6 = " 6 Did by self in last month/DKRF difficulty"
   7 = " 7 DKRF did by self in last month/DKRF difficulty"
   8 = " 8 Not done in last month"
  -1 = "-1 Inapplicable "
  -9 = '-9 Missing';

   VALUE MDOUTDEV
   8 = " 8 Not done in last month"
   1 = " 1 No use of devices to go outside in last month"
   2 = " 2 Use of devices to go outside in last month"
   3 = " 3 DKRF if used devices to go outside in last month"
   4 = " 4 DKRF if used devices in last month"
  -1 = "-1 Inapplicable "
  -9 = '-9 Missing';

   VALUE MDOUTHLP
   8 = " 8 Not done in last month"
   1 = " 1 No help to go outside in last month"
   2 = " 2 Had help to go outside in last month"
   3 = " 3 DKRF if had help to go outside in last month"
  -1 = "-1 Inapplicable "
  -9 = '-9 Missing';

   VALUE MODINSLF
   8 = " 8 Not done in last month"
   1 = " 1 Did not do by self in last month"
   2 = " 2 Did by self in last month/no difficulty"
   3 = " 3 Did by self in last month/difficulty"
   4 = " 4 DKRF did by self in last month/no difficulty"
   5 = " 5 DKRF did by self in  last month/difficulty"
   6 = " 6 Did by self in last month/DKRF difficulty"
   7 = " 7 DKRF did by self in last month/DKRF difficulty"
  -1 = "-1 Inapplicable"
  -9 = '-9 Missing';

   VALUE MODINDEV
   8 = " 8 Not done in last month"
   1 = " 1 No use of devices inside in last month"
   2 = " 2 Use of devices inside in last month"
   3 = " 3 DKRF if used devices inside in last month"
   4 = " 4 DKRF on use of devices "
  -1 = "-1 Inapplicable ";

   VALUE MODINHLP
   8 = " 8 Not done in last month"
   1 = " 1 No help to go around inside in last month"
   2 = " 2 Had help to go around inside in last month"
   3 = " 3 DKRF if had help to go around inside in last month"
  -1 = "-1 Inapplicable";

   VALUE MDBEDSLF
   8 = " 8 Not done in last month"
   1 = " 1 Did not do by self in last month"
   2 = " 2 Did by self in last month/no difficulty"
   3 = " 3 Did by self in last month/difficulty"
   4 = " 4 DKRF did by self in last month/no difficulty"
```

```
   5 = " 5 DKRF did by self in  last month/difficulty"
   6 = " 6 Did by self in last month/DKRF difficulty"
   7 = " 7 DKRF did by self in last month/DKRF difficulty"
  -1 = "-1 Inapplicable"
  -9 = '-9 Missing';

VALUE MDBEDDEV
   1 = " 1 No use of cane or walker to get out of bed in last month"
   2 = " 2 Use of cane or walker to get out of bed in last month"
   3 = " 3 DKRF if used cane or walker to get out of bed in last month "
   4 = " 4 DKRF if used cane or walker in last month"
  -1 = "-1 Inapplicable ";

 VALUE MDBEDHLP
  1 = " 1 No help to get out of bed in last month"
  2 = " 2 Had help to get out of bed in last month"
  3 = " 3 DKRF if had help to get out of bed in last month"
 -1 = "-1 Inapplicable" ;

 VALUE DMDHLPYR
  1 = " 1 No mobility help in last year"
  2 = " 2 Mobility help in last year"
 -7 = " -7 RF"
 -8 = " -8 DK"
 -1 = " -1 Inapplicable ";

 VALUE DMDHLPST
   0 = ' 0 less than 1 month of help'
   1 = ' 1 1 month of help'
   2 = ' 2 2 months of help'
   3 = ' 3 3 months of help'
   4 = ' 4 4 months of help'
   5 = ' 5 5 months of help'
   6 = ' 6 6 months of help'
   7 = ' 7 7 months of help'
   8 = ' 8 8 months of help'
   9 = ' 9 9 months of help'
  10 = '10 10 months of help'
  11 = '11 11 months of help'
  -7 = '-7 help last month but RF number of months of help in year'
  -8 = '-8 help last month but DK number of months of help in year'
 -1 = " -1 Inapplicable ";

 VALUE DMDHLPEN
   0 = ' 0 less than 1 month since help ended'
   1 = ' 1 1 month since help ended'
   2 = ' 2 2 months since help ended'
   3 = ' 3 3 months since help ended'
   4 = ' 4 4 months since help ended'
   5 = ' 5 5 months since help ended'
   6 = ' 6 6 months since help ended'
   7 = ' 7 7 months since help ended'
   8 = ' 8 8 months since help ended'
   9 = ' 9 9 months since help ended'
  10 = '10 10 months since help ended'
  11 = '11 11 months since help ended'
  -7 = '-7 no help last month and RF number of months since help ended'
```

```
    -8 = '-8 no help last month and DK number of months since help ended'
    -1 = '-1 Inapplicable ';

   VALUE DMHLPYRS
    0   = '0 none or less than 1 year'
    997 = '997 since birth'
    -7  = '-7 RF'
    -8  = '-8 DK'
    -1  = '-1 Inapplicable '
    -9  = '-9 Missing';

   VALUE DMDDEVYR
    1 = ' 1 No Mobility device use in last year'
    2 = ' 2 Mobility device use in last year'
    -1 = '-1 Inapplicable '
    -7  = '-7 RF'
    -8  = '-8 DK'
    -9 = '-9 Missing';

   VALUE DMDEVST
    0 = ' 0 less than 1 month of mobility device use'
    1 = ' 1 1 month of mobility device use'
    2 = ' 2 2 months of mobility device use'
    3 = ' 3 3 months of mobility device use'
    4 = ' 4 4 months of mobility device use'
    5 = ' 5 5 months of mobility device use'
    6 = ' 6 6 months of mobility device use'
    7 = ' 7 7 months of mobility device use'
    8 = ' 8 8 months of mobility device use'
    9 = ' 9 9 months of mobility device use'
   10 = '10 10 months of mobility device use'
   11 = '11 11 months of mobility device use'
   -7 = '-7 used last month but RF number of months of use in year'
   -8 = '-8 used last month but DK number of months of use in year'
   -1 = '-1 Inapplicable ';

   VALUE DMDEVEND
    1 = ' 1 1 month since mobility device use ended'
    2 = ' 2 2 months since mobility device use ended'
    3 = ' 3 3 months since mobility device use ended'
    4 = ' 4 4 months since mobility device use ended'
    5 = ' 5 5 months since mobility device use ended'
    6 = ' 6 6 months since mobility device use ended'
    7 = ' 7 7 months since mobility device use ended'
    8 = ' 8 8 months since mobility device use ended'
    9 = ' 9 9 months since mobility device use ended'
   10 = '10 10 months since mobility device use ended'
   11 = '11 11 months since mobility device use ended'
   -7 = '-7 no use last month and RF number of months since device use
ended'
   -8 = '-8 no use last month and DK number of months since device use
ended'
   -1 = '-1 Inapplicable '
  ;

   VALUE DMDEVYRS
    0   = '0  none or less than 1 year'
```

```
   997 = '997 since birth'
   -7  = '-7 DK'
   -8  = '-8 RF'
   -1  = '-1 Inapplicable '
    ;

  VALUE HADLSLF
  1 = ' 1  Did not do by self in last month'
  2 = ' 2  Did by self in last month/no difficulty'
  3 = ' 3  Did by self in last month/difficulty'
  4 = ' 4  DKRF did by self in last month/no difficulty'
  5 = ' 5  DKRF did by self in last month/difficulty'
  6 = ' 6  Did by self in last month/DKRF difficulty'
  7 = ' 7  DKRF did by self in last month/DKRF difficulty'
  8 = ' 8 Not done in last month'
 -1 = '-1 Inapplicable'    ;

    VALUE HADLOTH
  1 = ' 1 Health/functioning reason only'
  2 = ' 2 Other reason only'
  3 = ' 3 Both health/functioning and other reason'
  4 = ' 4 Service/someone from the place SP lives'
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'        ;

  VALUE HADSHSLF
  1 = ' 1 Did not do by self in last month'
  2 = ' 2 Did by self in last month/no difficulty'
  3 = ' 3 Did by self in last month/difficulty'
  4 = ' 4 DKRF did by self in last month/no difficulty'
  5 = ' 5 DKRF did by self in  last month/difficulty'
  6 = ' 6 Did by self in last month/DKRF difficulty'
  7 = ' 7 DKRF did by self in last month/DKRF difficulty'
  8 = ' 8 Not done in last month'
 -1 = '-1 Inapplicable'  ;

  VALUE HADSHOTH
   1 = ' 1 Health/functioning reason only'
   2 = ' 2 Other reason only'
   3 = ' 3 Both health/functioning and other reason'
   4 = ' 4 Service/someone from the place SP lives'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable ';

  VALUE HADMLSLF
  1 = ' 1 Did not do by self in last month'
  2 = ' 2 Did by self in last month/no difficulty'
  3 = ' 3 Did by self in last month/difficulty'
  4 = ' 4 DKRF did by self in last month/no difficulty'
  5 = ' 5 DKRF did by self in  last month/difficulty'
  6 = ' 6 Did by self in last month/DKRF difficulty'
  7 = ' 7 DKRF did by self in last month/DKRF difficulty'
  8 = ' 8 Not done in last month'
 -1 = '-1 Inapplicable' ;
```

```
VALUE HADMLOTH
 1 = ' 1 Health/functioning reason only'
 2 = ' 2 Other reason only'
 3 = ' 3 Both health/functioning and other reason'
 4 = ' 4 Service/someone from the place SP lives'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'          ;

VALUE HADBBSLF
1 = ' 1 Did not do by self in last month'
2 = ' 2 Did by self in last month/no difficulty'
3 = ' 3 Did by self in last month/difficulty'
4 = ' 4 DKRF did by self in last month/no difficulty'
5 = ' 5 DKRF did by self in  last month/difficulty'
6 = ' 6 Did by self in last month/DKRF difficulty'
7 = ' 7 DKRF did by self in last month/DKRF difficulty'
8 = ' 8 Not done in last month'
-1 = 'Inapplicable'      ;

VALUE HADBBOTH
 1 = ' 1 Health/functioning reason only'
 2 = ' 2 Other reason only'
 3 = ' 3 Both health/functioning and other reason'
 4 = ' 4 Service/someone from the place SP lives'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'  ;

VALUE SCEATDEV
1 = ' 1 No use of adapted utensils in last month'
2 = ' 2 Use of adapted utensils in last month'
3 = ' 3 RFDK if used adapted utensils in last month'
8 = ' 8 Not done in last month'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'    ;

VALUE SCEATHLP
 1 = ' 1 No help eating in last month'
 2 = ' 2 Help eating in last month'
 3 = ' 3 DKRF help eating in last month'
 8 = ' 8 Not done in last month'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'    ;

VALUE SCEATDIF
1 = ' 1 Did not do by self in last month'
2 = ' 2 No difficulty by self (and when using utensils)'
3 = ' 3 Difficulty by self (and when using utensils)'
6 = ' 6 Did by self in last month/DKRF difficulty'
7 = ' 7 DKRF did by self in last month/DKRF difficulty'
8 = ' 8 Not done in last month'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'    ;

VALUE SCDBADEV
```

```
    1 = ' 1 No use of grab bars or bath seats in last month'
    2 = ' 2 Use of grab bars or bath seats in last month'
    3 = ' 3 DKRF if use of grab bars or bath seats in last month'
    4 = ' 4 DKRF if had grab bars or bath seats in last month'
    9 = ' 9 No grab bars or bath seats or washes up (does not shower or
bathe) or has no shower or bathtub'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'    ;

   VALUE SCBTHHLP
    1 = ' 1 No help bathing in last month'
    2 = ' 2 Had help bathing in last month'
    3 = ' 3 DKRF if had help bathing in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'    ;

   VALUE SCDBADIF
    1 = ' 1 Did not do by self in last month'
    2 = ' 2 No difficulty by self (and when using grab bars or tub seat)'
    3 = ' 3 Difficulty by self (and when using grab bars or tub seat)'
    6 = ' 6 Did by self in last month/DKRF difficulty '
    7 = ' 7 DKRF did by self in last month/DKRF difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'    ;

   VALUE SCTLTDEV
    1 = " 1 No use of toileting devices in last month"
    2 = " 2 Use of toileting devices in last month"
    3 = ' 3 DKRF of some and no use of other toileting devices in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'    ;

   VALUE SCTLTHLP
    1 = ' 1 No help toileting in last month'
    2 = ' 2 Had help toileting in last month'
    3 = ' 3 DKRF if had help toileting in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

   VALUE SCDTODIF
    1 = ' 1 Did not do by self in last month'
    2 = ' 2 No difficulty by self (and when using toileting devices)'
    3 = ' 3 Difficulty by self (and when using toileting devices)'
    6 = ' 6 Did by self in last month/DKRF difficulty'
    7 = ' 7 DKRF did by self in last month/DKRF difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

   VALUE DDRDEV
    1 = ' 1 No use of dressing devices in last month'
    2 = ' 2 Use of dressing devices in last month'
    3 = ' 3 DKRF if use of dressing devices in last month'
    8 = ' 8 Not done in last month '
    9 = ' 9 DKRF if dressed in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
```

SAS ALGORITHM FOR DEMENTIA

```
    VALUE DDRHLP
     1 = ' 1 No help dressing in last month'
     2 = ' 2 Had help dressing in last month'
     3 = ' 3 DKRF if had help dressing in last month'
     8 = ' 8 Not done in last month '
     9 = ' 9 DKRF if dressed in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE DDRDIF
     1 = ' 1 Did not do by self in last month'
     2 = ' 2 No difficulty by self (and when using dressing devices)'
     3 = ' 3 Difficulty by self (and when using dressing devices)'
     6 = ' 6 Did by self in last month/DKRF difficulty'
     7 = ' 7 DKRF did by self in last month/DKRF difficulty'
     8 = ' 8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE DSDHLPYR
     1 = ' 1 No self care help in last year'
     2 = ' 2 Self care help in last year'
    -1 = '-1 Inapplicable'
    -7 = '-7 DK'
    -8 = '-8 RF'
    -9 = '-9 Missing';

    VALUE DHLPST
     0 = ' 0 - less than 1 month of self care help'
     1 = ' 1 - 1 month of self care help'
     2 = ' 2 - 2 months of self care help'
     3 = ' 3 - 3 months of self care help'
     4 = ' 4 - 4 months of self care help'
     5 = ' 5 - 5 months of self care help'
     6 = ' 6 - 6 months of self care help'
     7 = ' 7 - 7 months of self care help'
     8 = ' 8 - 8 months of self care help'
     9 = ' 9 - 9 months of self care help'
    10 = '10 - 10 months of self care help'
    11 = '11 - 11 months of self care help'
    -7 = '-7 - help in last month but RF number of months of help in last
year'
    -8 = '-8 - help in last month but DK number of months of help in last
year'
    -1 = '-1 - Inapplicable'
    -9 = '-9 - Missing';

    VALUE DHLPEND
     1 = ' 1 - 1 month since self care help ended'
     2 = ' 2 - 2 months since self care help ended'
     3 = ' 3 - 3 months since self care help ended'
     4 = ' 4 - 4 months since self care help ended'
     5 = ' 5 - 5 months since self care help ended'
     6 = ' 6 - 6 months since self care help ended'
     7 = ' 7 - 7 months since self care help ended'
     8 = ' 8 - 8 months since self care help ended'
     9 = ' 9 - 9 months since self care help ended'
```

```
    10 = '10 - 10 months since self care help ended'
    11 = '11 - 11 months since self care help ended'
    -7 = '-7 - no help last month and RF number of months since help ended'
    -8 = '-8 - no help last month and DK number of months since help ended'
    -1 = '-1 - Inapplicable'
    -9 = '-9 - Missing';

    VALUE DSHLPYRS
        0 = ' 0 None or less than 1 year of self care help'
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'       ;

    VALUE DPMSLF
    1 = ' 1 Did not do by self in last month'
    2 = ' 2 Did by self in last month/no difficulty'
    3 = ' 3 Did by self in last month/difficulty'
    4 = ' 4 DKRF did by self in last month/no difficulty'
    5 = ' 5 DKRF did by self in  last month/difficulty'
    6 = ' 6 Did by self in last month/DKRF difficulty'
    7 = ' 7 DKRF did by self in last month/DKRF difficulty'
    8 = ' 8 not done in last month'
    9 = ' 9 no or DKRF if medications taken in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'    ;

    VALUE DFQTYPE
    0 = ' 0 Missing'
    2 = ' 2 Assisted Living or Continuing Care Retirement Community'
    3 = ' 3 Special care, memory care, Alzheimers unit'
    4 = ' 4 Nursing home'
    8 = ' 8 DKRF'
    9 = ' 9 Independent living or other'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'    ;

    VALUE DPMOTH
        1 = ' 1 Health/functioning reason only'
        2 = ' 2 Other reason only'
        3 = ' 3 Both health/functioning and other'
        4 = ' 4 Service/someone from the place SP lives'
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'         ;

    /* PE BOOKLET */
    VALUE PE_STAT
        1 = '1 Booklet with recorded information on at least 1 test SP was
eligible for
        (balance stands, walking course, chair stands, grip strength, peak
air flow)'
        2 = ' 2 No recorded information'
       -1 = '-1 Inapplicable (nursing home or residential care FQ only)'
```

```
        -9 = '-9 Missing';

    VALUE BALSTAND
     0 = ' 0 Not eligible balance stands'
     1 = ' 1 Administer balance stands'
    -9 = '-9 Residential care with no SP interview'
    -1 = '-1 Inapplicable (nursing home resident)'    ;

    VALUE WALKADMN
     0 = ' 0 Not eligible walking'
     1 = ' 1 Administer walking'
    -1 = '-9 Inapplicable (nursing home resident)'
    -9 = '-1 Missing';

    VALUE CHSTAND
     0 = ' 0 Not eligible chair stands'
     1 = ' 1 Administer chair stands'
    -1 = '-9 Inapplicable (nursing home resident)'
    -9 = '-1 Missing';

    VALUE GRSTADMN
     0 = ' 0 Not eligible grip strength'
     1 = ' 1 Administer grip strength on right hand'
     2 = ' 2 Administer grip strength on left hand'
    -1 = '-1 Inapplicable (nursing home resident)'
    -9 = '-9 Missing';

    VALUE DWORK
     1 = ' 1 Works'
     2 = ' 2 Out of labor force including retired'
     3 = ' 3 Other'
    -7 = '-7 Missing';

    VALUE ELAGE2US
      0 = '  0 less than age 1'
    997 = '997 born in US'
     -7 = ' -7 DK'
     -8 = ' -8 RF'
     -1 = ' -1 Inapplicable'
     -9 = ' -9 Missing';

    VALUE DSAMERES
     1 = ' 1 Lives in same City and State as at age 15'
     2 = ' 2 Lives in same state but different City (or DKRF city) as age 15'
     3 = ' 3 Does not live in same State as age 15'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'    ;

    VALUE RACEHISP
        1 = ' 1 White, non-hispanic'
        2 = ' 2 Black, non-hispanic'
        3 = ' 3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic'
        4 = ' 4 Hispanic'
        5 = ' 5 more than one DKRF primary'
```

```
        6 = ' 6 DKRF'
       -9 = '-9 Missing';

    VALUE $DISP
        '10' = "10 Not Available "
        '11' = "11 Ready"
        '12' = "12 Started "
        '20' = "20 Final "
        '24' = "24 Not Required "
        '60' = "60 Complete "
        '61' = "61 Complete, NH facility"
        '63' = "63 Complete SP, FQ not complete"
        '64' = "64 Complete FQ, SP not complete"
        '75' = "75 Physically/mentally unable to participate, no proxy"
        '76' = "76 Too ill to participate, no proxy"
        '77' = "77 Refusal, SP"
        '78' = "78 Language barrier"
        '79' = "79 Unable to locate"
        '80' = "80 Unavailable during field period"
        '82' = "82 Outside of PSU"
        '83' = "83 Ineligible"
        '85' = "85 Refusal, facility"
        '86' = "86 Deceased"
        '87' = "87 Refusal, proxy"
        '88' = "88 Work stopped"     ;

VALUE DISP_a
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required"
        60 = "60 Complete"
        61 = "61 Complete, NH facility"
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"     ;

    VALUE DISP_
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required";

    VALUE $STAT_DT
```

```
        '4' = "  4 April"
        '5' = "  5 May"
        '6' = "  6 June"
        '7' = "  7 July"
        '8' = "  8 August"
        '9' = "  9 September"
       '10' = "10 October"
       '11' = "11 November"
       '99' = "99 Prior to start of field work"
       '-1' = '-1 - Inapplicable';

  VALUE STAT_DTa
         4 = "  4 April"
         5 = "  5 May"
         6 = "  6 June"
         7 = "  7 July"
         8 = "  8 August"
         9 = "  9 September"
        10 = "10 October"
        11 = "11 November"
        99 = "99 Prior to start of field work"
        -1 = '-1 - Inapplicable';

  VALUE DOPAGECT
    -7 = '-7 - DK'
    -8 = '-8 - RF'
    -1 = '-1 - Inapplicable'
    -9 = '-9 - Missing'
     1 = "  1 - UNDER 20"
     2 = "  2 - 20-24"
     3 = "  3 - 25-29"
     4 = "  4 - 30-34"
     5 = "  5 - 35-39"
     6 = "  6 - 40-44"
     7 = "  7 - 45-49"
     8 = "  8 - 50-54"
     9 = "  9 - 55-59"
    10 = "10 - 60-64"
    11 = "11 - 65-69"
    12 = "12 - 70-74"
    13 = "13 - 75-79"
    14 = "14 - 80-84"
    15 = "15 - 85-89"
    16 = "16 - 90 +";

  VALUE DOPAGE2C
    -7 = '-7 - DK'
    -8 = '-8 - RF'
    -1 = '-1 - Inapplicable'
    -9 = '-9 - Missing'
     1 = "  1 - UNDER 20"
     2 = "  2 - 20-24"
     3 = "  3 - 25-29"
     4 = "  4 - 30-34"
     5 = "  5 - 35-39"
     6 = "  6 - 40-44"
     7 = "  7 - 45-49"
```

```
      8 = " 8 - 50-54"
      9 = " 9 - 55-59"
     10 = "10 - 60-65"
     11 = "11 - 66-69"
     12 = "12 - 70-74"
     13 = "13 - 75-79"
     14 = "14 - 80-84"
     15 = "15 - 85-89"
     16 = "16 - 90 +"       ;

 VALUE DOPAGE3C
      1  = '1- UNDER 30'
      2  = '2- 30-39'
      3  = '3- 40-49'
      4  = '4- 50-59'
      5  = '5- 60-69'
      6  = '6- 70-79'
      7  = '7- 80-89'
      8  = '8- 90 +'
     -7 = '-7 - DK'
     -8 = '-8 - RF'
     -1 = '-1 - Inapplicable'
     -9 = '-9 - Missing';


 VALUE DSPSAGEC
  -7 = '-7 - RF'
  -8 = '-8 - DK'
  -1 = '-1 - Inapplicable'
  -9 = '-9 - Missing'
   1 = " 1 - UNDER 50"
   2 = " 2 - 50-54"
   3 = " 3 - 55-59"
   4 = " 4 - 60-64"
   5 = " 5 - 65-69"
   6 = " 6 - 70-74"
   7 = " 7 - 75-79"
   8 = " 8 - 80-84"
   9 = " 9 - 85-89"
  10 = "10 - 90 +"      ;

 VALUE DINTAGEC
   1 = "1 - 65-69"
   2 = "2 - 70-74"
   3 = "3 - 75-79"
   4 = "4 - 80-84"
   5 = "5 - 85-89"
   6 = "6 - 90 +"    ;

 VALUE DCLCKSC
   0 = '0 Not recognizable as a clock'
   1 = '1 Severely distorted depiction of a clock'
   2 = '2 Moderately distorted depection of a clock'
   3 = '3 Mildly distorted depiction of a clock'
   4 = '4 Reasonably accurate depiction of a clock'
   5 = '5 Accurate depiction of a clock (circular or square)'
  -7 = '-7 SP refused to draw clock'
```

```
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-2 = '-2 Proxy says cannot ask SP'
-3 = '-3 Proxy says can ask SP but SP unable to answer'
-4 = '-4 SP did not attempt to draw clock'
-9 = '-9 Missing';

VALUE DCLCKCL
  1 = '1 Very clear'
  2 = '2 Somewhat clear'
  3 = '3 Somewhat unclear'
  4 = '4 Very unclear'
  5 = '5 Blank'
-7 = '-7 SP refused to draw clock'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-2 = '-2 Proxy says cannot ask SP'
-3 = '-3 Proxy says can ask SP but SP unable to answer'
-4 = '-4 SP did not attempt to draw clock'
-9 = '-9 Missing';

VALUE W000001W
  12 = "12 STARTED"
  20 = "20 COMPLETE"
  21 = "21 INELIGIBLE - NOT 65+"    ;

VALUE W000002W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = " 1 MALE"
 2 = " 2 FEMALE"    ;

VALUE W000003W
  1 = "1 Black"
  2 = "2 Hispanic"
  3 = "3 White"    ;

VALUE W000004W
  12 = "12 Started"
  20 = "20 Complete"    ;

VALUE W000005W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = " 1 YES"
 2 = " 2 NO"     ;

VALUE W000006W
  1 = "1 Person"
  2 = "2 Agency"    ;

VALUE W000007W
  1 = "1 Yes"
```

```
      2 = "2 Do not change this person's details"
      3 = "3 Mark person for removal"     ;

  VALUE W000008W
     1 = " 1 - UNDER 20"
     2 = " 2 - 20-24"
     3 = " 3 - 25-29"
     4 = " 4 - 30-34"
     5 = " 5 - 35-39"
     6 = " 6 - 40-44"
     7 = " 7 - 45-49"
     8 = " 8 - 50-54"
     9 = " 9 - 55-59"
    10 = "10 - 60-65"
    11 = "11 - 66-69"
    12 = "12 - 70-74"
    13 = "13 - 75-79"
    14 = "14 - 80-85"
    15 = "15 - 86-89"
    16 = "16 - 90-94"
    17 = "17 - 95-99"
    18 = "18 - 100 +"      ;

  VALUE W000009W
     1 = " 1 SAMPLE PERSON"
     2 = " 2 SPOUSE/ PARTNER"
     3 = " 3 DAUGHTER"
     4 = " 4 SON"
     5 = " 5 DAUGHTER-IN-LAW"
     6 = " 6 SON-IN-LAW"
     7 = " 7 STEPDAUGHTER"
     8 = " 8 STEPSON"
     9 = " 9 SISTER"
    10 = "10 BROTHER"
    11 = "11 SISTER-IN-LAW"
    12 = "12 BROTHER-IN-LAW"
    13 = "13 MOTHER"
    14 = "14 STEPMOTHER"
    15 = "15 MOTHER-IN-LAW"
    16 = "16 FATHER"
    17 = "17 STEPFATHER"
    18 = "18 FATHER-IN-LAW"
    19 = "19 GRANDDAUGHTER"
    20 = "20 GRANDSON"
    21 = "21 NIECE"
    22 = "22 NEPHEW"
    23 = "23 AUNT"
    24 = "24 UNCLE"
    25 = "25 COUSIN"
    26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
    27 = "27 STEPSON'S SON/ DAUGHTER"
    28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
    29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
    30 = "30 BOARDER/RENTER"
    31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
    32 = "32 ROOMMATE"
    33 = "33 EX-WIFE/ EX-HUSBAND"
```

```
     34 = "34 BOYFRIEND/ GIRLFRIEND"
     35 = "35 NEIGHBOR"
     36 = "36 FRIEND"
     37 = "37 STAFF PERSON AT THE PLACE SP LIVES"
     38 = "38 CO-WORKER"
     39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
     40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
     91 = "91 OTHER RELATIVE"
     92 = "92 OTHER NONRELATIVE"     ;

  VALUE W000010W
     1 = " 1 MARRIED"
     2 = " 2 LIVING WITH A PARTNER"
     3 = " 3 SEPARATED"
     4 = " 4 DIVORCED"
     5 = " 5 WIDOWED"
     6 = " 6 NEVER MARRIED"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 INAPPLICABLE'
    -9 = '-9 MISSING';

  VALUE W000011W
     1 = " 1 HOME"
     2 = " 2 CELL PHONE"
     3 = " 3 WORK/OFFICE"
     4 = " 4 NEIGHBOR'S"
     5 = " 5 FRIEND'S"
     6 = " 6 RELATIVE'S"
    91 = "91 OTHER (SPECIFY)"   ;

  VALUE W000012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 NO SCHOOLING COMPLETED"
     2 = " 2 1ST-8TH GRADE"
     3 = " 3 9TH-12TH GRADE (NO DIPLOMA)"
     4 = " 4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
     5 = " 5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
     6 = " 6 SOME COLLEGE BUT NO DEGREE"
     7 = " 7 ASSOCIATE'S DEGREE"
     8 = " 8 BACHELOR'S DEGREE"
     9 = " 9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE";

  VALUE W000013W
     1 = " 1 REGULAR"
     2 = " 2 VARIED"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 INAPPLICABLE'
    -9 = '-9 MISSING'     ;

  VALUE W000014W
     1 = " 1 SP AND/OR FAMILY"
```

```
     2 = " 2 GOVERNMENT PROGRAM"
     3 = " 3 INSURANCE"
    91 = "91 OTHER (SPECIFY)"     ;

    VALUE W000015W
     1 = " 1 HOURLY"
     2 = " 2 WEEKLY"
     3 = " 3 MONTHLY"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 INAPPLICABLE'
    -9 = '-9 MISSING'     ;

    VALUE W000016W
     1 = " 1 MEDICAID"
     2 = " 2 MEDICARE"
     3 = " 3 STATE PROGRAM"
    91 = "91 OTHER (SPECIFY)"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 INAPPLICABLE'
    -9 = '-9 MISSING'     ;

    VALUE W000017W
     1 = "1 Yes"
     2 = "2 No"
     3 = "3 Refused"     ;

    VALUE W000018W
      5 = " 5 DAUGHTER-IN-LAW"
      6 = " 6 SON-IN-LAW"
      9 = " 9 SISTER"
     10 = "10 BROTHER"
     11 = "11 SISTER-IN-LAW"
     12 = "12 BROTHER-IN-LAW"
     13 = "13 MOTHER"
     14 = "14 STEPMOTHER"
     15 = "15 MOTHER-IN-LAW"
     16 = "16 FATHER"
     17 = "17 STEPFATHER"
     18 = "18 FATHER-IN-LAW"
     19 = "19 GRANDDAUGHTER"
     20 = "20 GRANDSON"
     21 = "21 NIECE"
     22 = "22 NEPHEW"
     23 = "23 AUNT"
     24 = "24 UNCLE"
     25 = "25 COUSIN"
     26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
     27 = "27 STEPSON'S SON/ DAUGHTER"
     28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
     29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
     30 = "30 BOARDER/ RENTER"
     31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
     32 = "32 ROOMMATE"
     33 = "33 EX-WIFE/ EX-HUSBAND"
     34 = "34 BOYFRIEND/ GIRLFRIEND"
```

```
    35 = "35 NEIGHBOR"
    36 = "36 FRIEND"
    91 = "91 OTHER RELATIVE"
    92 = "92 OTHER NONRELATIVE"     ;

VALUE W000019W
     5 = " 5 DAUGHTER-IN-LAW"
     6 = " 6 SON-IN-LAW"
     9 = " 9 SISTER"
    10 = "10 BROTHER"
    11 = "11 SISTER-IN-LAW"
    12 = "12 BROTHER-IN-LAW"
    13 = "13 MOTHER"
    14 = "14 STEPMOTHER"
    15 = "15 MOTHER-IN-LAW"
    16 = "16 FATHER"
    17 = "17 STEPFATHER"
    18 = "18 FATHER-IN-LAW"
    19 = "19 GRANDDAUGHTER"
    20 = "20 GRANDSON"
    21 = "21 NIECE"
    22 = "22 NEPHEW"
    23 = "23 AUNT"
    24 = "24 UNCLE"
    25 = "25 COUSIN"
    26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
    27 = "27 STEPSON'S SON/ DAUGHTER"
    28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
    29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
    30 = "30 BOARDER/ RENTER"
    31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
    32 = "32 ROOMMATE"
    33 = "33 EX-WIFE/ EX-HUSBAND"
    34 = "34 BOYFRIEND/ GIRLFRIEND"
    35 = "35 NEIGHBOR"
    36 = "36 FRIEND"
    37 = "37 STAFF PERSON AT THE PLACE SP LIVES"
    38 = "38 CO-WORKER"
    39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
    40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
    91 = "91 OTHER RELATIVE"
    92 = "92 OTHER NONRELATIVE"     ;

VALUE W000020W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
  1 = "1 HOME"
  2 = "2 MULTI-UNIT"
  3 = "3 OTHER"     ;

VALUE W000021W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
```

```
   1 = " 1 BUILDING HAS ONE FLOOR"
   2 = " 2 BUILDING HAS MULTIPLE FLOORS"     ;

 VALUE W000022W
   1 = "1  REQUIRED"
  24 = "24 NOT REQUIRED"     ;

 VALUE W000023W
   1 = "1 NURSING HOME"
   2 = "2 OTHER FACILITY"     ;

 VALUE W000024W
   1 = " 1 HOME"
   2 = " 2 APARTMENT"
   3 = " 3 ROOM"
   4 = " 4 UNIT"
   5 = " 5 SUITE"
   6 = " 6 SOMETHING ELSE (SPECIFY)"     ;

 VALUE W000025W
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SAMPLE PERSON (SP)"
   2 = "2 PROXY"     ;

 VALUE W000026W
   1 = " 1 DEMENTIA OR COGNITIVE IMPAIRMENT REPORTED BY PROXY"
   2 = " 2 SP TOO ILL"
   3 = " 3 SP SPEECH IMPAIRED"
   4 = " 4 SP HEARING IMPAIRED"
   5 = " 5 LANGUAGE BARRIER"
   6 = " 6 TEMPORARILY UNAVAILABLE"
  91 = "91 OTHER (SPECIFY)"     ;

 VALUE W000027W
   1 = "1 CONSENT TO RECORDING"
   7 = "7 REFUSE CONSENT TO RECORD"     ;

 VALUE W000028W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 SELF"
   2 = " 2 SPOUSE/ PARTNER"
   3 = " 3 DAUGHTER"
   4 = " 4 SON"
   5 = " 5 DAUGHTER-IN-LAW"
   6 = " 6 SON-IN-LAW"
   7 = " 7 STEPDAUGHTER"
   8 = " 8 STEPSON"
   9 = " 9 SISTER"
  10 = "10 BROTHER"
  11 = "11 SISTER-IN-LAW"
  12 = "12 BROTHER-IN-LAW"
  13 = "13 MOTHER"
  14 = "14 STEPMOTHER"
```

```
        15 = "15 MOTHER-IN-LAW"
        16 = "16 FATHER"
        17 = "17 STEPFATHER"
        18 = "18 FATHER-IN-LAW"
        19 = "19 GRANDDAUGHTER"
        20 = "20 GRANDSON"
        21 = "21 NIECE"
        22 = "22 NEPHEW"
        23 = "23 AUNT"
        24 = "24 UNCLE"
        25 = "25 COUSIN"
        26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
        27 = "27 STEPSON'S SON/ DAUGHTER"
        28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
        29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
        30 = "30 BOARDER/RENTER"
        31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
        32 = "32 ROOMMATE"
        33 = "33 EX-WIFE/ EX-HUSBAND"
        34 = "34 BOYFRIEND/ GIRLFRIEND"
        35 = "35 NEIGHBOR"
        36 = "36 FRIEND"
        37 = "37 STAFF PERSON FROM THE PLACE SP LIVES"
        38 = "38 CO-WORKER"
        39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
        40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
        91 = "91 OTHER RELATIVE"
        92 = "92 OTHER NONRELATIVE"     ;

    VALUE W000029W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = " 1 VERY FAMILIAR"
      2 = " 2 SOMEWHAT FAMILIAR"
      3 = " 3 A LITTLE FAMILIAR"
      4 = " 4 NOT AT ALL FAMILIAR"     ;

    VALUE W000030W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = " 1 FREE-STANDING (DETACHED) SINGLE HOUSE"
      2 = " 2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE,
DUPLEX, TRIPLEX, OR TRIPLE DECKER)"
      3 = " 3 MOBILE HOME OR TRAILER"
      4 = " 4 MULTI-UNIT (2+) BUILDING"
        91 = "91 OTHER (SPECIFY)"     ;

    VALUE W000031W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = " 1 EXCELLENT"
```

```
   2 = " 2 VERY GOOD"
   3 = " 3 GOOD"
   4 = " 4 FAIR"
   5 = " 5 POOR"      ;

VALUE W000032W
   1 = " 1 SKIN CANCER"
   2 = " 2 BREAST CANCER"
   3 = " 3 PROSTATE CANCER"
   4 = " 4 BLADDER CANCER"
   5 = " 5 CERVICAL/OVARIAN/UTERINE CANCER"
   6 = " 6 COLON CANCER"
   7 = " 7 KIDNEY CANCER"
  91 = "91 OTHER TYPE OF CANCER"      ;

VALUE W000033W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 NOT AT ALL"
   2 = " 2 SEVERAL DAYS"
   3 = " 3 MORE THAN HALF THE DAYS"
   4 = " 4 NEARLY EVERY DAY"     ;

VALUE W000034W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 EVERY NIGHT"
   2 = " 2 MOST NIGHTS"
   3 = " 3 SOME NIGHTS"
   4 = " 4 RARELY"
   5 = " 5 NEVER"      ;

VALUE W000035W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 EVERY NIGHT"
   2 = " 2 MOST NIGHTS "
   3 = " 3 SOME NIGHTS"
   4 = " 4 RARELY"
   5 = " 5 NEVER"
   7 = " 7 DON'T WAKE UP/NOT A PROBLEM"     ;

VALUE W000036W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 MONTHS"
   2 = " 2 YEARS"     ;

VALUE W000037W
```

```
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = " 1 PRIVATE RESIDENCE"
      2 = " 2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
      3 = " 3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT
COMMUNITY (CCRC)"
      4 = " 4 RELIGIOUS GROUP QUARTERS"
     91 = "91 OTHER (SPECIFY)"
      ;

    VALUE W000038W

     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = " 1 YES"
      2 = " 2 NO"
      7 = " 7 PLACE DOES NOT HAVE A NAME"    ;

    VALUE W000039W

     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = " 1 APARTMENT"
      2 = " 2 ROOM"
      3 = " 3 UNIT"
      4 = " 4 SUITE"
     91 = "91 SOMETHING ELSE (SPECIFY)"    ;

    VALUE W000040W

     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = " 1 PRIVATE RESIDENCE"
      2 = " 2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
      3 = " 3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT
COMMUNITY (CCRC)"
      5 = " 5 NURSING HOME"
     91 = "91 OTHER (SPECIFY)"    ;

    VALUE W000041W
      3 = " 3 DAUGHTER"
      4 = " 4 SON"
      5 = " 5 DAUGHTER-IN-LAW"
      6 = " 6 SON-IN-LAW"
      7 = " 7 STEPDAUGHTER"
      8 = " 8 STEPSON"
      9 = " 9 SISTER"
     10 = "10 BROTHER"
     11 = "11 SISTER-IN-LAW"
```

```
      12 = "12 BROTHER-IN-LAW"
      13 = "13 MOTHER"
      14 = "14 STEPMOTHER"
      15 = "15 MOTHER-IN-LAW"
      16 = "16 FATHER"
      17 = "17 STEPFATHER"
      18 = "18 FATHER-IN-LAW"
      19 = "19 GRANDDAUGHTER"
      20 = "20 GRANDSON"
      21 = "21 NIECE"
      22 = "22 NEPHEW"
      23 = "23 AUNT"
      24 = "24 UNCLE"
      25 = "25 COUSIN"
      26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
      27 = "27 STEPSON'S SON/ DAUGHTER"
      28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
      29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
      30 = "30 BOARDER/ RENTER"
      31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
      32 = "32 ROOMMATE"
      33 = "33 EX-WIFE/ EX-HUSBAND"
      34 = "34 BOYFRIEND/ GIRLFRIEND"
      36 = "36 FRIEND"
      91 = "91 OTHER RELATIVE"
      92 = "92 OTHER NONRELATIVE"      ;

  VALUE W000042W
    3 = "3 DAUGHTER"
    4 = "4 SON"
    7 = "7 STEPDAUGHTER"
    8 = "8 STEPSON"      ;

  VALUE W000043W
     1 = " 1 SocialNetwork: Person 1"
     2 = " 2 SocialNetwork: Person 2"
     3 = " 3 SocialNetwork: Person 3"
     4 = " 4 SocialNetwork: Person 4"
     5 = " 5 SocialNetwork: Person 5"
     6 = " 6 SocialNetwork: Person 6"
     7 = " 7 SocialNetwork: Person 7"
     8 = " 8 SocialNetwork: Person 8"
     9 = " 9 SocialNetwork: Person 9"
    10 = "10 SocialNetwork: Person 10"
    11 = "11 SocialNetwork: Person 11"
    12 = "12 SocialNetwork: Person 12"
    13 = "13 SocialNetwork: Person 13"
    14 = "14 SocialNetwork: Person 14"
    15 = "15 SocialNetwork: Person 15"
    16 = "16 SocialNetwork: Person 16"
    17 = "17 SocialNetwork: Person 17"
    18 = "18 SocialNetwork: Person 18"
    19 = "19 SocialNetwork: Person 19"
    20 = "20 SocialNetwork: Person 20"
    21 = "21 SocialNetwork: Person 21"
    22 = "22 SocialNetwork: Person 22"      ;
```

```
VALUE W000044W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = " 1 COMMON OR SHARED ENTRANCE"
 2 = " 2 ENTRANCE DIRECTLY INTO HOME"     ;

VALUE W000045W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = " 1 - 1"
 2 = " 2 - 2"
 3 = " 3 - 3"
 4 = " 4 - 4+"     ;

VALUE W000046W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = " 1 ALL ITEMS HERE"
 2 = " 2 ADDED ONE OR MORE ITEMS"     ;

VALUE W000047W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = " 1 MORE THAN $500"
 2 = " 2 LESS THAN $500"
 3 = " 3 JUST ABOUT $500"     ;

VALUE W000048W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = " 1 MORE THAN $1,000"
 2 = " 2 LESS THAN $1,000"
 3 = " 3 JUST ABOUT $1,000"     ;

VALUE W000049W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = " 1 MORE THAN $100"
 2 = " 2 LESS THAN $100"
 3 = " 3 JUST ABOUT $100"     ;

VALUE W000050W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
```

```
    -9 = '-9 Missing'
     1 = " 1 YES"
     2 = " 2 NO"
     7 = " 7 YES, DOESNT KNOW HOW TO USE A COMPUTER"       ;

   VALUE W000051W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 MOST DAYS"
     2 = " 2 SOME DAYS"
     3 = " 3 RARELY"      ;

   VALUE W000052W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 EXCELLENT"
     2 = " 2 VERY GOOD"
     3 = " 3 GOOD"
     4 = " 4 FAIR"
     5 = " 5 POOR"      ;

   VALUE W000053W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 YES"
     2 = " 2 NO"
     7 = " 7 DEAF"      ;

   VALUE W000054W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 YES"
     2 = " 2 NO"
     7 = " 7 BLIND"      ;

   VALUE W000055W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 EVERY DAY (7 DAYS A WEEK)"
     2 = " 2 MOST DAYS (5-6 DAYS A WEEK)"
     3 = " 3 SOME DAYS (2-4 DAYS A WEEK)"
     4 = " 4 RARELY (ONCE A WEEK OR LESS)"
     5 = " 5 NEVER"      ;

   VALUE W000056W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 BACK"
   2 = " 2 HIPS"
   3 = " 3 KNEES"
   4 = " 4 FEET"
   5 = " 5 HANDS"
   6 = " 6 WRISTS"
   7 = " 7 SHOULDERS"
   8 = " 8 HEAD"
   9 = " 9 NECK"
  10 = "10 ARMS"
  11 = "11 LEGS"
  12 = "12 STOMACH"
  91 = "91 OTHER PLACES (SPECIFY)"     ;

VALUE W000057W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 YES, A CHANGE"
   2 = " 2 NO, NO CHANGE"
   3 = " 3 DEMENTIA/ALZHEIMER'S REPORTED BY PROXY"     ;

VALUE W000058W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE"
   2 = " 2 SP IS UNABLE TO SPEAK"
   3 = " 3 SP IS UNABLE TO HEAR"
   4 = " 4 SP REFUSED"
   5 = " 5 PROXY REFUSED"
   6 = " 6 SP NOT PRESENT"
   7 = " 7 SP TOO ILL"
   8 = " 8 SP LANGUAGE BARRIER"
  91 = "91 OTHER (SPECIFY)"     ;

VALUE W000059W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 MUCH BETTER"
   2 = " 2 BETTER"
   3 = " 3 SAME"
   4 = " 4 WORSE"
   5 = " 5 MUCH WORSE"     ;

VALUE W000060W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 YES"
```

```
       2 = " 2 NO/DON'T KNOW"      ;

  VALUE W000061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 CONTINUE WITH ACTIVITY"
    2 = " 2 SP REFUSES ACTIVITY"     ;

  VALUE W000062W
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 Word[1]"
    2 = " 2 Word[2]"
    3 = " 3 Word[3]"
    4 = " 4 Word[4]"
    5 = " 5 Word[5]"
    6 = " 6 Word[6]"
    7 = " 7 Word[7]"
    8 = " 8 Word[8]"
    9 = " 9 Word[9]"
   10 = "10 Word[10]"
   91 = "91 NO WORDS REMEMBERED"
   92 = "92 REFUSED"      ;

  VALUE W000063W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 DIFFICULTY HEARING ANY OF THE WORDS"
    2 = " 2 INTERRUPTION OCCURRED WHILE LIST WAS BEING READ"
   91 = "91 OTHER PROBLEM (SPECIFY)"
   92 = "92 NO PROBLEMS OCCURRED"     ;

  VALUE W000064W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 SP ATTEMPTED CLOCK DRAWING"
    2 = " 2 SP DID NOT ATTEMPT CLOCK DRAWING"
   97 = "97 SP REFUSED CLOCK DRAWING"     ;

  VALUE W000065W
    1 = "1 LAST NAME CORRECT"
    2 = "2 LAST NAME NOT CORRECT/DK LAST NAME"
    3 = "3 FIRST NAME CORRECT"
    4 = "4 FIRST NAME NOT CORRECT/DK FIRST NAME"     ;

  VALUE W000066W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
```

```
    1 = " 1 EVERY DAY (7 DAYS A WEEK)"
    2 = " 2 MOST DAYS (5-6 DAYS A WEEK)"
    3 = " 3 SOME DAYS (2-4 DAYS A WEEK)"
    4 = " 4 RARELY (ONCE A WEEK OR LESS)"
    5 = " 5 NEVER"      ;

VALUE W000067W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 EVERY TIME"
  2 = " 2 MOST TIMES"
  3 = " 3 SOMETIMES"
  4 = " 4 RARELY"
  5 = " 5 NEVER"      ;

VALUE W000068W
    1 = " 1 HelperMember: Person 1"
    2 = " 2 HelperMember: Person 2"
    3 = " 3 HelperMember: Person 3"
    4 = " 4 HelperMember: Person 4"
    5 = " 5 HelperMember: Person 5"
    6 = " 6 HelperMember: Person 6"
    7 = " 7 HelperMember: Person 7"
    8 = " 8 HelperMember: Person 8"
    9 = " 9 HelperMember: Person 9"
   10 = "10 HelperMember: Person 10"
   11 = "11 HelperMember: Person 11"
   12 = "12 HelperMember: Person 12"
   13 = "13 HelperMember: Person 13"
   14 = "14 HelperMember: Person 14"
   15 = "15 HelperMember: Person 15"
   16 = "16 HelperMember: Person 16"
   17 = "17 HelperMember: Person 17"
   18 = "18 HelperMember: Person 18"
   19 = "19 HelperMember: Person 19"
   20 = "20 HelperMember: Person 20"
   21 = "21 HelperMember: Person 21"
   22 = "22 HelperMember: Person 22"
   23 = "23 HelperMember: Person 23"
   24 = "24 HelperMember: Person 24"
   25 = "25 HelperMember: Person 25"     ;

VALUE W000069W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 MOST TIMES"
  2 = " 2 SOMETIMES"
  3 = " 3 RARELY"
  4 = " 4 NEVER"      ;

VALUE W000070W
 -7 = '-7 RF'
 -8 = '-8 DK'
```

```
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = " 1 NONE"
         2 = " 2 A LITTLE"
         3 = " 3 SOME"
         4 = " 4 A LOT"      ;

    VALUE W000071W
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = " 1 MORE OFTEN"
         2 = " 2 LESS OFTEN"
         3 = " 3 ABOUT THE SAME"      ;

    VALUE W000072W
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = " 1 YES, A YEAR OR MORE"
         2 = " 2 NO, LESS THAN A YEAR"      ;

    VALUE W000073W
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = " 1 JANUARY"
         2 = " 2 FEBRUARY"
         3 = " 3 MARCH"
         4 = " 4 APRIL"
         5 = " 5 MAY"
         6 = " 6 JUNE"
         7 = " 7 JULY"
         8 = " 8 AUGUST"
         9 = " 9 SEPTEMBER"
        10 = "10 OCTOBER"
        11 = "11 NOVEMBER"
        12 = "12 DECEMBER"      ;

    VALUE W000074W
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = " 1 MONTH AND YEAR"
         2 = " 2 NUMBER OF MONTHS AGO"
         3 = " 3 NUMBER OF YEARS AGO"
         4 = " 4 AGE WHEN LAST DROVE"
         7 = " 7 NEVER DROVE"      ;

    VALUE W000075W
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
```

```
         -9 = '-9 Missing'
          1 = " 1 YES"
          2 = " 2 NO"
          7 = " 7 {NO, NO RAIN OR BAD WEATHER}"     ;

     VALUE W000076W
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          1 = " 1 ALWAYS DID IT BY SELF"
          2 = " 2 ALWAYS DID IT TOGETHER WITH SOMEONE ELSE"
          3 = " 3 SOMEONE ELSE ALWAYS DID IT"
          4 = " 4 IT VARIED (MORE THAN ONE WAY)"
          5 = " 5 NOT DONE IN LAST MONTH"     ;

     VALUE W000077W
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          1 = " 1 MACHINE IN HOME"
          2 = " 2 MACHINE ELSEWHERE IN BUILDING"
          3 = " 3 LAUNDROMAT"
          4 = " 4 SINK IN HOME"
          5 = " 5 SINK ELSEWHERE IN BUILDING"
         91 = "91 OTHER (SPECIFY)"     ;

     VALUE W000078W
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          1 = " 1 HEALTH OR FUNCTIONING (INCLUDES AGE, MEMORY, VISION, HEALTH
CONDITION/DISEASE NAMES, SURGERY, UNABLE TO DRIVE)"
          2 = " 2 OTHER REASON (INCLUDES SHARED ACTIVITY, ALWAYS DONE THIS WAY,
SOMEONE ELSE WANTED TO DO IT, PAY SOMEONE, DOESNT LIKE TO D"
     ;

     VALUE W000079W
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          1 = " 1 MORE OFTEN"
          2 = " 2 LESS OFTEN"
          3 = " 3 SAME"     ;

     VALUE W000080W
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          1 = " 1 CASH"
          2 = " 2 CHECK"
          3 = " 3 DEBIT OR GIFT CARD"
          4 = " 4 CREDIT CARD"
```

```
    5 = " 5 FOOD STAMPS"
    6 = " 6 SOMEONE ELSE PAYS"
   91 = "91 OTHER"      ;

  VALUE W000081W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 {DROVE}"
    2 = " 2 GOT A RIDE FROM A FAMILY MEMBER OR FRIEND OR SOMEONE PAID TO
HELP"
    3 = " 3 {USED A VAN OR SHUTTLE SERVICE PROVIDED BY THE PLACE SP LIVES}"
    4 = " 4 USED A VAN OR SHUTTLE SERVICE FOR PEOPLE WITH DISABILITIES OR
SENIORS {NOT PROVIDED BY THE PLACE SP LIVES}"
    5 = " 5 TOOK PUBLIC TRANSPORTATION (THE BUS, SUBWAY, TRAIN, OR TRAM)"
    6 = " 6 TOOK A TAXI"
    7 = " 7 WALKED"
    8 = " 8 HOME VISIT"
   91 = "91 OTHER (SPECIFY)"     ;

  VALUE W000082W
    1 = " 1 HelperMeals: Person 1"
    2 = " 2 HelperMeals: Person 2"
    3 = " 3 HelperMeals: Person 3"
    4 = " 4 HelperMeals: Person 4"
    5 = " 5 HelperMeals: Person 5"
    6 = " 6 HelperMeals: Person 6"
    7 = " 7 HelperMeals: Person 7"
    8 = " 8 HelperMeals: Person 8"
    9 = " 9 HelperMeals: Person 9"
   10 = "10 HelperMeals: Person 10"
   11 = "11 HelperMeals: Person 11"
   12 = "12 HelperMeals: Person 12"
   13 = "13 HelperMeals: Person 13"
   14 = "14 HelperMeals: Person 14"
   15 = "15 HelperMeals: Person 15"
   16 = "16 HelperMeals: Person 16"
   17 = "17 HelperMeals: Person 17"
   18 = "18 HelperMeals: Person 18"
   19 = "19 HelperMeals: Person 19"
   20 = "20 HelperMeals: Person 20"
   21 = "21 HelperMeals: Person 21"
   22 = "22 HelperMeals: Person 22"
   23 = "23 HelperMeals: Person 23"
   24 = "24 HelperMeals: Person 24"
   25 = "25 HelperMeals: Person 25"     ;

  VALUE W000083W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 YES"
    2 = " 2 NO"
    7 = " 7 ALWAYS FED THROUGH IV OR TUBE"     ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W000084W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 EVERY TIME"
  2 = " 2 MOST TIMES"
  3 = " 3 SOMETIMES"
  4 = " 4 RARELY"      ;

VALUE W000085W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 SHOWERED"
  2 = " 2 TOOK BATHS IN A TUB"
  3 = " 3 WASHED UP SOME OTHER WAY"     ;

VALUE W000086W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 {SHOWERING}"
  2 = " 2 {TAKING BATHS}"
  3 = " 3 {WASHING UP SOME OTHER WAY}"     ;

VALUE W000087W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 LOCAL STORE OR PHARMACY"
  2 = " 2 BY MAIL"
  3 = " 3 HEALTHCARE PROVIDER/HOSPITAL"
 91 = "91 SOMEWHERE ELSE (SPECIFY)"     ;

VALUE W000088W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 PICKED THEM UP BY SELF"
  2 = " 2 HAD THEM DELIVERED"
  3 = " 3 HAD SOMEONE ELSE PICK THEM UP"     ;

VALUE W000089W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 ^fdrove"
  2 = " 2 GOT A RIDE FROM A FAMILY MEMBER OR FRIEND OR SOMEONE PAID TO
HELP"
  3 = " 3 ^fservice"
  4 = " 4 ^fnotprov"
```

```
        5 = " 5 TOOK PUBLIC TRANSPORTATION (THE BUS, SUBWAY, TRAIN, OR TRAM)"
        6 = " 6 TOOK A TAXI"
       91 = "91 OTHER (SPECIFY)"      ;

    VALUE W000090W
        1 = " 1 HelperSatInwDoctor: Person 1"
        2 = " 2 HelperSatInwDoctor: Person 2"
        3 = " 3 HelperSatInwDoctor: Person 3"
        4 = " 4 HelperSatInwDoctor: Person 4"
        5 = " 5 HelperSatInwDoctor: Person 5"
        6 = " 6 HelperSatInwDoctor: Person 6"
        7 = " 7 HelperSatInwDoctor: Person 7"
        8 = " 8 HelperSatInwDoctor: Person 8"
        9 = " 9 HelperSatInwDoctor: Person 9"
       10 = "10 HelperSatInwDoctor: Person 10"
       11 = "11 HelperSatInwDoctor: Person 11"
       12 = "12 HelperSatInwDoctor: Person 12"
       13 = "13 HelperSatInwDoctor: Person 13"
       14 = "14 HelperSatInwDoctor: Person 14"
       15 = "15 HelperSatInwDoctor: Person 15"
       16 = "16 HelperSatInwDoctor: Person 16"
       17 = "17 HelperSatInwDoctor: Person 17"
       18 = "18 HelperSatInwDoctor: Person 18"
       19 = "19 HelperSatInwDoctor: Person 19"
       20 = "20 HelperSatInwDoctor: Person 20"
       21 = "21 HelperSatInwDoctor: Person 21"
       22 = "22 HelperSatInwDoctor: Person 22"
       23 = "23 HelperSatInwDoctor: Person 23"
       24 = "24 HelperSatInwDoctor: Person 24"
       25 = "25 HelperSatInwDoctor: Person 25"      ;

    VALUE W000091W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = " 1 VERY IMPORTANT"
        2 = " 2 SOMEWHAT IMPORTANT"
        3 = " 3 NOT SO IMPORTANT"     ;

    VALUE W000092W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = " 1 YES"
        2 = " 2 NO"
        3 = " 3 CAN'T DO/DON'T DO"      ;

    VALUE W000093W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = " 1 LEFT"
        2 = " 2 RIGHT"
        3 = " 3 BOTH"      ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W000094W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 LEFT SIDE"
  2 = " 2 RIGHT SIDE"
  3 = " 3 BOTH SIDES"     ;

VALUE W000095W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 ONE SIDE"
  2 = " 2 BOTH SIDES"     ;

VALUE W000096W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 WELL OFF"
  2 = " 2 ABOVE AVERAGE"
  3 = " 3 AVERAGE"
  4 = " 4 BELOW AVERAGE"
  5 = " 5 POOR"      ;

VALUE W000097W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 MOTHER ONLY"
  2 = " 2 FATHER ONLY"
  3 = " 3 ANOTHER RELATIVE"
  4 = " 4 NON-RELATIVES"
  5 = " 5 VARIED/MOVED AROUND"     ;

VALUE W000098W
  1 = " 1 Contact: Person 1"
  2 = " 2 Contact: Person 2"
  3 = " 3 Contact: Person 3"
  4 = " 4 Contact: Person 4"
  5 = " 5 Contact: Person 5"
  6 = " 6 Contact: Person 6"
  7 = " 7 Contact: Person 7"
  8 = " 8 Contact: Person 8"
  9 = " 9 Contact: Person 9"
 10 = "10 Contact: Person 10"
 11 = "11 Contact: Person 11"
 12 = "12 Contact: Person 12"
 13 = "13 Contact: Person 13"
 14 = "14 Contact: Person 14"
 15 = "15 Contact: Person 15"
 16 = "16 Contact: Person 16"
```

```
       17 = "17 Contact: Person 17"
       18 = "18 Contact: Person 18"
       19 = "19 Contact: Person 19"
       20 = "20 Contact: Person 20"
       21 = "21 Contact: Person 21"
       22 = "22 Contact: Person 22"     ;

   VALUE W000099W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 AGREE A LOT"
     2 = " 2 AGREE A LITTLE"
     3 = " 3 DO NOT AGREE"     ;

   VALUE W000100W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 WHITE/CAUCASIAN"
     2 = " 2 BLACK/AFRICAN AMERICAN"
     3 = " 3 AMERICAN INDIAN"
     4 = " 4 ALASKA NATIVE"
     5 = " 5 ASIAN"
     6 = " 6 NATIVE HAWAIIAN"
     7 = " 7 PACIFIC ISLANDER"
     8 = " 8 OTHER (SPECIFY)"     ;

   VALUE W000101W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 {WHITE}"
     2 = " 2 {BLACK}"
     3 = " 3 {AMERICAN INDIAN}"
     4 = " 4 {ALASKAN NATIVE}"
     5 = " 5 {ASIAN}"
     6 = " 6 {NATIVE HAWAIIAN}"
     7 = " 7 {PACIFIC ISLANDER}"
     8 = " 8 {OTHER}"     ;

   VALUE W000102W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 MEXICAN AMERICAN/CHICANO"
     2 = " 2 PUERTO RICAN"
     3 = " 3 CUBAN AMERICAN"
     4 = " 4 OTHER (SPECIFY)"     ;

   VALUE W000103W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

# SAS ALGORITHM FOR DEMENTIA

```
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 VERY WELL"
    2 = " 2 WELL"
    3 = " 3 NOT WELL"
    4 = " 4 NOT AT ALL"     ;

 VALUE W000104W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 NOVEMBER 1941 OR EARLIER"
    2 = " 2 WORLD WAR II (DECEMBER 1941-DECEMBER 1946)"
    3 = " 3 JANUARY 1947 - JUNE 1950"
    4 = " 4 KOREAN WAR (JULY 1950 - JANUARY 1955)"
    5 = " 5 FEBRUARY 1955 - JULY 1964"
    6 = " 6 VIETNAM ERA (AUGUST 1964 - APRIL 1975)"
    7 = " 7 MAY 1975 - JULY 1990"
    8 = " 8 AUGUST 1990 - AUGUST 2001 (INCLUDING PERSIAN GULF WAR)"
    9 = " 9 SEPTEMBER 2001 OR LATER"     ;

 VALUE W000105W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 AGREE A LOT"
    2 = " 2 AGREE A LITTLE"
    3 = " 3 AGREE NOT AT ALL"     ;

 VALUE W000106W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 NURSING HOME CARE"
    2 = " 2 ASSISTED LIVING"
    3 = " 3 CARE BY HOME HEALTH PROVIDERS IN HOME"     ;

 VALUE W000107W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $1,000,"
    2 = " 2 $1,000 to less than $2,000,"
    3 = " 3 $2,000 to less than $3,000,"
    4 = " 4 $3,000 to less than $5,000, or"
    5 = " 5 $5,000 or more?"     ;

 VALUE W000108W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 NUMBER OF YEARS"
```

```
      2 = " 2 AGE"      ;

   VALUE W000109W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 YES"
    2 = " 2 NO"
    3 = " 3 RETIRED/DON'T WORK ANYMORE"      ;

   VALUE W000110W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 EVERY WEEK"
    2 = " 2 EVERY TWO WEEKS"
    3 = " 3 TWO TIMES A MONTH"
    4 = " 4 OTHER SCHEDULE (SPECIFY)"     ;

   VALUE W000111W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 ENTER PAYCHECK AMOUNT"
    2 = " 2 ENTER PAY PER HOUR"
    3 = " 3 ENTER PAY PER DAY"     ;

   VALUE W000112W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 ENTER OCCUPATION"
    2 = " 2 NEVER WORKED ENTIRE LIFE"
    3 = " 3 HOMEMAKER/RAISED CHILDREN/WORKED IN THE HOME"     ;

   VALUE W000113W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 SAME KIND OF WORK"
    2 = " 2 SOMETHING DIFFERENT"     ;

   VALUE W000114W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 OWN"
    2 = " 2 RENT"
    3 = " 3 SOME OTHER ARRANGEMENT"     ;

   VALUE W000115W
```

```
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 PAID OFF"
     2 = " 2 STILL MAKE PAYMENTS"
     3 = " 3 REVERSE MORTGAGE"      ;

  VALUE W000116W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 less than $250,"
     2 = " 2 $250-$499,"
     3 = " 3 $500-$999, or"
     4 = " 4 $1,000 or more?"     ;

  VALUE W000117W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 5 YEARS"
     2 = " 2 10 YEARS"
     3 = " 3 LONGER THAN 10 YEARS"     ;

  VALUE W000118W

    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 less than $50,000,"
     2 = " 2 between $50,000 and $100,000, or"
     3 = " 3 over $100,000?"     ;

  VALUE W000119W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 less than $50,000,"
     2 = " 2 $50,000-$74,999,"
     3 = " 3 $75,000-$99,999,"
     4 = " 4 $100,000-$199,999,"
     5 = " 5 $200,000-$299,999,"
     6 = " 6 $300,000-$499,999,"
     7 = " 7 $500,000-$749,999, or"
     8 = " 8 $750,000 or more?"     ;

  VALUE W000120W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 YES, SP RECEIVED PAYMENT FROM SOURCE"
```

```
          2 = " 2 ^HH.fOption2Response"
          3 = " 3 NO PAYMENT RECEIVED FROM THIS SOURCE"      ;

     VALUE W000121W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = " 1 MAIL"
      2 = " 2 DIRECT DEPOSIT"      ;

     VALUE W000122W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 YES, SP HAS 401K, 403B, IRA, OR KEOGH"
       2 = " 2 ^HH.fOption2ResponseIA7"
       3 = " 3 NO ACCOUNTS OF THIS TYPE"    ;

     VALUE W000123W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 YES, SP HAS ASSET"
       2 = " 2 ^HH.fOption2ResponseIA8"
       3 = " 3 ^HH.fOption3Response"
       4 = " 4 NO ASSET OF THIS TYPE"     ;

     VALUE W000124W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 YES, SP HAS ASSET"
       2 = " 2 ^HH.fOption2ResponseIA8"
       3 = " 3 ^HH.fOption3Response"
       4 = " 4 NO ASSETS OF THIS TYPE"     ;

     VALUE W000125W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 ENTER COMBINED AMOUNT"
       2 = " 2 ENTER SP AND SPOUSE/PARTNER AMOUNTS SEPARATELY"     ;

     VALUE W000126W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 less than $1,200,"
       2 = " 2 $1,200-$1,599,"
       3 = " 3 $1,600-$1,999,"
       4 = " 4 $2,000-$2,499, or"
```

```
      5 = " 5 $2,500 or more?"      ;

   VALUE W000127W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $600,"
    2 = " 2 $600-$899,"
    3 = " 3 $900-$1,099,"
    4 = " 4 $1,100-$1,499, or"
    5 = " 5 $1,500 or more?"      ;

   VALUE W000128W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $300,"
    2 = " 2 $300-$699,"
    3 = " 3 $700-$999, or"
    4 = " 4 $1000 or more?"      ;

   VALUE W000129W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $100,"
    2 = " 2 $100-$199,"
    3 = " 3 $200-$399,"
    4 = " 4 $400-$699, or"
    5 = " 5 $700 or more?"      ;

   VALUE W000130W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $600,"
    2 = " 2 $600-$799,"
    3 = " 3 $800-$999,"
    4 = " 4 $1000-$1199, or"
    5 = " 5 $1200 or more?"      ;

   VALUE W000131W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $500,"
    2 = " 2 $500-$699,"
    3 = " 3 $700-$899,"
    4 = " 4 $900-$1,099, or"
    5 = " 5 $1,100 or more?"      ;

   VALUE W000132W
```

```
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 less than $600,"
   2 = " 2 $600-$1,099,"
   3 = " 3 $1,100-$2,099,"
   4 = " 4 $2,100-$4,499, or"
   5 = " 5 $4,500 or more?"    ;

   VALUE W000133W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 less than $400,"
   2 = " 2 $400-$799,"
   3 = " 3 $800-$1,499,"
   4 = " 4 $1,500-$3,399, or"
   5 = " 5 $3,400 or more?"    ;

   VALUE W000134W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 less than $16,000,"
   2 = " 2 $16,000-$49,999,"
   3 = " 3 $50,000-$118,999,"
   4 = " 4 $119,000-$224,999, or"
   5 = " 5 $225,000 or more?"    ;

   VALUE W000135W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 less than $10,000,"
   2 = " 2 $10,000-$27,999,"
   3 = " 3 $28,000-$54,999,"
   4 = " 4 $55,000-$143,999, or"
   5 = " 5 $144,000 or more?"    ;

   VALUE W000136W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 less than $200,"
   2 = " 2 $200-$299,"
   3 = " 3 $300-$699,"
   4 = " 4 $700-$1,499, or"
   5 = " 5 $1,500 or more?"    ;

   VALUE W000137W
  -7 = '-7 RF'
  -8 = '-8 DK'
```

```
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $100,"
    2 = " 2 $100-$199,"
    3 = " 3 $200-$399,"
    4 = " 4 $400-$1,099, or"
    5 = " 5 $1,100 or more?"     ;

  VALUE W000138W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $2,400,"
    2 = " 2 $2,400-$3,599,"
    3 = " 3 $3,600-$8,399,"
    4 = " 4 $8,400-$17,999, or"
    5 = " 5 $18,000 or more?"     ;

  VALUE W000139W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $1,200,"
    2 = " 2 $1,200-$2,399,"
    3 = " 3 $2,400-$4,799,"
    4 = " 4 $4,800-$13,199, or"
    5 = " 5 $13,200 or more?"     ;

  VALUE W000140W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $62,000,"
    2 = " 2 $62,000-$85,999,"
    3 = " 3 $86,000-$149,999,"
    4 = " 4 $150,000-$434,999, or"
    5 = " 5 $435,000 or more?"     ;

  VALUE W000141W

   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 less than $1,000,"
    2 = " 2 $1,000-$1,999,"
    3 = " 3 $2,000-$19,999,"
    4 = " 4 $20,000-$49,999, or"
    5 = " 5 $50,000 or more?"     ;

  VALUE W000142W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
```

```
 -9 = '-9 Missing'
  1 = " 1 less than $77,000,"
  2 = " 2 $77,000-$79,999,"
  3 = " 3 $80,000-$171,999,"
  4 = " 4 $172,000-$199,999, or"
  5 = " 5 $200,000 or more?"    ;

VALUE W000143W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $1,000,"
  2 = " 2 $1,000-$15,999,"
  3 = " 3 $16,000-$33,999,"
  4 = " 4 $34,000-$55,999, or"
  5 = " 5 $56,000 or more?"    ;

VALUE W000144W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $11,000,"
  2 = " 2 $11,000-$22,999,"
  3 = " 3 $23,000-$44,999,"
  4 = " 4 $45,000-$112,999, or"
  5 = " 5 $113,000 or more?"    ;

VALUE W000145W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $1,000,"
  2 = " 2 $1,000-$5,999,"
  3 = " 3 $6,000-$13,999,"
  4 = " 4 $14,000-$35,999, or"
  5 = " 5 $36,000 or more?"    ;

VALUE W000146W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $10,000,"
  2 = " 2 $10,000-$22,999,"
  3 = " 3 $23,000-$55,999,"
  4 = " 4 $56,000-$80,999, or"
  5 = " 5 $81,000 or more?"    ;

VALUE W000147W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $600,"
```

```
   2 = " 2 $600-$999,"
   3 = " 3 $1,000-$2,999,"
   4 = " 4 $3,000-$10,999, or"
   5 = " 5 $11,000 or more?"     ;

VALUE W000148W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $500,"
  2 = " 2 $500-$999,"
  3 = " 3 $1,000-$3,999,"
  4 = " 4 $4,000-$15,999, or"
  5 = " 5 $16,000 or more?"     ;

VALUE W000149W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $200,"
  2 = " 2 $200-$999,"
  3 = " 3 $1,000-$3,999,"
  4 = " 4 $4,000-$6,999, or"
  5 = " 5 $7,000 or more?"     ;

VALUE W000150W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $30,000,"
  2 = " 2 $30,000-$151,999,"
  3 = " 3 $152,000-$367,999,"
  4 = " 4 $368,000-$956,999, or"
  5 = " 5 $957,000 or more?"     ;

VALUE W000151W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $30,000,"
  2 = " 2 $30,000-$88,999,"
  3 = " 3 $89,000-$295,999,"
  4 = " 4 $296,000-$360,999, or"
  5 = " 5 $361,000 or more?"     ;

VALUE W000152W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $7,200,"
  2 = " 2 $7,200-$16,799,"
  3 = " 3 $16,800-$40,799,"
```

```
  4 = " 4 $40,800-$86,399, or"
  5 = " 5 $86,400 or more?"      ;

VALUE W000153W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $6,000,"
  2 = " 2 $6,000-$11,999,"
  3 = " 3 $12,000-$23,999,"
  4 = " 4 $24,000-$47,999, or"
  5 = " 5 $48,000 or more?"      ;

VALUE W000154W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $27,600,"
  2 = " 2 $27,600-$41,999,"
  3 = " 3 $42,000-$63,999,"
  4 = " 4 $64,000-$107,999, or"
  5 = " 5 $108,000 or more?"      ;

VALUE W000155W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $14,000,"
  2 = " 2 $14,000-$21,999,"
  3 = " 3 $22,000-$35,999,"
  4 = " 4 $36,000-$48,999, or"
  5 = " 5 $49,000 or more?"      ;

VALUE W000156W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $2,500,"
  2 = " 2 $2,500-$4,999,"
  3 = " 3 $5,000-$7,499,"
  4 = " 4 $7,500-$9,999,"
  5 = " 5 $10,000-$19,999, or"
  6 = " 6 $20,000 or more?"      ;

VALUE W000157W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 PAY OFF BALANCE"
  2 = " 2 PAY MINIMUM"
  3 = " 3 PAY MORE THAN MINIMUM, BUT NOT ENTIRE BALANCE"
  4 = " 4 DON'T HAVE ANY CREDIT CARDS"      ;
```

```
VALUE W000158W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $1,000,"
  2 = " 2 over $1,000 but less than $2,000,"
  3 = " 3 over $2,000 but less than $4,000,"
  4 = " 4 over $4,000 but less than $6,000,"
  5 = " 5 over $6,000 but less than $10,000,"
  6 = " 6 over $10,000 but less than $20,000, or"
  7 = " 7 $20,000 or more?"     ;

VALUE W000159W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 MOST"
  2 = " 2 SOME"
  3 = " 3 A LITTLE"     ;

VALUE W000160W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 less than $500,"
  2 = " 2 over $500 but less than $1,000,"
  3 = " 3 over $1,000 but less than $2,000,"
  4 = " 4 over $2,000 but less than $4,000,"
  5 = " 5 over $4,000 but less than $6,000,"
  6 = " 6 over $6,000 but less than $10,000,"
  7 = " 7 over $10,000 but less than $20,000, or"
  8 = " 8 $20,000 or more?"     ;

VALUE W000161W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 CHILD/CHILDREN"
  2 = " 2 SOMEONE ELSE"     ;

VALUE W000162W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 HelperChildRel: Person 1"
   2 = " 2 HelperChildRel: Person 2"
   3 = " 3 HelperChildRel: Person 3"
   4 = " 4 HelperChildRel: Person 4"
   5 = " 5 HelperChildRel: Person 5"
   6 = " 6 HelperChildRel: Person 6"
   7 = " 7 HelperChildRel: Person 7"
```

```
      8 = " 8 HelperChildRel: Person 8"
      9 = " 9 HelperChildRel: Person 9"
     10 = "10 HelperChildRel: Person 10"
     11 = "11 HelperChildRel: Person 11"
     12 = "12 HelperChildRel: Person 12"
     13 = "13 HelperChildRel: Person 13"
     14 = "14 HelperChildRel: Person 14"
     15 = "15 HelperChildRel: Person 15"
     16 = "16 HelperChildRel: Person 16"
     17 = "17 HelperChildRel: Person 17"
     18 = "18 HelperChildRel: Person 18"
     19 = "19 HelperChildRel: Person 19"
     20 = "20 HelperChildRel: Person 20"
     21 = "21 HelperChildRel: Person 21"
     22 = "22 HelperChildRel: Person 22"
     23 = "23 HelperChildRel: Person 23"
     24 = "24 HelperChildRel: Person 24"     ;

  VALUE W000163W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 CHILD/CHILDREN"
    2 = " 2 GRANDCHILD/GRANDCHILDREN"
    3 = " 3 SOMEONE ELSE"     ;

  VALUE W000164W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 NEARLY EVERY DAY"
    2 = " 2 MORE THAN HALF THE DAYS"
    3 = " 3 SEVERAL DAYS (LESS THAN HALF)"
    4 = " 4 A FEW DAYS"     ;

  VALUE W000165W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 INCLUDED"
    2 = " 2 EXTRA CHARGE"     ;

  VALUE W000166W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 YES, PHONE NUMBER PROVIDED"
    2 = " 2 NO PHONE NUMBER AVAILABLE"
    3 = " 3 REFUSED TO GIVE PHONE NUMBER"     ;

  VALUE W000167W
   -7 = '-7 RF'
   -8 = '-8 DK'
```

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 HOME"
  2 = " 2 CELL PHONE"
  3 = " 3 WORK PHONE"
 91 = "91 SOMEWHERE ELSE (SPECIFY)"    ;

VALUE W000168W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 Yes"    ;

VALUE I000001W
 12 = "12 STARTED"
 20 = "20 COMPLETE"
 21 = "21 INELIGIBLE - NOT 65+"     ;

VALUE I000002W
 12 = "12 Started"
 20 = "20 Complete"    ;

VALUE I000003W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
 24 = "24 Notrequired"    ;

VALUE I000004W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 YES"
  2 = " 2 NO"     ;

VALUE I000005W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 IN PERSON"
  2 = " 2 TELEPHONE"    ;

VALUE I000006W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 Friendly and interested"
  2 = " 2 Cooperative but not particularly interested"
  3 = " 3 Impatient and restless"
  4 = " 4 Hostile"    ;

VALUE I000007W
```

```
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 Good"
     2 = " 2 Fair"
     3 = " 3 Poor"      ;

  VALUE I000008W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 All of the time"
     2 = " 2 Most of the time"
     3 = " 3 Some of the time"
     4 = " 4 Only for the cognition and/or performance parts"
     5 = " 5 None of the time"     ;

  VALUE I000009W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 YES"
     2 = " 2 NO"
     3 = " 3 Interview was conducted by telephone"     ;

  VALUE I000010W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 Spouse/Partner"
     2 = " 2 Child of SP"
     3 = " 3 Other relative"
     4 = " 4 Friend/Neighbor"
     5 = " 5 Staff person from place SP lives"
     6 = " 6 Personal helper/aide"
    91 = "91 Other"     ;

  VALUE I000011W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 Yes"
     2 = " 2 No"
     3 = " 3 Not Administered"     ;

  VALUE I000012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 SP/Proxy too tired to complete in 1 session"
     2 = " 2 SP/Proxy felt poorly/ill / SP's health"
```

```
     3 = " 3 Schedule conflict for respondent"
    91 =  "91 Other(Specify)"     ;

VALUE I000013W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 Not at all cluttered"
  2 = " 2 Somewhat cluttered"
  3 = " 3 Very cluttered"
  4 = " 4 Could not see other rooms"    ;

VALUE I000014W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 NONE"
  2 = " 2 A LITTLE"
  3 = " 3 SOME"
  4 = " 4 A LOT"     ;

VALUE I000015W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 YES"
  2 = " 2 NO"
  7 = " 7 Could not observe"    ;

VALUE I000016W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 IN PERSON"
  2 = " 2 BY PHONE"     ;

  VALUE F000001W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 MALE"
  2 = " 2 FEMALE"        ;

  VALUE F000002W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = " 1 Yes"        ;

  VALUE F000003W
 -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 CONSENT TO RECORDING"
     7 = " 7 REFUSE CONSENT TO RECORD"         ;

     VALUE F000004W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 FREE STANDING NURSING HOME"
       2 = " 2 FREE STANDING ASSISTED LIVING FACILITY"
       3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
       4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
       5 = " 5 ADULT FAMILY CARE HOME"
       6 = " 6 GROUP HOME"
       7 = " 7 BOARD AND CARE HOME"
       8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
      91 = "91 OTHER (SPECIFY)"          ;

     VALUE F000005W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 YES"
       2 = " 2 NO"          ;

     VALUE F000006W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 INDEPENDENT LIVING"
       2 = " 2 ASSISTED LIVING"
       3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
       4 = " 4 NURSING HOME"
      91 = "91 OTHER (SPECIFY)"          ;

     VALUE F000007W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 ASSISTED LIVING"
       2 = " 2 NURSING HOME"          ;

     VALUE F000008W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 ASSISTED LIVING"
       2 = " 2 NURSING HOME"
       3 = " 3 BOTH"          ;
```

SAS ALGORITHM FOR DEMENTIA

```
      VALUE F000009W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = " 1 YES, SERVICE PROVIDED AS PART OF PACKAGE"
        2 = " 2 YES, SERVICE PROVIDED AT AN EXTRA CHARGE"
        3 = " 3 NO, SERVICE NOT PROVIDED"
      ;

      VALUE F000010W

       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = " 1 SP/FAMILY"
        2 = " 2 SOCIAL SECURITY/SSI"
        3 = " 3 MEDICAID"
        4 = " 4 MEDICARE"
        5 = " 5 OTHER SOURCE"
      ;

      VALUE F000011W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = " 1 INDEPENDENT LIVING"
        2 = " 2 ASSISTED LIVING"
        3 = " 3 SPECIAL CARE UNIT ASSISTED LIVING"
        4 = " 4 NURSING HOME"
        5 = " 5 SPECIAL CARE UNIT NURSING HOME"
        6 = " 6 OTHER (SPECIFY)"        ;

      VALUE F000012W
        12 = "12 STARTED"
        20 = "20 COMPLETED"
        24 = "24 NOT REQUIRED"        ;

      VALUE F000013W
        61 = "61 COMPLETE, NH FACILITY"        ;

      VALUE F000014W
        1 = "1 NURSING HOME"
        2 = "2 OTHER FACILITY"        ;
********;
VALUE BA1SS
    1 = '1 Eligible and recorded result for SxS Balance'
    2 = '2 Eligible and no recorded result for SxS Balance'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1STAN
    1 = '1 Eligible and recorded result for Semi Tandem Balance'
    2 = '2 Eligible and no recorded result for Semi Tandem Balance'
```

```
       3 = '3 Not administered because did not complete prior balance test'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

VALUE BA1TAN
       1 = '1 Eligible and recorded result for Full tandem Balance'
       2 = '2 Eligible and no recorded result for Full tandem Balance'
       3 = '3 Not administered because did not complete prior balance tests'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

VALUE BA1OP
       1 = '1 Eligible and recorded result for One leg eyes open Balance'
       2 = '2 Eligible and no recorded result for One leg eyes open Balance'
       3 = '3 Not administered because did not complete prior balance tests'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

VALUE BA1CL
       1 = '1 Eligible and recorded result for One leg eyes closed Balance'
       2 = '2 Eligible and no recorded result for One leg eyes closed Balance'
       3 = '3 Not administered because did not complete prior balance tests'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

VALUE WA1WLK
       1 = '1 Eligible and recorded result for walking course'
       2 = '2 Eligible and no recorded result for walking course'
       4 = '4 Not Eligible due to exclusion criteria'
       5 = '5 Not Eligible on exclusion criteria but recorded result (SP changed
mind)'
      -1 = '-1 Inapplicable '
      -9 = '-9 Missing';

VALUE CH1SCH
       1 = '1 Eligible and recorded result for single chair stand'
       2 = '2 Eligible and no recorded result for single chair stand'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

VALUE CH1RSH
       1 = '1 Eligible and recorded result for repeated chair stand'
       2 = '2 Eligible and no recorded result for repeated chair stand'
       3 = '3 Not administered because did not complete single chair stand w/o
arms'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

VALUE GR1GRIP
       1 = '1 Eligible and recorded result for grip strength'
       2 = '2 Eligible and no recorded result for grip strength'
```

```
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';


VALUE WC1WAIST
    1 = '1 Eligible and recorded result for waist circumference'
    2 = '2 Eligible and no recorded result for waist circumference'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE PK1PEAK
    1 = '1 Eligible and recorded result for peak air flow'
    2 = '2 Eligible and no recorded result for peak air flow'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';


VALUE PA25FMT
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    111= '111 Sleeping Napping'
    131= '131 Eating'
    132= '132 Going out to eat'
    199= '199 Other self care activities'
    211= '211 Work and work-related activities'
    221= '221 Other income generating activities'
    241= '241 Volunteering'
    299= '299 Other productive activities'
    321= '321 Shopping for non-durable goods'
    399= '399 Other shopping'
    411= '411 Food and drink preparation'
    434= '434 Outdoor Maintenance'
    439= '439 Household chores (can not tell if indoor/outdoor)'
    441= '441 Animal and pet care'
    442= '442 Walking and exercising pets'
    449= '449 Other animal and pet care'
    451= '451 Vehicle maintenance and repair'
    471= '471 Financial management'
    499= '499 Other household activities'
    511= '511 Physical care and assistance to others'
    599= '599 Other physical care'
    611= '611 Socializing with others in person'
    612= '612 Socializing with others on the phone'
    616= '616 Socializing and communicating on the computer'
    621= '621 Watching TV and movies'
    631= '631 Doing puzzles or games not on computer or online'
    632= '632 Gambling not online or at a casino'
    636= '636 Doing puzzles or games on a computer or online'
    641= '641 Arts and crafts or hobbies'
    642= '642 Reading'
    643= '643 Writing'
    644= '644 Listening to music'
    646= '646 Computer or online leisure activities'
    651= '651 Smoking or other tobacco use'
    652= '652 Drinking alcohol'
    661= '661 Doing nothing/relaxing'
    669= '669 No activity'
```

```
    699= '699 Other non active leisure'
    711= '711 Playing sports'
    712= '712 Walking or jogging'
    713= '713 Other outdoor recreating activities'
    714= '714 Attending sporting events'
    718= '718 Watching sporting events'
    721= '721 Attending arts  including plays and concerts'
    723= '723 Attending movies'
    724= '724 Attending casinos'
    737= '737 Travel for leisure'
    799= '799 Other active leisure'
    811= '811 Attending religious activities'
    812= '812 Other religious and spirtual activities'
    821= '821 Attending meetings or events'
    899= '899 Other organizational activity'
    991= '991 Other miscellaneous'
    992= '992 No favorite activity'
    997= '997 Refused'
    998= '998 Don''t Know'
    999= '999 Not Codeable';

VALUE $PA25FM
    '-1' = '-1 Inapplicable'
    '-9' = '-9 Missing'
    '111'= '111 Sleeping Napping'
    '131'= '131 Eating'
    '132'= '132 Going out to eat'
    '199'= '199 Other self care activities'
    '211'= '211 Work and work-related activities'
    '221'= '221 Other income generating activities'
    '241'= '241 Volunteering'
    '299'= '299 Other productive activities'
    '321'= '321 Shopping for non-durable goods'
    '399'= '399 Other shopping'
    '411'= '411 Food and drink preparation'
    '434'= '434 Outdoor Maintenance'
    '439'= '439 Household chores (can not tell if indoor/outdoor)'
    '441'= '441 Animal and pet care'
    '442'= '442 Walking and exercising pets'
    '449'= '449 Other animal and pet care'
    '451'= '451 Vehicle maintenance and repair'
    '471'= '471 Financial management'
    '499'= '499 Other household activities'
    '511'= '511 Physical care and assistance to others'
    '599'= '599 Other physical care'
    '611'= '611 Socializing with others in person'
    '612'= '612 Socializing with others on the phone'
    '616'= '616 Socializing and communicating on the computer'
    '621'= '621 Watching TV and movies'
    '631'= '631 Doing puzzles or games not on computer or online'
    '632'= '632 Gambling not online or at a casino'
    '636'= '636 Doing puzzles or games on a computer or online'
    '641'= '641 Arts and crafts or hobbies'
    '642'= '642 Reading'
    '643'= '643 Writing'
    '644'= '644 Listening to music'
    '646'= '646 Computer or online leisure activities'
```

```
    '651'= '651 Smoking or other tobacco use'
    '652'= '652 Drinking alcohol'
    '661'= '661 Doing nothing/relaxing'
    '669'= '669 No activity'
    '699'= '699 Other non active leisure'
    '711'= '711 Playing sports'
    '712'= '712 Walking or jogging'
    '713'= '713 Other outdoor recreating activities'
    '714'= '714 Attending sporting events'
    '718'= '718 Watching sporting events'
    '721'= '721 Attending arts  including plays and concerts'
    '723'= '723 Attending movies'
    '724'= '724 Attending casinos'
    '737'= '737 Travel for leisure'
    '799'= '799 Other active leisure'
    '811'= '811 Attending religious activities'
    '812'= '812 Other religious and spirtual activities'
    '821'= '821 Attending meetings or events'
    '899'= '899 Other organizational activity'
    '991'= '991 Other miscellaneous'
    '992'= '992 No favorite activity'
    '997'= '997 Refused'
    '998'= '998 Don''t Know'
    '999'= '999 Not Codeable';

/* ADD NEW FORMATS FOR THE PE DATA. */

VALUE PE_COMP
    1 = '1 Completed    '
    2 = '2 Attempted    '
    3 = '3 Not attempted'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';


VALUE PE_YES
  1-HIGH = '1 Yes'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

 VALUE WalkAid
  1 = '1 none'
  2 = '2 cane'
  3 = '3 walker or rollator'
  9 = '4 other'
 -1 = '-1 Inapplicable'
 -7 = '-7 RF'
 -8 = '-8 DK'
 -9 = '-9 Missing';

 VALUE CH_ARMS
  1 = '1 with arms'
  2 = '2 without arms'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

 VALUE RGT_LFT
```

# SAS ALGORITHM FOR DEMENTIA

```
    1 = '1 Right'
    2 = '2 Left'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE PERSON
    1 = '1 Interviewer'
    2 = '2 Sample person'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE STAND
     1 = '1 Standing'
     2 = '2 Sitting'
     3 = '3 Lying down'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE EFFORT
     1 = '1 Full effort'
     2 = '2 Less effort for health reason'
     3 = '3 Less effort for other reason'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0001AB
     1 = "1 AM"
     2 = "2 PM"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0003BA
     1 = "1 Completed, held for 10 seconds"
     2 = "2 Attempted, not held for 10 seconds"
     3 = "3 Not attempted"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE A0019BA
     1 = "1 Completed, held for 30 seconds"
     2 = "2 Attempted, not held for 30 seconds"
     3 = "3 Not attempted"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0002WA
     1 = "1 Yes, there is space to set up the walking course"
     2 = "2 No, there is not space to set up the walking course"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0004WA
     1 = "1 None"
     2 = "2 Cane"
     3 = "3 Walker or rollator"
     9 = "9 Other, specify"
    -1 = '-1 Inapplicable'
```

```
    -7 = '-7 RF'
    -8 = '-8 DK'
    -9 = '-9 Missing';

 VALUE A0004CH
     1 = "1 No, chair stand not completed"
     2 = "2 Yes, chair stand completed"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0008CH
     1 = "1 With arms"
     2 = "2 Without arms"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0014CH
     1 = "1 1 Chair stand completed"
     2 = "2 2 Chair stands completed"
     3 = "3 3 Chair stands completed"
     4 = "4 4 Chair stands completed"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

     VALUE OCCCODE
1   ='1 Management Occupations: 0010-0430'
2   ='2 Business and Financial Operations Occupations:  0500-0950'
3   ='3 Computer and mathematical occupations:  1000-1240'
4   ='4 Architecture and Engineering Occupations:   1300-1560'
5   ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6   ='6 Community and Social Service Occupations:   2000-2060'
7   ='7 Legal Occupations:  2100-2160'
8   ='8 Education, Training, and Library Occupations:   2200-2550'
9   ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10  ='10 Healthcare Practitioners and Technical Occupations:   3000-3540'
11  ='11 Healthcare Support Occupations:   3600-3655'
12  ='12 Protective Service Occupations:   3700-3955'
13  ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14  ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15  ='15 Personal Care and Service Occupations: 4300-4650'
16  ='16 Sales and Related Occupations: 4700-4965'
17  ='17 Office and Administrative Support Occupations: 5000-5940'
18  ='18 Farming, Fishing, and Forestry Occupations:   6000-6130'
19  ='19 Construction and Extraction Occupations:   6200-6940'
20  ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21  ='21 Production Occupations:   7700-8965'
22  ='22 Transportation and Material Moving Occupations:   9000-9750'
23  ='23 Military Specific Occupations: 9800-9830'
24  ='24 NSOC: No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
```

```
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';

VALUE R1DSPPBM
-1="-1: Inapplicable"
1="1: PROXY INTERVIEW"
2="2: MISSING WALK AND REPEAT CHAIR AND BALANCE"
3="3: MISSING WALK AND REPEAT CHAIR"
4="4: MISSING WALK AND BALANCE"
5="5: MISSING REPEAT CHAIR AND BALANCE"
6="6: MISSING WALK"
7="7: MISSING REPEAT CHAIR"
8="8: MISSING BALANCE"
9="9: NO SPACE"
10="10: NO CHAIR"
11="11: NO SPACE WALK AND NO CHAIR"
12="12: NO SPACE WALK AND NON-SAFETY MISSING"
13="13: NO CHAIR AND NON-SAFETY MISSING"
14="14: NON-SAFETY WALK"
15="15: NON-SAFETY CHAIR"
16="16: NON-SAFETY BALANCE"
17="17: NON-SAFETY WALK AND CHAIR"
18="18: NON-SAFETY WALK AND BALANCE"
19="19: NON-SAFETY CHAIR AND BALANCE"
20="20: NON-SAFETY WALK AND CHAIR AND BALANCE"
;

VALUE dchntinhh
    1 = ' 1 Child identified in interview but not enumerated to OP File'
   -1 = '-1 Inapplicable';

 VALUE STAT1A
      0 = "0 No"
      1 = "1 Yes"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE $SPOUSEID
         '-1' = "-1 Inapplicable"
         '-9' = "-9 Missing";
RUN;


/*================================================================*/

/* NHATS_Round_2_Combined_PROC_FORMAT_Statement_v2.sas*/

PROC FORMAT ;

      VALUE release
        1 = '1 Main Sample'
        2 = '2 Reserve Sample'
        9 = '9 New Release Sample';

      VALUE STAT_DTa
```

```
         4 = "  4 April"
         5 = "  5 May"
         6 = "  6 June"
         7 = "  7 July"
         8 = "  8 August"
         9 = "  9 September"
        10 = "10 October"
        11 = "11 November"
        99 = "99 Prior to start of field work"
        -1 = '-1 Inapplicable';

    VALUE $DISP
        '10' = "10 Not Available "
        '11' = "11 Ready"
        '12' = "12 Started "
        '20' = "20 Final "
        '24' = "24 Not Required "
        '60' = "60 Complete "
        '61' = "61 Complete, NH facility"
        '62' = "62 Complete SP Deceased, Proxy Intv"
        '63' = "63 Complete SP, FQ not complete"
        '64' = "64 Complete FQ, SP not complete"
        '75' = "75 Physically/mentally unable to participate, no proxy"
        '76' = "76 Too ill to participate, no proxy"
        '77' = "77 Refusal, SP"
        '78' = "78 Language barrier"
        '79' = "79 Unable to locate"
        '80' = "80 Unavailable during field period"
        '82' = "82 Outside of PSU"
        '83' = "83 Ineligible"
        '85' = "85 Refusal, facility"
        '86' = "86 Deceased"
        '87' = "87 Refusal, proxy"
        '88' = "88 Work stopped"     ;

 VALUE DISP_a
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required"
        60 = "60 Complete"
        61 = "61 Complete, NH facility"
        62 = "62 Complete SP Deceased, Proxy Intv"
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
```

```
        88 = "88 Work stopped"     ;

    VALUE DISP_
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required";

    VALUE DISP_F
     -1 = '-1 Inapplicable'
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required"
        60 = "60 Complete"
        61 = "61 Complete, NH facility"
        62 = "62 Complete SP Deceased, Proxy Intv"
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"
            89 = "89 Final, Other Specify";

    VALUE RFDK
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable (nursing home resident or residential care no FQ)'
    -9 = '-9 Missing';

    VALUE $RFDK_F
    '-7' = '-7 RF'
    '-8' = '-8 DK'
    '-1' = '-1 Inapplicable'
    '-9' = '-9 Missing';

    VALUE RFDK_F
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE RFDK_B
    -1 = '-1 Inapplicable'
    1 = '1 Yes-Breakoff';
```

# SAS ALGORITHM FOR DEMENTIA

```sas
VALUE $RFDK_C
    '-1' = '-1 Inapplicable'
    'CL' ='CL - Closing'
    'EW' ='EW - Economic Well-Being'
    'FQ' ='FQ - Facility Questionnaire'
    'HL' ='HL - Helper'
    'HW' ='HW - Height and Weight'
    'IP' ='IP - Insurance Plans'
    'LF' ='LF - Labor Force'
    'PA' ='PA - Participation'
    'PE' ='PE - Performance'
    'WB' ='WB - Well-being' ;

VALUE $RFDK_2C
    '-1' = '-1 Inapplicable'
    '-7' = '-7 RF'
    '-8' = '-8 DK'
    '-9' = '-9 Missing';

    VALUE RFDK_Y
     1 = ' 1 Yes'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE RFDK_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE DSTRP_G
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1 =  '1 X condition and word color condition accuracy below threshold
(less than .42)'
    2 =  '2 word condition only below threshold (less than .42)'
    3 =  '3 X condition and word color condition meet criteria for accuracy'
    4 =  '4 fewer than 50% of X and word color condition trials answered'
    999 = '999 X condition only below threshold (less than .42)';

    VALUE DSTRP_R
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -999 = '-999 Inapplicable'
    other = 'Values ranging between -.353 and 1.115';

    VALUE DSTRP_M
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
```

```
    -999 = '-999 Inapplicable'
    other = 'Values ranging between -544.732 and 924.863';

VALUE FQ_4F
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
        1='1 YES'
        2='2 NO';

  VALUE CHILDDEC
   1 =  '1 CHILD DECEASED'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE W200001W
    12 = "12 STARTED"
    20 = "20 COMPLETE"
    21 = "21 INELIGIBLE - NOT 65+"   ;

  VALUE W200008x
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 UNDER 20"
    2 = "2 20-24"
    3 = "3 25-29"
    4 = "4 30-34"
    5 = "5 35-39"
    6 = "6 40-44"
    7 = "7 45-49"
    8 = "8 50-54"
    9 = "9 55-59"
   10 = "10 60-64"
   11 = "11 65-69"
   12 = "12 70-74"
   13 = "13 75-79"
   14 = "14 80-84"
   15 = "15 85-89"
   16 = "16 90 +";

  VALUE W200009W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SAMPLE PERSON"
    2 = "2 SPOUSE/ PARTNER"
    3 = "3 DAUGHTER"
    4 = "4 SON"
    5 = "5 DAUGHTER-IN-LAW"
    6 = "6 SON-IN-LAW"
    7 = "7 STEPDAUGHTER"
```

```
      8 = "8 STEPSON"
      9 = "9 SISTER"
     10 = "10 BROTHER"
     11 = "11 SISTER-IN-LAW"
     12 = "12 BROTHER-IN-LAW"
     13 = "13 MOTHER"
     14 = "14 STEPMOTHER"
     15 = "15 MOTHER-IN-LAW"
     16 = "16 FATHER"
     17 = "17 STEPFATHER"
     18 = "18 FATHER-IN-LAW"
     19 = "19 GRANDDAUGHTER"
     20 = "20 GRANDSON"
     21 = "21 NIECE"
     22 = "22 NEPHEW"
     23 = "23 AUNT"
     24 = "24 UNCLE"
     25 = "25 COUSIN"
     26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
     27 = "27 STEPSON'S SON/ DAUGHTER"
     28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
     29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
     30 = "30 BOARDER/RENTER"
     31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
     32 = "32 ROOMMATE"
     33 = "33 EX-WIFE/ EX-HUSBAND"
     34 = "34 BOYFRIEND/ GIRLFRIEND"
     35 = "35 NEIGHBOR"
     36 = "36 FRIEND"
     37 = "37 SOMEONE/SERVICE AT THE PLACE SP LIVES/LIVED"
     38 = "38 CO-WORKER"
     39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
     40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
     41 = "41 DECEASED SPOUSE/PARTNER"
     91 = "91 OTHER RELATIVE"
     92 = "92 OTHER NONRELATIVE"    ;

   VALUE W200002W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MALE"
    2 = "2 FEMALE";

   VALUE W200005W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 NO SCHOOLING COMPLETED"
    2 = "2 1ST-8TH GRADE"
    3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
    4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
    5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
    6 = "6 SOME COLLEGE BUT NO DEGREE"
```

```
      7 = "7 ASSOCIATE'S DEGREE"
      8 = "8 BACHELOR'S DEGREE"
      9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"  ;

   VALUE W200010W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MARRIED"
     2 = "2 LIVING WITH A PARTNER"
     3 = "3 SEPARATED"
     4 = "4 DIVORCED"
     5 = "5 WIDOWED"
     6 = "6 NEVER MARRIED";

   VALUE W200011W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 PREVIOUSLY REPORTED"  ;
VALUE W200012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 REGULAR"
     2 = "2 VARIED"  ;

   VALUE W200013W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 SP AND/OR FAMILY"
     2 = "2 GOVERNMENT PROGRAM"
     3 = "3 INSURANCE"
    91 = "91 OTHER (SPECIFY)"   ;

   VALUE W200015W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1='1 HOURLY'
    2='2 WEEKLY'
    3='3 MONTHLY'
    4='4 DID NOT PAY IN LAST MONTH';

   VALUE W200016W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
```

```
      1 = "1 MEDICAID"
      2 = "2 MEDICARE"
      3 = "3 STATE PROGRAM"
      91 = "91 OTHER (SPECIFY)"    ;

   VALUE W200018W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
     2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
     3 = "3 MOBILE HOME OR TRAILER"
     4 = "4 MULTI-UNIT (2+) BUILDING"
     91 = "91 OTHER (SPECIFY)"  ;

   VALUE W200020W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 HOME"
     2 = "2 MULTI-UNIT"
     3 = "3 OTHER"  ;

   VALUE W200021W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 BUILDING HAS ONE FLOOR"
     2 = "2 BUILDING HAS MULTIPLE FLOORS"   ;

   VALUE W200022W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 HOME"
     2 = "2 APARTMENT"
     3 = "3 ROOM"
     4 = "4 UNIT"
     5 = "5 SUITE"
     6 = "6 SOMETHING ELSE (SPECIFY)"  ;

   VALUE W200030W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 SAMPLE PERSON (SP)"
     2 = "2 PROXY"  ;

   VALUE W200032W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 HOSPITAL"
 2 = "2 NURSING HOME/REHAB CENTER"
91 = "91 OTHER (SPECIFY)"  ;

VALUE W200035W
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 SELF"
 2 = "2 SPOUSE/ PARTNER"
 3 = "3 DAUGHTER"
 4 = "4 SON"
 5 = "5 DAUGHTER-IN-LAW"
 6 = "6 SON-IN-LAW"
 7 = "7 STEPDAUGHTER"
 8 = "8 STEPSON"
 9 = "9 SISTER"
10 = "10 BROTHER"
11 = "11 SISTER-IN-LAW"
12 = "12 BROTHER-IN-LAW"
13 = "13 MOTHER"
14 = "14 STEPMOTHER"
15 = "15 MOTHER-IN-LAW"
16 = "16 FATHER"
17 = "17 STEPFATHER"
18 = "18 FATHER-IN-LAW"
19 = "19 GRANDDAUGHTER"
20 = "20 GRANDSON"
21 = "21 NIECE"
22 = "22 NEPHEW"
23 = "23 AUNT"
24 = "24 UNCLE"
25 = "25 COUSIN"
26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
27 = "27 STEPSON'S SON/ DAUGHTER"
28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
30 = "30 BOARDER/RENTER"
31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
32 = "32 ROOMMATE"
33 = "33 EX-WIFE/ EX-HUSBAND"
34 = "34 BOYFRIEND/ GIRLFRIEND"
35 = "35 NEIGHBOR"
36 = "36 FRIEND"
37 = "37 SOMEONE/SERVICE FROM THE PLACE SP LIVES/DIED"
38 = "38 CO-WORKER"
39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
91 = "91 OTHER RELATIVE"
92 = "92 OTHER NONRELATIVE"  ;

VALUE W200036W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
```

```
      1 = "1 VERY FAMILIAR"
      2 = "2 SOMEWHAT FAMILIAR"
      3 = "3 A LITTLE FAMILIAR"
      4 = "4 NOT AT ALL FAMILIAR"  ;

   VALUE W200037W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES, SAME ADDRESS"
     2 = "2 NO, DIFFERENT ADDRESS"
     3 = "3 YES, SAME ADDRESS WITH MINOR CORRECTIONS"  ;

   VALUE W200038W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 JANUARY"
     2 = "2 FEBRUARY"
     3 = "3 MARCH"
     4 = "4 APRIL"
     5 = "5 MAY"
     6 = "6 JUNE"
     7 = "7 JULY"
     8 = "8 AUGUST"
     9 = "9 SEPTEMBER"
    10 = "10 OCTOBER"
    11 = "11 NOVEMBER"
    12 = "12 DECEMBER"  ;

   VALUE W200039W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 2011"
     2 = "2 2012"
     3 = "3 YEAR2013"
     4 = "4 YEAR2014"
     5 = "5 YEAR2015"
     6 = "6 YEAR2016"
     7 = "7 YEAR2017"
     8 = "8 YEAR2018"
     9 = "9 YEAR2019"
    10 = "10 YEAR2020"  ;

   VALUE W200040W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 2011"
     2 = "2 2012"  ;

   VALUE W200041W
```

```
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 AT SPS OR SOMEONE ELSES HOME"
   2 = "2 IN A HOSPITAL"
   3 = "3 IN A NURSING HOME"
   4 = "4 IN A HOSPICE RESIDENCE"
   5 = "5 IN TRANSIT (AMBULANCE TO HOSPITAL)"
  91 = "91 SOMEWHERE ELSE (SPECIFY)";

VALUE W200042W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP'S HOME"
   2 = "2 SOMEONE ELSE'S HOME"  ;

VALUE W200043W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 INTENSIVE CARE UNIT"
   2 = "2 PALLIATIVE CARE UNIT"
   3 = "3 INPATIENT HOSPICE UNIT"
   4 = "4 EMERGENCY ROOM"
   5 = "5 ANOTHER KIND OF UNIT"  ;

VALUE W200044W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 HOSPICE AT A HOSPITAL"
   2 = "2 HOSPICE AT A NURSING HOME"
   3 = "3 RESIDENTIAL HOSPICE"
   4 = "4 OTHER HOSPICE"  ;

VALUE W200045W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 DAYS"
   2 = "2 WEEKS"
   3 = "3 MONTHS"
   4 = "4 YEARS"  ;

VALUE W200046W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 AT SP'S HOME"
   2 = "2 IN A HOSPITAL"
```

```
       3 = "3 IN A NURSING HOME"
       4 = "4 IN A HOSPICE RESIDENCE"
      91 = "91 SOMEWHERE ELSE (SPECIFY)"  ;

   VALUE W200047W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EVERY DAY"
     2 = "2 MOST DAYS"
     3 = "3 SOME DAYS"
     4 = "4 RARELY"
     5 = "5 NOT AT ALL"  ;

   VALUE W200048W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN WAS NEEDED"
     2 = "2 MORE THAN WAS NEEDED"
     3 = "3 ABOUT RIGHT AMOUNT"  ;

   VALUE W200049W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     3 = "3 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

   VALUE W200050W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ALWAYS"
     2 = "2 USUALLY"
     3 = "3 SOMETIMES"
     4 = "4 NEVER"
     5 = "5 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

   VALUE W200051W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EXCELLENT"
     2 = "2 VERY GOOD"
     3 = "3 GOOD"
     4 = "4 FAIR"
     5 = "5 POOR"  ;

   VALUE W200052W
    -7 = '-7 RF'
```

```
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 NOT AT ALL"
    2 = "2 SEVERAL DAYS"
    3 = "3 MORE THAN HALF THE DAYS"
    4 = "4 NEARLY EVERY DAY"  ;

 VALUE W200053W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
    2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
    3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
    4 = "4 RARELY (ONCE A WEEK OR LESS)"
    5 = "5 NEVER"  ;

 VALUE W200054W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
    2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
    3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
    4 = "4 RARELY (ONCE A WEEK OR LESS)"
    5 = "5 NEVER"
    7 = "7 DON'T WAKE UP/NOT A PROBLEM"  ;

 VALUE W200055W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PRIVATE RESIDENCE"
    2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
    3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
    4 = "4 RELIGIOUS GROUP QUARTERS"
   91 = "91 OTHER (SPECIFY)"  ;

 VALUE W200056W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 PLACE DOES NOT HAVE A NAME"  ;

 VALUE W200057W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
```

```
     1 = "1 APARTMENT"
     2 = "2 ROOM"
     3 = "3 UNIT"
     4 = "4 SUITE"
    91 = "91 SOMETHING ELSE (SPECIFY)"   ;

  VALUE W200058W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO, DIFFERENT PERSON"
    3 = "3 NO, NAME MISSPELLED"   ;

   VALUE W200060W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PRIVATE RESIDENCE"
    2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
    3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
    5 = "5 NURSING HOME"
   91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
    8 = "8 OTHER REASON"    ;

  VALUE W200067W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 COMMON OR SHARED ENTRANCE"
    2 = "2 ENTRANCE DIRECTLY INTO HOME"  ;

  VALUE W200068W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1"
    2 = "2"
    3 = "3"
    4 = "4+"   ;

  VALUE W200069W
```

```
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ALL ITEMS HERE"
     2 = "2 ADDED ONE OR MORE ITEMS"  ;

   VALUE W200070W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MORE THAN $500"
     2 = "2 LESS THAN $500"
     3 = "3 JUST ABOUT $500"  ;

   VALUE W200071W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MORE THAN $1,000"
     2 = "2 LESS THAN $1,000"
     3 = "3 JUST ABOUT $1,000"  ;

   VALUE W200072W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MORE THAN $100"
     2 = "2 LESS THAN $100"
     3 = "3 JUST ABOUT $100"  ;

   VALUE W200073W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 YES, DOESNT KNOW HOW TO USE A COMPUTER"  ;

   VALUE W200074W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MOST DAYS"
     2 = "2 SOME DAYS"
     3 = "3 RARELY"  ;

   VALUE W200076W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
```

```
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 DEAF"   ;

 VALUE W200077W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 BLIND"   ;

 VALUE W200078W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY DAY (7 DAYS A WEEK)"
   2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
   3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
   4 = "4 RARELY (ONCE A WEEK OR LESS)"
   5 = "5 NEVER"   ;

 VALUE W200080W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES, A CHANGE"
   2 = "2 NO, NO CHANGE"
   3 = "3 DEMENTIA/ALZHEIMER'S REPORTED BY PROXY"   ;

 VALUE W200081W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE"
   2 = "2 SP IS UNABLE TO SPEAK"
   3 = "3 SP IS UNABLE TO HEAR"
   4 = "4 SP REFUSED"
   5 = "5 PROXY REFUSED"
   6 = "6 SP NOT PRESENT"
   7 = "7 SP TOO ILL"
   8 = "8 SP LANGUAGE BARRIER"
  91 = "91 OTHER (SPECIFY)"   ;

 VALUE W200082W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MUCH BETTER"
   2 = "2 BETTER"
   3 = "3 SAME"
   4 = "4 WORSE"
```

```
    5 = "5 MUCH WORSE"   ;

  VALUE W200083W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO/DON'T KNOW"  ;

  VALUE W200084W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 CONTINUE WITH ACTIVITY"
   2 = "2 SP REFUSES ACTIVITY"  ;

  VALUE W200085W
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "Word[1]"
   2 = "Word[2]"
   3 = "Word[3]"
   4 = "Word[4]"
   5 = "Word[5]"
   6 = "Word[6]"
   7 = "Word[7]"
   8 = "Word[8]"
   9 = "Word[9]"
   10 = "Word[10]"
   91 = "91 NO WORDS REMEMBERED"
   92 = "92 REFUSED"  ;

  VALUE W200086W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 DIFFICULTY HEARING ANY OF THE WORDS"
   2 = "2 INTERRUPTION OCCURRED WHILE LIST WAS BEING READ"
   91 = "91 OTHER PROBLEM (SPECIFY)"
   92 = "92 NO PROBLEMS OCCURRED"
   97 = "97 SP REFUSED WORD RECALL TASK"  ;

  VALUE W200087W
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP ATTEMPTED CLOCK DRAWING"
   2 = "2 SP DID NOT ATTEMPT CLOCK DRAWING"
   97 = "3 SP REFUSED CLOCK DRAWING"  ;

  VALUE W200089W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
```

```
   1 = "1 EVERY DAY (7 DAYS A WEEK)"
   2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
   3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
   4 = "4 RARELY (ONCE A WEEK OR LESS)"
   5 = "5 NEVER"  ;

VALUE W200090W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY TIME"
  2 = "2 MOST TIMES"
  3 = "3 SOMETIMES"
  4 = "4 RARELY"
  5 = "5 NEVER"  ;

VALUE W200092W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST TIMES"
  2 = "2 SOMETIMES"
  3 = "3 RARELY"
  4 = "4 NEVER"  ;

VALUE W200093W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NONE"
  2 = "2 A LITTLE"
  3 = "3 SOME"
  4 = "4 A LOT"  ;

VALUE W200094W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE OFTEN"
  2 = "2 LESS OFTEN"
  3 = "3 ABOUT THE SAME"  ;

VALUE W200095W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
```

```
     7 = "7 JULY"
     8 = "8 AUGUST"
     9 = "9 SEPTEMBER"
    10 = "10 OCTOBER"
    11 = "11 NOVEMBER"
    12 = "12 DECEMBER"
    90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

  VALUE W200096W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

  VALUE W200097W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO / NO LONGER DRIVE"  ;

  VALUE W200098W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 NO, NO RAIN OR BAD WEATHER"  ;

  VALUE W200099W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 ALWAYS DID IT BY SELF"
    2 = "2 ALWAYS DID IT TOGETHER WITH SOMEONE ELSE"
    3 = "3 SOMEONE ELSE ALWAYS DID IT"
    4 = "4 IT VARIED (MORE THAN ONE WAY)"
    5 = "5 NOT DONE IN LAST MONTH"  ;

  VALUE W200102W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MORE OFTEN"
    2 = "2 LESS OFTEN"
    3 = "3 SAME"  ;

  VALUE W200106W
   -7 = '-7 RF'
   -8 = '-8 DK'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 ALWAYS FED THROUGH IV OR TUBE"  ;

  VALUE W200107W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EVERY TIME"
     2 = "2 MOST TIMES"
     3 = "3 SOMETIMES"
     4 = "4 RARELY"  ;

  VALUE W200109W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 SHOWERING"
     2 = "2 TAKING BATHS"
     3 = "3 WASHING UP SOME OTHER WAY"  ;


  VALUE W200114W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 VERY IMPORTANT"
     2 = "2 SOMEWHAT IMPORTANT"
     3 = "3 NOT SO IMPORTANT"  ;

  VALUE W200115W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
    95 = "95 NO ACTIVITY LISTED"  ;

  VALUE W200116W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LEFT"
     2 = "2 RIGHT"
     3 = "3 BOTH"  ;

  VALUE W200117W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
```

```
    -9 = '-9 Missing'
     1 = "1 LEFT SIDE"
     2 = "2 RIGHT SIDE"
     3 = "3 BOTH SIDES"  ;

   VALUE W200118W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ONE SIDE"
     2 = "2 BOTH SIDES"  ;

   VALUE W200119W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 RECEIVE ALL TREATMENTS"
     2 = "2 STOP/REJECT ALL TREATMENTS"  ;

   VALUE W200120W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
     2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
     3 = "3 LIVING WITH AN ADULT CHILD"
     4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
     5 = "5 LIVING IN A NURSING HOME"  ;

   VALUE W200121W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
     4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

   VALUE W200122W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MAKE DECISIONS WITHOUT MUCH ADVICE FROM THEM"
     2 = "2 GET THEIR ADVICE AND THEN MAKE DECISIONS"
     3 = "3 MAKE DECISIONS TOGETHER"
     4 = "4 LEAVE DECISIONS UP TO THEM"  ;

   VALUE W200123W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
```

```
     -9 = '-9 Missing'
      1 = "1 HANDLE MOSTLY BY SELF"
      2 = "2 HANDLE TOGETHER WITH FAMILY OR CLOSE FRIENDS"
      3 = "3 FAMILY OR CLOSE FRIENDS MOSTLY HANDLE THESE THINGS"
      4 = "4 IT VARIES"   ;

   VALUE W200124W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 NEVER"
      2 = "2 RARELY"
      3 = "3 SOMETIMES"
      4 = "4 OFTEN"   ;

   VALUE W200126W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 AGREE A LOT"
      2 = "2 AGREE A LITTLE"
      3 = "3 DO NOT AGREE"   ;

   VALUE W200127W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 AGREE A LOT"
      2 = "2 AGREE A LITTLE"
      3 = "3 AGREE NOT AT ALL"   ;

   VALUE W200129W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 less than $1,000,"
      2 = "2 $1,000 to less than $2,000,"
      3 = "3 $2,000 to less than $3,000,"
      4 = "4 $3,000 to less than $5,000, or"
      5 = "5 $5,000 or more?"   ;

   VALUE W200131W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 YES"
      2 = "2 NO"
      3 = "3 RETIRED/DON'T WORK ANYMORE"   ;

   VALUE W200132W
     -7 = '-7 RF'
     -8 = '-8 DK'
```

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY WEEK"
  2 = "2 EVERY TWO WEEKS"
  3 = "3 TWO TIMES A MONTH"
  4 = "4 ONCE A MONTH"
  5 = "5 DAILY"
 91 = "91 OTHER SCHEDULE (SPECIFY)"  ;

VALUE W200133W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 OWN"
  2 = "2 RENT"
  3 = "3 SOME OTHER ARRANGEMENT"  ;

VALUE W200134W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 PAID OFF"
  2 = "2 STILL MAKE PAYMENTS"
  3 = "3 REVERSE MORTGAGE"  ;

VALUE W200135W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $250,"
  2 = "2 $250-$499,"
  3 = "3 $500-$999, or"
  4 = "4 $1,000 or more?"  ;

VALUE W200136W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 5 YEARS"
  2 = "2 10 YEARS"
  3 = "3 LONGER THAN 10 YEARS"  ;

VALUE W200137W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $50,000,"
  2 = "2 between $50,000 and $100,000, or"
  3 = "3 over $100,000?"  ;

VALUE W200138W
 -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $50,000,"
  2 = "2 $50,000-$74,999,"
  3 = "3 $75,000-$99,999,"
  4 = "4 $100,000-$199,999,"
  5 = "5 $200,000-$299,999,"
  6 = "6 $300,000-$499,999,"
  7 = "7 $500,000-$749,999, or"
  8 = "8 $750,000 or more?"  ;

VALUE W200139W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 PAY OFF BALANCE"
  2 = "2 PAY MINIMUM"
  3 = "3 PAY MORE THAN MINIMUM, BUT NOT ENTIRE BALANCE"
  4 = "4 DON'T HAVE ANY CREDIT CARDS"  ;

VALUE W200140W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $1,000,"
  2 = "2 $1,000 - $1,999,"
  3 = "3 $2,000 - $3,999,"
  4 = "4 $4,000 - $5,999,"
  5 = "5 $6,000 - $9,999,"
  6 = "6 $10,000 - $19,999, or"
  7 = "7 $20,000 or more?"  ;

VALUE W200141W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST"
  2 = "2 SOME"
  3 = "3 A LITTLE"  ;

VALUE W200142W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $500,"
  2 = "2 $500 - $999,"
  3 = "3 $1,000 - $1,999,"
  4 = "4 $2,000 - $3,999,"
  5 = "5 $4,000 - $5,999,"
  6 = "6 $6,000 - $9,999,"
  7 = "7 $10,000 - $19,999, or"
  8 = "8 $20,000 or more?"  ;
```

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```
VALUE W200146W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NEARLY EVERY DAY"
  2 = "2 MORE THAN HALF THE DAYS"
  3 = "3 SEVERAL DAYS (LESS THAN HALF)"
  4 = "4 A FEW DAYS"  ;

VALUE W200147W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INCLUDED"
  2 = "2 EXTRA CHARGE"  ;

VALUE W200148W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"  ;

VALUE F200006W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 FREE STANDING NURSING HOME"
    2 = "2 FREE STANDING ASSISTED LIVING FACILITY"
    3 = "3 NURSING HOME AND ASSISTED LIVING FACILITY"
    4 = "4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
    5 = "5 ADULT FAMILY CARE HOME"
    6 = "6 GROUP HOME"
    7 = "7 BOARD AND CARE HOME"
    8 = "8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
   91 = "91 OTHER (SPECIFY)"  ;

VALUE F200007W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"  ;

VALUE F200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INDEPENDENT LIVING"
  2 = "2 ASSISTED LIVING"
  3 = "3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
```

```
    4 = "4 NURSING HOME"
    91 = "91 OTHER (SPECIFY)"  ;

  VALUE F200009W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 ASSISTED LIVING"
   2 = "2 NURSING HOME"  ;

  VALUE F200011W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES, SERVICE PROVIDED AS PART OF PACKAGE"
   2 = "2 YES, SERVICE PROVIDED AT AN EXTRA CHARGE"
   3 = "3 NO, SERVICE NOT PROVIDED"  ;

  VALUE F200012W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP/FAMILY"
   2 = "2 SOCIAL SECURITY/SSI"
   3 = "3 MEDICAID"
   4 = "4 MEDICARE"
   5 = "5 OTHER SOURCE"  ;

  VALUE I200002W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
   2 = "2 No"  ;

  VALUE I200003W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 English"
   2 = "2 Spanish"
   3 = "3 Other (specify)"  ;

  VALUE I200005W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Friendly and interested"
   2 = "2 Cooperative but not particularly interested"
   3 = "3 Impatient and restless"
   4 = "4 Hostile"  ;
```

```
VALUE I200006W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Good"
  2 = "2 Fair"
  3 = "3 Poor"  ;

VALUE I200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 All of the time"
  2 = "2 Most of the time"
  3 = "3 Some of the time"
  4 = "4 Only for the cognition and/or performance parts"
  5 = "5 None of the time"  ;

 VALUE I200010W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Interview was conducted by telephone"  ;

VALUE I200012W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Not Administered"  ;

VALUE I200013W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"  ;

VALUE I200016W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Entire interview conducted by telephone"  ;

VALUE I200017W
```

```
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 Not at all cluttered"
      2 = "2 Somewhat cluttered"
      3 = "3 Very cluttered"
      4 = "4 Could not see other rooms"  ;

   VALUE I200018W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 None"
      2 = "2 A little"
      3 = "3 Some"
      4 = "4 A lot"
      5 = "5 Could not observe"  ;

   VALUE I200019W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 Yes"
      2 = "2 No"
      7 = "7 Could not observe"  ;


/* DERIVED VARIABLE FORMATS */
   VALUE LVGARRG
      1 = '1 Alone'
      2 = '2 With spouse/partner only (spouse/partner in household]'
      3 = '3 With spouse/partner and with others'
      4 = '4 With others only'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE DOUTSFDF
      8 = '8 Not done in last month'
      1 = '1 Did not do by self in last month'
      2 = '2 Did by self in last month/No Difficulty'
      3 = '3 Did by self in last month/Difficulty'
      4 = '4 DKRF Did by self in last month/No Difficulty'
      5 = '5 DKRF Did by self in last month/Difficulty'
      6 = '6 Did by self in last month/DKRF Difficulty'
      7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE DOUTDEVI
      8 = '8 Not done in last month'
      1 = '1 No use of devices to go outside in last month'
      2 = '2 Use of devices to go outside in last month'
      3 = '3 DKRF If used devices to go outside in last month'
      4 = '4 DKRF If used devices in last month'
```

```
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE DOUTHELP
     8 = '8 Not done in last month'
     1 = '1 NO HELP TO GO OUTSIDE IN LAST MONTH'
     2 = '2 HAD HELP TO GO OUTSIDE IN LAST MONTH'
     3 = '3 DKRF IF HAD HELP TO GO OUTSIDE IN LAST MONTH'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE DINSDSFD
     8 = '8 Not done in last month'
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE DINSDDEV
     8 = '8 Not done in last month'
     1 = '1 No use of devices inside in last month'
     2 = '2 Use of devices inside in last month'
     3 = '3 DKRF If used devices inside in last month'
     4 = '4 DKRF On Use of devices'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dinsdhlp
     8 = '8 Not done in last month'
     1 = '1 No help to go around inside in last month'
     2 = '2 Had help to go around inside in last month'
     3 = '3 DKRF If had help to go around inside in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dbedsfdf
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

    VALUE dbeddevi
     1 = '1 No use of cane or walker to get out of bed in last month'
     2 = '2 Use of cane or walker to get out of bed in last month'
     3 = '3 DKRF If Used cane or walker to get out of bed in last month'
     4 = '4 DKRF If used cane or walker in last month'
     -1 = '-1 Inapplicable'
```

```
     -9 = '-9 Missing';

  VALUE dbedhelp
    1 = '1 No help to get out of bed in last month'
    2 = '2 Had help to get out of bed in last month'
    3 = '3 DKRF If had help to get out of bed in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';


  VALUE dlaunsfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';



  VALUE dlaunrea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
    4= '4 Service/someone from the place SP lives'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dshopsfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dshoprea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
    4= '4 Service/someone from the place SP lives'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dmealsfd
```

```
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

   VALUE dmealrea
   1= '1 Health/functioning reason only'
   2= '2 Other reason only'
   3= '3 Both health/functioning and other'
   4= '4 Service/someone from the place SP lives'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbanksfd
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbankrea
   1= '1 Health/functioning reason only'
   2= '2 Other reason only'
   3= '3 Both health/functioning and other'
   4= '4 Service/someone from the place SP lives'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE deatdevi
   1 = '1 No use of adapted utensils in last month'
   2 = '2 Use of adapted utensils in last month'
   8 = '8 Not done in last month'
   3 = '3 DKRF If used adapted utensils in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE deathelp
   1 = '1 No help eating in last month'
   2 = '2 Had help eating in last month'
   3 = '3 DKRF If had help eating in last month'
```

```
      8 = '8 Not done in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE deatsfdf
      1 = '1 Did not do by self in last month'
      2 = '2 No Difficulty by self (and when using utensils)'
      3 = '3 Difficulty by self (and when using utensils)'
      6 = '6 Did by self in last month/DKRF Difficulty'
      7 = '7 DKRF Did by self in last month/DKRF Difficulty'
      8 = '8 Not done in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dbathdev
      1 = '1 No use of grab bars or bath seats in last month'
      2 = '2 Use of grab bars or bath seats in last month'
      3 = '3 DKRF If use of grab bars or bath seats in last month'
      4 = '4 DKRF If had grab bars or bath seats in last month'
      9 = '9 No bars/seats/shower/tub or washes up other way'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dbathhel
      1 = '1 No help bathing in last month'
      2 = '2 Had help bathing in last month'
      3 = '3 DKRF If had help bathing in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dbathsfd
      1 = '1 Did not do by self in last month'
      2 = '2 No Difficulty by self (and when using grab bars or tub seat)'
      3 = '3 Difficulty by self (and when using grab bars or tub seat)'
      6 = '6 Did by self in last month/DKRF Difficulty'
      7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dtoildev
      1 = '1 No use of toileting devices in last month'
      2 = '2 Use of toileting devices in last month'
      3 = '3 DKRF of some and no use of other toileting devices in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dtoilhel
      1 = '1 No help toileting in last month'
      2 = '2 Had help toileting in last month'
      3 = '3 DKRF If had help toileting in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dtoilsfd
      1 = '1 Did not do by self in last month'
      2 = '2 No Difficulty by self (and when using toileting devices)'
      3 = '3 Difficulty by self (and when using toileting devices)'
```

```
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE ddresdev
    8 = '8 Not done in last month'
    9 = '9 DKRF If dressed in last month'
    2 = '2 Use of dressing devices in last month'
    1 = '1 No Use of dressing devices in last month'
    3 = '3 DKRF If use of dressing devices in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE ddreshel
    8 = '8 Not done in last month'
    9 = '9 DKRF If dressed in last month'
    1 = '1 No help dressing in last month'
    2 = '2 Had help dressing in last month'
    3 = '3 DKRF if had help dressing in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE ddressfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using dressing devices)'
    3 = '3 Difficulty by self (and when using dressing devices)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
  VALUE dmedssfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
    9 = '9 No or DKRF if medications taken in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dmedsrea
    1 = '1 HEALTH/FUNCTIONING REASON ONLY'
    2 = '2 OTHER REASON ONLY'
    3 = '3 BOTH HEALTH/FUNCTIONING AND OTHER'
    4 = '4 SERVICE/SOMEONE FROM THE PLACE SP LIVES'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dmarstat
    1 = '1 Married'
```

```
         2 = '2 Living with a partner'
         3 = '3 Separated'
         4 = '4 Divorced'
         5 = '5 Widowed'
         6 = '6 Never married'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';
      VALUE DSPSAGEC
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          1 = " 1 UNDER 50"
          2 = " 2 50-54"
          3 = " 3 55-59"
          4 = " 4 60-64"
          5 = " 5 65-69"
          6 = " 6 70-74"
          7 = " 7 75-79"
          8 = " 8 80-84"
          9 = " 9 85-89"
         10 = "10 90 +"      ;

      VALUE f_dresid
          1 = '1 Community '
          2 = '2 Residential care not nursing home (SP interview)'
          3 = '3 Residential care not nursing home (FQ only)'
          4 = '4 Nursing home (SP interview)'
          5 = '5 Nursing home (FQ only)'
          6 = '6 Deceased'
          7 = '7 Residential care not nursing home in R1 and R2 (FQ only)'
          8 = '8 Nursing home in R1 and R2 (FQ only)' ;

VALUE QUARTILE
-9="-9 Missing"
-1="-1 Inapplicable";

VALUE SPPB
-9="-9 Missing"
-1="-1 Inapplicable";
VALUE SPPB_MIS
    -9="-9 Missing"
    -1="-1 Inapplicable"
    1="1 PROXY INTERVIEW"
    2="2 MISSING WALK AND REPEAT CHAIR AND BALANCE"
    3="3 MISSING WALK AND REPEAT CHAIR"
    4="4 MISSING WALK AND BALANCE"
    5="5 MISSING REPEAT CHAIR AND BALANCE"
    6="6 MISSING WALK"
    7="7 MISSING REPEAT CHAIR"
    8="8 MISSING BALANCE"
    9="9 NO SPACE"
    10="10 NO CHAIR"
    11="11 NO SPACE WALK AND NO CHAIR"
    12="12 NO SPACE WALK AND NON-SAFETY MISSING"
```

```
    13="13 NO CHAIR AND NON-SAFETY MISSING"
    14="14 NON-SAFETY WALK"
    15="15 NON-SAFETY CHAIR"
    16="16 NON-SAFETY BALANCE"
    17="17 NON-SAFETY WALK AND CHAIR"
    18="18 NON-SAFETY WALK AND BALANCE"
    19="19 NON-SAFETY CHAIR AND BALANCE"
    20="20 NON SAFETY WALK AND CHAIR AND BALANCE";

    VALUE DCLCKSC
      0 = '0 Not recognizable as a clock'
      1 = '1 Severely distorted depiction of a clock'
      2 = '2 Moderately distorted depection of a clock'
      3 = '3 Mildly distorted depiction of a clock'
      4 = '4 Reasonably accurate depiction of a clock'
      5 = '5 Accurate depiction of a clock (circular or square)'
    -7 = '-7 SP refused to draw clock'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -2 = '-2 Proxy says cannot ask SP'
    -3 = '-3 Proxy says can ask SP but SP unable to answer'
    -4 = '-4 SP did not attempt to draw clock'
    -9 = '-9 Missing';

    VALUE DCLCKCL
      1 = '1 Very clear'
      2 = '2 Somewhat clear'
      3 = '3 Somewhat unclear'
      4 = '4 Very unclear'
      5 = '5 Blank'
    -7 = '-7 SP refused to draw clock'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -2 = '-2 Proxy says cannot ask SP'
    -3 = '-3 Proxy says can ask SP but SP unable to answer'
    -4 = '-4 SP did not attempt to draw clock'
    -9 = '-9 Missing';

VALUE RESULT
    -9='-9: MISSING'
    1='1: COMPLETED W RESULTS'
    2='2: COMPLETED MISSING RESULTS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    7='7: NO CHAIR/NO SPACE'
    9='9: NOT ATTEMPTED/MISSING';

    VALUE RESULT_SCH
    -9='-9: MISSING'
    1='1: COMPLETED W/OUT ARMS'
    2='2: COMPLETED W ARMS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
```

```
      7='7: NO CHAIR/SAFETY REASON'
      8='8: NO CHAIR/NOT SAFETY REAS'
      9='9: NOT ATTEMPTED/MISSING'
      10='10: CH4=1 SINGLE CHAIR NOT COMPL';

      VALUE RESULT_RCH
      -9='-9: MISSING'
      1='1: COMPLETED W/OUT ARMS'
      2='2: COMPLETED MISSING RESULTS'
      3='3: ATTEMPTED W RESULTS'
      4='4: ATTEMPTED MISSING RESULTS'
      5='5: NOT ATTEMPTED SAFETY'
      6='6: NOT ATTEMPTED NOT SAFETY REASON'
      9='9: NO CHAIR OR NOT ATTEMPTED/MISSING';

      VALUE ZEROSCORE
      1="1: NOT ELIGIBLE DUE TO EXCLUSION CRITERIA"
      2="2: NOT ATTEMPTED FOR SAFETY REASON"
      3="3: ATTEMPTED CHAIR STANDS/NOT ATTEMPTED FOR SAFETY"
      4="4: ATTEMPTED"
      5="5: NEW WALKING EXCLUSION"
      9="9: NOT ASSIGNED A ZERO SCORE";

    VALUE D_LMLLOC
     1 = '1 Community'
     2 = '2 Residential Care'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

        VALUE D_LOCSP
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          1 = "1 Independent Living/Housing/Retirement"
          2 = "2 Assisted Living/Personal Care"
          3 = "3 Special Care, Memory or Alzheimer's Unit"
          4 = "4 Nursing Home"
          8 = "8 Not Reported" ;

        VALUE PA25FMT
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
     111= '111 Sleeping Napping'
     131= '131 Eating'
     132= '132 Going out to eat'
     199= '199 Other self care activities'
     211= '211 Work and work-related activities'
     221= '221 Other income generating activities'
     241= '241 Volunteering'
     299= '299 Other productive activities'
     321= '321 Shopping for non-durable goods'
     399= '399 Other shopping'
     411= '411 Food and drink preparation'
     434= '434 Outdoor Maintenance'
     439= '439 Household chores (cannot tell if indoor/outdoor)'
     441= '441 Animal and pet care'
```

```
    442= '442 Walking and exercising pets'
    449= '449 Other animal and pet care'
    451= '451 Vehicle maintenance and repair'
    471= '471 Financial management'
    499= '499 Other household activities'
    511= '511 Physical care and assistance to others'
    599= '599 Other physical care'
    611= '611 Socializing with others in person'
    612= '612 Socializing with others on the phone'
    616= '616 Socializing and communicating on the computer'
    621= '621 Watching TV and movies'
    631= '631 Doing puzzles or games not on computer or online'
    632= '632 Gambling not online or at a casino'
    636= '636 Doing puzzles or games on a computer or online'
    641= '641 Arts and crafts or hobbies'
    642= '642 Reading'
    643= '643 Writing'
    644= '644 Listening to music'
    646= '646 Computer or online leisure activities'
    651= '651 Smoking or other tobacco use'
    652= '652 Drinking alcohol'
    661= '661 Doing nothing/relaxing'
    669= '669 No activity'
    699= '699 Other non active leisure'
    711= '711 Playing sports'
    712= '712 Walking or jogging'
    713= '713 Other outdoor recreating activities'
    714= '714 Attending sporting events'
    715= '715 Other physical activity, exercise, yoga, swimming, working out,
dancing'
    718= '718 Watching sporting events'
    721= '721 Attending arts  including plays and concerts'
    723= '723 Attending movies'
    724= '724 Attending casinos'
    737= '737 Travel for leisure'
    799= '799 Other active leisure'
    811= '811 Attending religious activities'
    812= '812 Other religious and spirtual activities'
    821= '821 Attending meetings or events'
    899= '899 Other organizational activity'
    991= '991 Other miscellaneous'
    992= '992 No favorite activity'
    997= '997 Refused'
    998= '998 Dont Know'
    999= '999 Not Codeable';

        VALUE OCC_CODE
1   ='1 Management Occupations: 0010-0430'
2   ='2 Business and Financial Operations Occupations:  0500-0950'
3   ='3 Computer and mathematical occupations:  1000-1240'
4   ='4 Architecture and Engineering Occupations:   1300-1560'
5   ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6   ='6 Community and Social Service Occupations:   2000-2060'
7   ='7 Legal Occupations:  2100-2160'
8   ='8 Education, Training, and Library Occupations:   2200-2550'
9   ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
```

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10  ='10 Healthcare Practitioners and Technical Occupations:    3000-3540'
11  ='11 Healthcare Support Occupations:    3600-3655'
12  ='12 Protective Service Occupations:    3700-3955'
13  ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14  ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15  ='15 Personal Care and Service Occupations: 4300-4650'
16  ='16 Sales and Related Occupations: 4700-4965'
17  ='17 Office and Administrative Support Occupations: 5000-5940'
18  ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19  ='19 Construction and Extraction Occupations:   6200-6940'
20  ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21  ='21 Production Occupations:    7700-8965'
22  ='22 Transportation and Material Moving Occupations:    9000-9750'
23  ='23 Military Specific Occupations: 9800-9830'
24  ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';

    Value fl_Dfac
1 = '1 Should have routed as facility but did not'
2 = '2 Routed as facility but determined not facility resident'
-1 = '-1 Inapplicable';
VALUE PE_RSLT
    -9='-9 Missing'
    -1 = '-1 Inapplicable'
    1='1 Completed'
    2='2 Attempted'
    3='3 Not attempted' ;
VALUE dosfacd /* FOR FQ2dosfacd  */
      -9= "-9 Missing"
      -8 = "-8 DK"
      -1 = "-1 INAPPLICABLE"
       1 = " 1 FREE STANDING NURSING HOME"
       2 = " 2 FREE STANDING ASSISTED LIVING FACILITY / RESIDENTIAL CARE
FACILITY"
       3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
       4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
       5 = " 5 ADULT FAMILY CARE HOME"
       6 = " 6 GROUP HOME"
       7 = " 7 BOARD AND CARE HOME / PERSONAL CARE HOME"
       8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
       9 = " 9 INDEPENDENT LIVING"
      10 = " 10 ASSISTED AND INDEPENDENT/RETIREMENT (NO NURSING HOME)"
      11 = " 11 HOUSING (APT, CONDO, ETC.)";
       ;
    VALUE dosfaca /* FOR FQ2dosfaca */
      -9= "-9 Missing"
      -8 = "-8 DK"
```

```
        -1 = "-1 INAPPLICABLE"
         1 = " 1 INDEPENDENT LIVING / HOUSING / RETIREMENT "
         2 = " 2 ASSISTED LIVING / PERSONAL CARE"
         3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
         4 = " 4 NURSING HOME"    ;

VALUE INAP_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -1 = '-1 Inapplicable' ;
VALUE CENDIV /* RE1DCENSDIV - Updated for R2 - Re-Release */
     1 =  '1 Northeast Region: New England Division (ME, NH, VT, MA, RI, CT)'
     2 =  '2 Northeast Region: Middle Atlantic Division (NY, NJ, PA)'
     3 =  '3 Midwest Region: East North Central Division (OH, IN, IL, MI, WI)'
     4 =  '4 Midwest Region: West North Central Division (MN, IA, MO, ND, SD,
NE, KS)'
     5 =  '5 South Region: South Atlantic Division (DE, MD, DC, VA, WV, NC,
SC, GA, FL)'
     6 =  '6 South Region: East South Central Division (KY, TN, AL, MS)'
     7 =  '7 South Region: West South Central Division (AR, LA, OK, TX)'
     8 =  '8 West Region: Mountain Division (MT, ID, WY, CO, NM, AZ, UT, NV)'
     9 =  '9 West Region: Pacific Division (WA, OR, CA, AK, HI)'
    -9 = '-9 Missing';

    VALUE W000002W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MALE"
     2 = "2 FEMALE"  ;

    VALUE W000005W
     1 = ' 1 Yes'
     2 = ' 2 No'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE R1DRESID
     1 = '1 Community '
     2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
     3 = '3 Residential Care Resident not nursing home (FQ only)'
     4 = '4 Nursing Home Resident';

  VALUE W200016W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MEDICAID"
    2 = "2 MEDICARE"
    3 = "3 STATE PROGRAM"
    91 = "91 OTHER (SPECIFY)"    ;
```

```
    VALUE W200012W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 REGULAR"
  2 = "2 VARIED"   ;

 VALUE W200061W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SEPARATION OR DIVORCE"
  2 = "2 DECEASED"
  3 = "3 MOVED ELSEWHERE"
  5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
  8 = "8 OTHER REASON"    ;

 VALUE d2hrsmth
  -13= '-13 Deceased '
  -12= '-12 Zero days/wk'
  -11= '-11 Hours missing'
  -10= '-10 Days missing'
  -9 = ' -9 Days and hrs missing'
  -1 = ' -1 Inapplicable'
  -7 = ' -7 RF'
  -8 = ' -8 DK'
   0-<1  ='<1'
   1-<10 =' 1-<10'
  10-<20 ='10-<20'
  20-<30 ='20-<30'
  30-<40 ='30-<40'
  40-<60 ='40-<60'
  60-<120 ='60-<120'
  120-<180='120-<180'
  180-744='180-744 (24/7)'
   9999='9999 Not codeable, <1 hour/day' ;

 VALUE dhrsmth
  -11= '-11:hours missing'
  -10= '-10:days missing'
  -9 = '-9:days and hrs missing'
  -1 = '-1 Inapplicable'
  -7 = '-7 RF'
  -8 = '-8 DK'
   0-<1  ='<1'
   1-<10 =' 1-<10'
  10-<20 ='10-<20'
  20-<30 ='20-<30'
  30-<40 ='30-<40'
  40-<60 ='40-<60'
  60-<120 ='60-<120'
  120-<180='120-<180'
  180-744='180-744 (24/7)'
   9999='9999 Not codeable, <1 hour/day' ;
```

# SAS ALGORITHM FOR DEMENTIA

```
 Value dmissadd
-1='-1 not applicable'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section';

Value d2mssadd
-1='-1 not applicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section';

Value dopage3c
 -9='-9 Missing'
 -8='-8 RF'
 -7='-7 DK'
 -1='-1 Inapplicable'
  1='1 UNDER 30'
  2='2 30-39'
  3='3 40-49'
  4='4 50-59'
  5='5 60-69'
  6='6 70-79'
  7='7 80-89'
  8='8 90 +';

 Value dopagect
-9='-9 Missing'
-8='-8 DK'
-7='-7 RF'
-1='-1 Inapplicable'
 1='1 UNDER 20'
 2='2 20-24'
 3='3 25-29'
 4='4 30-34'
 5='5 35-39'
 6='6 40-44'
```

```
 7='7 45-49'
 8='8 50-54'
 9='9 55-59'
10='10 60-64'
11='11 65-69'
12='12 70-74'
13='13 75-79'
14='14 80-84'
15='15 85-89'
16='16 90 +';


   VALUE W200008W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 UNDER 20"
    2 = "2 20-24"
    3 = "3 25-29"
    4 = "4 30-34"
    5 = "5 35-39"
    6 = "6 40-44"
    7 = "7 45-49"
    8 = "8 50-54"
    9 = "9 55-59"
   10 = "10 60-65"
   11 = "11 66-69"
   12 = "12 70-74"
   13 = "13 75-79"
   14 = "14 80-85"
   15 = "15 86-89"
   16 = "16 90-94"
   17 = "17 95-99"
   18 = "18 100 +"
 ;
   VALUE NumCigs
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     999 = '999 SP smokes less than 1 cigarette / day';


   VALUE dlmlint
    1 = '1 Last month of life interview'
   -1 = '-1 Inapplicable'      ;

   VALUE d2intvra
     1 = '1 65 to 69'
     2 = '2 70 to 74'
     3 = '3 75 to 79'
     4 = '4 80 to 84'
     5 = '5 85 to 89'
     6 = '6 90+'
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'        ;

   VALUE dad8dem
     1 = '1 DEMENTIA RESPONSE TO ANY AD8 ITEMS IN PRIOR ROUND'
    -1 = '-1 Inapplicable'     ;

   VALUE dwrdinon
   1 = '1 NO WORDS REMEMBERED'
    -1 = '-1 Inapplicable'
        -9 = '-9 Missing'        ;

   VALUE dwrdirre
     1 = '1 REFUSED WORD RECALL TASK'
    -1 = '-1 Inapplicable'
         -9 = '-9 Missing'       ;

  VALUE A0001AB
       1 = "1 AM"
       2 = "2 PM"
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

  VALUE A0002WA
       1 = "1 Yes, there is space to set up the walking course"
       2 = "2 No, there is not space to set up the walking course"
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

  VALUE A0004WA
       1 = "1 None"
       2 = "2 Cane"
       3 = "3 Walker or rollator"
       9 = "9 Other, specify"
      -1 = '-1 Inapplicable'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -9 = '-9 Missing';

  VALUE A0004CH
       1 = "1 No, chair stand not completed"
       2 = "2 Yes, chair stand completed"
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

  VALUE A0008CH
       1 = "1 With arms"
       2 = "2 Without arms"
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

  VALUE A0014CH
       1 = "1 1 Chair stand completed"
       2 = "2 2 Chair stands completed"
       3 = "3 3 Chair stands completed"
       4 = "4 4 Chair stands completed"
      -1 = '-1 Inapplicable'
```

```
    -9 = '-9 Missing';

VALUE BA1SS
    1 = '1 Eligible and recorded result for SxS Balance'
    2 = '2 Eligible and no recorded result for SxS Balance'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1STAN
    1 = '1 Eligible and recorded result for Semi Tandem Balance'
    2 = '2 Eligible and no recorded result for Semi Tandem Balance'
    3 = '3 Not administered because did not complete prior balance test'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1TAN
    1 = '1 Eligible and recorded result for full tandem balance'
    2 = '2 Eligible and no recorded result for full tandem balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1OP
    1 = '1 Eligible and recorded result for one leg eyes open balance'
    2 = '2 Eligible and no recorded result for one leg eyes open balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1CL
    1 = '1 Eligible and recorded result for one leg eyes closed balance'
    2 = '2 Eligible and no recorded result for one leg eyes closed balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE WA1WLK
    1 = '1 Eligible and recorded result for walking course'
    2 = '2 Eligible and no recorded result for walking course'
    4 = '4 Not Eligible due to exclusion criteria'
    5 = '5 Not Eligible on exclusion criteria but recorded result (SP changed
mind)'
    -1 = '-1 Inapplicable '
    -9 = '-9 Missing';

VALUE CH1SCH
    1 = '1 Eligible and recorded result for single chair stand'
    2 = '2 Eligible and no recorded result for single chair stand'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
```

# SAS ALGORITHM FOR DEMENTIA

```
VALUE CH1RSH
    1 = '1 Eligible and recorded result for repeated chair stand'
    2 = '2 Eligible and no recorded result for repeated chair stand'
    3 = '3 Not administered because did not complete single chair stand w/o
arms'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE GR1GRIP
    1 = '1 Eligible and recorded result for grip strength'
    2 = '2 Eligible and no recorded result for grip strength'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WC1WAIST
    1 = '1 Eligible and recorded result for waist circumference'
    2 = '2 Eligible and no recorded result for waist circumference'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE PK1PEAK
    1 = '1 Eligible and recorded result for peak air flow'
    2 = '2 Eligible and no recorded result for peak air flow'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE RGT_LFT
   1 = '1 Right'
   2 = '2 Left'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

 VALUE PERSON
    1 = '1 Interviewer'
    2 = '2 Sample person'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE STAND
    1 = '1 Standing'
    2 = '2 Sitting'
    3 = '3 Lying down'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE EFFORT
    1 = '1 Full effort'
    2 = '2 Less effort for health reason'
    3 = '3 Less effort for other reason'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
    VALUE WORDREC
        1 = ' 1 LIST 1'
        2 = ' 2 LIST 2'
        3 = ' 3 LIST 3'
```

```
      -1 = '-1 Inapplicable '
      -9 = '-9 Missing';
  VALUE WORDRE_N
      -1 = '-1 Inapplicable'
      -2 = '-2 Proxy says cannot ask SP'
      -3 = '-3 Proxy says can ask SP but SP unable to answer'
      -7 = '-7 SP refused activity'
      -9 = '-9 Missing';

   VALUE   DMH_GRP
        1 = "1 Help started"
        2 = "2 Help ended"
        3 = "3 Help both interviews with gap"
        4 = "4 Help both interviews with no gap"
        5 = "5 Help between interviews only (month ended missing)"
        6 = "6 No help either interview or between"
       11 = "11 Help started (month started missing)"
       21 = "21 Help ended (month ended missing)"
       41 = "41 Help both interviews (DK whether gap)"
       61 = "61 No help either interview (DK whether help between)"
       -9 = "-9 Missing"
       -1 = "-1 Inapplicable"
     -999 = "-999 Not determined" ;

   VALUE   DMU_GRP
        1 = "1 Use started"
        2 = "2 Use ended"
        3 = "3 Use both interviews with gap"
        4 = "4 Use both interviews with no gap"
        5 = "5 Use between interviews only (month ended missing)"
        6 = "6 No use either interview or between"
       11 = "11 Use started (month started missing)"
       21 = "21 Use ended (month ended missing)"
       41 = "41 Use both interviews (DK whether gap)"
       61 = "61 No use either interview (DK whether use between)"
       -9 = "-9 Missing"
       -1 = "-1 Inapplicable"
     -999 = "-999 Not determined" ;

   VALUE   DS_GRP
        1 = "1 Help started"
        2 = "2 Help ended"
        3 = "3 Help both interviews with gap"
        4 = "4 Help both interviews with no gap"
        5 = "5 Help between interviews only"
        6 = "6 No help either interview or between"
       11 = "11 Help started (month started missing)"
       21 = "21 Help ended (month ended missing)"
       41 = "41 Help both interviews (DK whether gap)"
       61 = "61 No help either interview (DK whether help between)"
       -9 = "-9 Missing"
       -1 = "-1 Inapplicable"
     -999 = "-999 Not determined" ;

       VALUE   DMDSINTV
        0 = "0 Less than 1 month"
        1 = "1 Month"
```

```
        2 = "2 Months"
        3 = "3 Months"
        4 = "4 Months"
        5 = "5 Months"
        6 = "6 Months"
        7 = "7 Months"
        8 = "8 Months"
        9 = "9 Months"
       10 = "10 Months"
       11 = "11 Months"
       12 = "12 Months"
       13 = "13 Months"
       14 = "14 Months"
       15 = "15 Months"
       16 = "16 Months"
       17 = "17 Months"
       18 = "18 Months"
       19 = "19 Months"
       20 = "20 Months"
       90 = "90 Last round disputed"
       -1 = "-1 Inapplicable"
       -7 = "-7 Refused"
       -8 = "-8 Dont know"
       -9 = "-9 Missing" ;

   VALUE   DMDS_DUR
        0 = "0 Less than 1 month"
        1 = "1 Month"
        2 = "2 Months"
        3 = "3 Months"
        4 = "4 Months"
        5 = "5 Months"
        6 = "6 Months"
        7 = "7 Months"
        8 = "8 Months"
        9 = "9 Months"
       10 = "10 Months"
       11 = "11 Months"
       12 = "12 Months"
       13 = "13 Months"
       14 = "14 Months"
       15 = "15 Months"
       16 = "16 Months"
       17 = "17 Months"
       90 = "90 Last round disputed"
       -1 = "-1 Inapplicable"
       -7 = "-7 Refused"
       -8 = "-8 Dont know"
       -9 = "-9 Missing"
      -10 = "-10 Not ascertained"
      -12 = "-12 Outside of range"
      -13 = "-13 None" ;

   VALUE   DMDSFLG
       -1 = "-1 Inapplicable"
        1 = "1 No SP interview last round"
        2 = "2 Died and month death missing"
```

```
               3 = "3 Died <=1 month after last interview"
               4 = "4 Died 12-13 months after last interview"
               5 = "5 Died and not mobile (fl2notmobile=1)"
               6 = "6 Died and not alert (fl2notalert =1)"
               7 = "7 Skipped 1 or more help questions" ;
run;


/*================================================================*/

/* NHATS_Round_3_Combined_PROC_FORMAT_Statement.sas */

PROC FORMAT ;

    VALUE release
        1 = '1 Main Sample'
        2 = '2 Reserve Sample'
        9 = '9 New Release Sample';

    VALUE STAT_DTa
          4 = " 4 April"
          5 = " 5 May"
          6 = " 6 June"
          7 = " 7 July"
          8 = " 8 August"
          9 = " 9 September"
         10 = "10 October"
         11 = "11 November"
         99 = "99 Prior to start of field work"
         -1 = '-1 Inapplicable';

    VALUE $DISP
         '10' = "10 Not Available "
         '11' = "11 Ready"
         '12' = "12 Started "
         '20' = "20 Final "
         '24' = "24 Not Required "
         '60' = "60 Complete "
         '61' = "61 Complete, NH facility"
         '62' = "62 Complete SP Deceased, Proxy Intv"
         '63' = "63 Complete SP, FQ not complete"
         '64' = "64 Complete FQ, SP not complete"
         '75' = "75 Physically/mentally unable to participate, no proxy"
         '76' = "76 Too ill to participate, no proxy"
         '77' = "77 Refusal, SP"
         '78' = "78 Language barrier"
         '79' = "79 Unable to locate"
         '80' = "80 Unavailable during field period"
         '82' = "82 Outside of PSU"
         '83' = "83 Ineligible"
         '85' = "85 Refusal, facility"
         '86' = "86 Deceased"
         '87' = "87 Refusal, proxy"
         '88' = "88 Work stopped"    ;

VALUE DISP_a
         10 = "10 Not Available"
```

```
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required"
        60 = "60 Complete"
        61 = "61 Complete, NH facility"
        62 = "62 Complete SP Deceased, Proxy Intv"
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"      ;

    VALUE DISP_
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required";

    VALUE DISP_F
     -1 = '-1 Inapplicable'
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required"
        60 = "60 Complete"
        61 = "61 Complete, NH facility"
        62 = "62 Complete SP Deceased, Proxy Intv"
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"
        89 = "89 Final, Other Specify";

    VALUE RFDK
    -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE $RFDK_F
    '-7' = '-7 RF'
    '-8' = '-8 DK'
    '-1' = '-1 Inapplicable'
    '-9' = '-9 Missing';

    VALUE RFDK_F
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE RFDK_B
    -1 = '-1 Inapplicable'
    1 = '1 Yes-Breakoff';

VALUE $RFDK_C
    '-1' = '-1 Inapplicable'
    'CL' ='CL - Closing'
    'EW' ='EW - Economic Well-Being'
    'FQ' ='FQ - Facility Questionnaire'
    'HL' ='HL - Helper'
    'HW' ='HW - Height and Weight'
    'IP' ='IP - Insurance Plans'
    'LF' ='LF - Labor Force'
    'PA' ='PA - Participation'
    'PE' ='PE - Performance'
    'WB' ='WB - Well-being' ;

VALUE $RFDK_2C
    '-1' = '-1 Inapplicable'
    '-7' = '-7 RF'
    '-8' = '-8 DK'
    '-9' = '-9 Missing';

    VALUE RFDK_Y
     1 = ' 1 Yes'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE RFDK_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE DSTRP_G
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 =  '1 X condition and word color condition accuracy below threshold
(less than .42)'
     2 =  '2 word condition only below threshold (less than .42)'
     3 =  '3 X condition and word color condition meet criteria for accuracy'
     4 =  '4 fewer than 50% of X and word color condition trials answered'
    999 = '999 X condition only below threshold (less than .42)';

    VALUE DSTRP_R
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -999 = '-999 Inapplicable'
    other = 'Values ranging between -.353 and 1.115';

    VALUE DSTRP_M
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -999 = '-999 Inapplicable'
    other = 'Values ranging between -544.732 and 924.863';

VALUE FQ_4F
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
         1='1 YES'
         2='2 NO';

  VALUE CHILDDEC
    1 =  '1 CHILD DECEASED'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE W200001W
    12 = "12 STARTED"
    20 = "20 COMPLETE"
    21 = "21 INELIGIBLE - NOT 65+"   ;

  VALUE W200008x
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 UNDER 20"
    2 = "2 20-24"
    3 = "3 25-29"
    4 = "4 30-34"
    5 = "5 35-39"
    6 = "6 40-44"
    7 = "7 45-49"
    8 = "8 50-54"
    9 = "9 55-59"
```

```
    10 = "10 60-64"
    11 = "11 65-69"
    12 = "12 70-74"
    13 = "13 75-79"
    14 = "14 80-84"
    15 = "15 85-89"
    16 = "16 90 +";

  VALUE W200009W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SAMPLE PERSON"
    2 = "2 SPOUSE/ PARTNER"
    3 = "3 DAUGHTER"
    4 = "4 SON"
    5 = "5 DAUGHTER-IN-LAW"
    6 = "6 SON-IN-LAW"
    7 = "7 STEPDAUGHTER"
    8 = "8 STEPSON"
    9 = "9 SISTER"
   10 = "10 BROTHER"
   11 = "11 SISTER-IN-LAW"
   12 = "12 BROTHER-IN-LAW"
   13 = "13 MOTHER"
   14 = "14 STEPMOTHER"
   15 = "15 MOTHER-IN-LAW"
   16 = "16 FATHER"
   17 = "17 STEPFATHER"
   18 = "18 FATHER-IN-LAW"
   19 = "19 GRANDDAUGHTER"
   20 = "20 GRANDSON"
   21 = "21 NIECE"
   22 = "22 NEPHEW"
   23 = "23 AUNT"
   24 = "24 UNCLE"
   25 = "25 COUSIN"
   26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
   27 = "27 STEPSON'S SON/ DAUGHTER"
   28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
   29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
   30 = "30 BOARDER/RENTER"
   31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
   32 = "32 ROOMMATE"
   33 = "33 EX-WIFE/ EX-HUSBAND"
   34 = "34 BOYFRIEND/ GIRLFRIEND"
   35 = "35 NEIGHBOR"
   36 = "36 FRIEND"
   37 = "37 SOMEONE/SERVICE AT THE PLACE SP LIVES/LIVED"
   38 = "38 CO-WORKER"
   39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
   40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
   41 = "41 DECEASED SPOUSE/PARTNER"
   91 = "91 OTHER RELATIVE"
   92 = "92 OTHER NONRELATIVE"    ;
```

SAS ALGORITHM FOR DEMENTIA

```
    VALUE W200002W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MALE"
     2 = "2 FEMALE";

    VALUE W200005W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 NO SCHOOLING COMPLETED"
     2 = "2 1ST-8TH GRADE"
     3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
     4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
     5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
     6 = "6 SOME COLLEGE BUT NO DEGREE"
     7 = "7 ASSOCIATE'S DEGREE"
     8 = "8 BACHELOR'S DEGREE"
     9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"  ;

   VALUE W200010W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MARRIED"
     2 = "2 LIVING WITH A PARTNER"
     3 = "3 SEPARATED"
     4 = "4 DIVORCED"
     5 = "5 WIDOWED"
     6 = "6 NEVER MARRIED";

   VALUE W200011W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 PREVIOUSLY REPORTED"  ;
VALUE W200012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 REGULAR"
     2 = "2 VARIED"  ;

   VALUE W200013W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
```

```
        1 = "1 SP AND/OR FAMILY"
        2 = "2 GOVERNMENT PROGRAM"
        3 = "3 INSURANCE"
        91 = "91 OTHER (SPECIFY)"    ;

   VALUE W200015W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1='1 HOURLY'
     2='2 WEEKLY'
     3='3 MONTHLY'
     4='4 DID NOT PAY IN LAST MONTH'
        91 = "91 OTHER (SPECIFY)"    ;

   VALUE W200016W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MEDICAID"
     2 = "2 MEDICARE"
     3 = "3 STATE PROGRAM"
        91 = "91 OTHER (SPECIFY)"    ;

   VALUE W200018W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
     2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
     3 = "3 MOBILE HOME OR TRAILER"
     4 = "4 MULTI-UNIT (2+) BUILDING"
        91 = "91 OTHER (SPECIFY)"  ;

   VALUE W200020W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 HOME"
     2 = "2 MULTI-UNIT"
     3 = "3 OTHER"  ;

   VALUE W200021W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 BUILDING HAS ONE FLOOR"
     2 = "2 BUILDING HAS MULTIPLE FLOORS"    ;

   VALUE W200022W
    -7 = '-7 RF'
```

```
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 HOME"
   2 = "2 APARTMENT"
   3 = "3 ROOM"
   4 = "4 UNIT"
   5 = "5 SUITE"
   6 = "6 SOMETHING ELSE (SPECIFY)"  ;

 VALUE W200030W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SAMPLE PERSON (SP)"
   2 = "2 PROXY"  ;

 VALUE W200032W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 HOSPITAL"
   2 = "2 NURSING HOME/REHAB CENTER"
  91 = "91 OTHER (SPECIFY)"  ;

 VALUE W200035W
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SELF"
   2 = "2 SPOUSE/ PARTNER"
   3 = "3 DAUGHTER"
   4 = "4 SON"
   5 = "5 DAUGHTER-IN-LAW"
   6 = "6 SON-IN-LAW"
   7 = "7 STEPDAUGHTER"
   8 = "8 STEPSON"
   9 = "9 SISTER"
  10 = "10 BROTHER"
  11 = "11 SISTER-IN-LAW"
  12 = "12 BROTHER-IN-LAW"
  13 = "13 MOTHER"
  14 = "14 STEPMOTHER"
  15 = "15 MOTHER-IN-LAW"
  16 = "16 FATHER"
  17 = "17 STEPFATHER"
  18 = "18 FATHER-IN-LAW"
  19 = "19 GRANDDAUGHTER"
  20 = "20 GRANDSON"
  21 = "21 NIECE"
  22 = "22 NEPHEW"
  23 = "23 AUNT"
  24 = "24 UNCLE"
  25 = "25 COUSIN"
  26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
  27 = "27 STEPSON'S SON/ DAUGHTER"
```

```
    28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
    29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
    30 = "30 BOARDER/RENTER"
    31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
    32 = "32 ROOMMATE"
    33 = "33 EX-WIFE/ EX-HUSBAND"
    34 = "34 BOYFRIEND/ GIRLFRIEND"
    35 = "35 NEIGHBOR"
    36 = "36 FRIEND"
    37 = "37 SOMEONE/SERVICE FROM THE PLACE SP LIVES/DIED"
    38 = "38 CO-WORKER"
    39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
    40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
    91 = "91 OTHER RELATIVE"
    92 = "92 OTHER NONRELATIVE"  ;

 VALUE W200036W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 VERY FAMILIAR"
   2 = "2 SOMEWHAT FAMILIAR"
   3 = "3 A LITTLE FAMILIAR"
   4 = "4 NOT AT ALL FAMILIAR"  ;

 VALUE W200037W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES, SAME ADDRESS"
   2 = "2 NO, DIFFERENT ADDRESS"
   3 = "3 YES, SAME ADDRESS WITH MINOR CORRECTIONS"  ;

 VALUE W200038W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 JANUARY"
   2 = "2 FEBRUARY"
   3 = "3 MARCH"
   4 = "4 APRIL"
   5 = "5 MAY"
   6 = "6 JUNE"
   7 = "7 JULY"
   8 = "8 AUGUST"
   9 = "9 SEPTEMBER"
  10 = "10 OCTOBER"
  11 = "11 NOVEMBER"
  12 = "12 DECEMBER"  ;

 VALUE W200039W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
```

```
     -9 = '-9 Missing'
      1 = "1 2011"
      2 = "2 2012"
      3 = "3 YEAR2013"
      4 = "4 YEAR2014"
      5 = "5 YEAR2015"
      6 = "6 YEAR2016"
      7 = "7 YEAR2017"
      8 = "8 YEAR2018"
      9 = "9 YEAR2019"
     10 = "10 YEAR2020"  ;

  VALUE W200040W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 2011"
    2 = "2 2012"  ;

  VALUE W200041W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 AT SPS OR SOMEONE ELSES HOME"
    2 = "2 IN A HOSPITAL"
    3 = "3 IN A NURSING HOME"
    4 = "4 IN A HOSPICE RESIDENCE"
    5 = "5 IN TRANSIT (AMBULANCE TO HOSPITAL)"
   91 = "91 SOMEWHERE ELSE (SPECIFY)";

  VALUE W200042W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SP'S HOME"
    2 = "2 SOMEONE ELSE'S HOME"  ;

  VALUE W200043W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 INTENSIVE CARE UNIT"
    2 = "2 PALLIATIVE CARE UNIT"
    3 = "3 INPATIENT HOSPICE UNIT"
    4 = "4 EMERGENCY ROOM"
    5 = "5 ANOTHER KIND OF UNIT"  ;

  VALUE W200044W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HOSPICE AT A HOSPITAL"
```

```
      2 = "2 HOSPICE AT A NURSING HOME"
      3 = "3 RESIDENTIAL HOSPICE"
      4 = "4 OTHER HOSPICE"   ;

   VALUE W200045W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 DAYS"
     2 = "2 WEEKS"
     3 = "3 MONTHS"
     4 = "4 YEARS"   ;

   VALUE W200046W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 AT SP'S HOME"
     2 = "2 IN A HOSPITAL"
     3 = "3 IN A NURSING HOME"
     4 = "4 IN A HOSPICE RESIDENCE"
    91 = "91 SOMEWHERE ELSE (SPECIFY)"   ;

   VALUE W200047W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EVERY DAY"
     2 = "2 MOST DAYS"
     3 = "3 SOME DAYS"
     4 = "4 RARELY"
     5 = "5 NOT AT ALL"   ;

   VALUE W200048W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN WAS NEEDED"
     2 = "2 MORE THAN WAS NEEDED"
     3 = "3 ABOUT RIGHT AMOUNT"   ;

   VALUE W200049W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     3 = "3 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"   ;

   VALUE W200050W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ALWAYS"
  2 = "2 USUALLY"
  3 = "3 SOMETIMES"
  4 = "4 NEVER"
  5 = "5 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

VALUE W200051W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EXCELLENT"
  2 = "2 VERY GOOD"
  3 = "3 GOOD"
  4 = "4 FAIR"
  5 = "5 POOR"  ;

VALUE W200052W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NOT AT ALL"
  2 = "2 SEVERAL DAYS"
  3 = "3 MORE THAN HALF THE DAYS"
  4 = "4 NEARLY EVERY DAY"  ;

VALUE W200053W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
  2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
  3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"  ;

VALUE W200054W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
  2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
  3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"
  7 = "7 DON'T WAKE UP/NOT A PROBLEM"  ;

VALUE W200055W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
```

```
     1 = "1 PRIVATE RESIDENCE"
     2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
     3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
     4 = "4 RELIGIOUS GROUP QUARTERS"
    91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200056W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 PLACE DOES NOT HAVE A NAME"  ;

  VALUE W200057W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 APARTMENT"
    2 = "2 ROOM"
    3 = "3 UNIT"
    4 = "4 SUITE"
   91 = "91 SOMETHING ELSE (SPECIFY)"  ;

  VALUE W200058W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO, DIFFERENT PERSON"
    3 = "3 NO, NAME MISSPELLED"  ;

  VALUE W200060W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PRIVATE RESIDENCE"
    2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
    3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
    5 = "5 NURSING HOME"
   91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
```

```
  8 = "8 OTHER REASON"    ;

VALUE W200067W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 COMMON OR SHARED ENTRANCE"
  2 = "2 ENTRANCE DIRECTLY INTO HOME"  ;

VALUE W200068W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1"
  2 = "2"
  3 = "3"
  4 = "4+"   ;

VALUE W200069W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ALL ITEMS HERE"
  2 = "2 ADDED ONE OR MORE ITEMS"  ;

VALUE W200070W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE THAN $500"
  2 = "2 LESS THAN $500"
  3 = "3 JUST ABOUT $500"  ;

VALUE W200071W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE THAN $1,000"
  2 = "2 LESS THAN $1,000"
  3 = "3 JUST ABOUT $1,000"  ;

VALUE W200072W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE THAN $100"
  2 = "2 LESS THAN $100"
  3 = "3 JUST ABOUT $100"  ;

VALUE W200073W
 -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 YES, DOESNT KNOW HOW TO USE A COMPUTER"  ;

    VALUE W200074W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MOST DAYS"
     2 = "2 SOME DAYS"
     3 = "3 RARELY"  ;

    VALUE W200076W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 DEAF"  ;

    VALUE W200077W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 BLIND"  ;

    VALUE W200078W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EVERY DAY (7 DAYS A WEEK)"
     2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
     3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
     4 = "4 RARELY (ONCE A WEEK OR LESS)"
     5 = "5 NEVER"  ;

    VALUE W200080W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES, A CHANGE"
     2 = "2 NO, NO CHANGE"
     3 = "3 DEMENTIA/ALZHEIMER'S REPORTED BY PROXY"  ;

    VALUE W200081W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

# SAS ALGORITHM FOR DEMENTIA

```
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE"
   2 = "2 SP IS UNABLE TO SPEAK"
   3 = "3 SP IS UNABLE TO HEAR"
   4 = "4 SP REFUSED"
   5 = "5 PROXY REFUSED"
   6 = "6 SP NOT PRESENT"
   7 = "7 SP TOO ILL"
   8 = "8 SP LANGUAGE BARRIER"
  91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200082W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MUCH BETTER"
   2 = "2 BETTER"
   3 = "3 SAME"
   4 = "4 WORSE"
   5 = "5 MUCH WORSE"  ;

  VALUE W200083W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO/DON'T KNOW"  ;

  VALUE W200084W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 CONTINUE WITH ACTIVITY"
   2 = "2 SP REFUSES ACTIVITY"  ;

  VALUE W200085W
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "Word[1]"
   2 = "Word[2]"
   3 = "Word[3]"
   4 = "Word[4]"
   5 = "Word[5]"
   6 = "Word[6]"
   7 = "Word[7]"
   8 = "Word[8]"
   9 = "Word[9]"
  10 = "Word[10]"
  91 = "91 NO WORDS REMEMBERED"
  92 = "92 REFUSED"  ;

  VALUE W200086W
  -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 DIFFICULTY HEARING ANY OF THE WORDS"
  2 = "2 INTERRUPTION OCCURRED WHILE LIST WAS BEING READ"
 91 = "91 OTHER PROBLEM (SPECIFY)"
 92 = "92 NO PROBLEMS OCCURRED"
 97 = "97 SP REFUSED WORD RECALL TASK"  ;

VALUE W200087W
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP ATTEMPTED CLOCK DRAWING"
  2 = "2 SP DID NOT ATTEMPT CLOCK DRAWING"
 97 = "3 SP REFUSED CLOCK DRAWING"  ;

VALUE W200089W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY DAY (7 DAYS A WEEK)"
  2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
  3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"  ;

VALUE W200090W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY TIME"
  2 = "2 MOST TIMES"
  3 = "3 SOMETIMES"
  4 = "4 RARELY"
  5 = "5 NEVER"  ;

VALUE W200092W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST TIMES"
  2 = "2 SOMETIMES"
  3 = "3 RARELY"
  4 = "4 NEVER"  ;

VALUE W200093W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NONE"
  2 = "2 A LITTLE"
  3 = "3 SOME"
  4 = "4 A LOT"  ;
```

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```
VALUE W200094W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE OFTEN"
  2 = "2 LESS OFTEN"
  3 = "3 ABOUT THE SAME"  ;

VALUE W200095W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
 10 = "10 OCTOBER"
 11 = "11 NOVEMBER"
 12 = "12 DECEMBER"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

VALUE W200096W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

VALUE W200097W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO / NO LONGER DRIVE"  ;

VALUE W200098W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 NO, NO RAIN OR BAD WEATHER"  ;

VALUE W200099W
 -7 = '-7 RF'
```

```
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 ALWAYS DID IT BY SELF"
    2 = "2 ALWAYS DID IT TOGETHER WITH SOMEONE ELSE"
    3 = "3 SOMEONE ELSE ALWAYS DID IT"
    4 = "4 IT VARIED (MORE THAN ONE WAY)"
    5 = "5 NOT DONE IN LAST MONTH"  ;

  VALUE W200102W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MORE OFTEN"
    2 = "2 LESS OFTEN"
    3 = "3 SAME"  ;

  VALUE W200106W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 ALWAYS FED THROUGH IV OR TUBE"  ;

  VALUE W200107W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY TIME"
    2 = "2 MOST TIMES"
    3 = "3 SOMETIMES"
    4 = "4 RARELY"  ;

  VALUE W200109W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SHOWERING"
    2 = "2 TAKING BATHS"
    3 = "3 WASHING UP SOME OTHER WAY"  ;


  VALUE W200114W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 VERY IMPORTANT"
    2 = "2 SOMEWHAT IMPORTANT"
    3 = "3 NOT SO IMPORTANT"  ;

  VALUE W200115W
```

```
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 YES"
      2 = "2 NO"
     95 = "95 NO ACTIVITY LISTED"  ;

   VALUE W200116W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LEFT"
     2 = "2 RIGHT"
     3 = "3 BOTH"  ;

   VALUE W200117W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LEFT SIDE"
     2 = "2 RIGHT SIDE"
     3 = "3 BOTH SIDES"  ;

   VALUE W200118W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ONE SIDE"
     2 = "2 BOTH SIDES"  ;

   VALUE W200119W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 RECEIVE ALL TREATMENTS"
     2 = "2 STOP/REJECT ALL TREATMENTS"  ;

   VALUE W200120W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
     2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
     3 = "3 LIVING WITH AN ADULT CHILD"
     4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
     5 = "5 LIVING IN A NURSING HOME"  ;

   VALUE W200121W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
     4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

 VALUE W200122W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MAKE DECISIONS WITHOUT MUCH ADVICE FROM THEM"
     2 = "2 GET THEIR ADVICE AND THEN MAKE DECISIONS"
     3 = "3 MAKE DECISIONS TOGETHER"
     4 = "4 LEAVE DECISIONS UP TO THEM"  ;

 VALUE W200123W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 HANDLE MOSTLY BY SELF"
     2 = "2 HANDLE TOGETHER WITH FAMILY OR CLOSE FRIENDS"
     3 = "3 FAMILY OR CLOSE FRIENDS MOSTLY HANDLE THESE THINGS"
     4 = "4 IT VARIES"  ;

 VALUE W200124W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 NEVER"
     2 = "2 RARELY"
     3 = "3 SOMETIMES"
     4 = "4 OFTEN"  ;

 VALUE W200126W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 AGREE A LOT"
     2 = "2 AGREE A LITTLE"
     3 = "3 DO NOT AGREE"  ;

 VALUE W200127W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 AGREE A LOT"
     2 = "2 AGREE A LITTLE"
     3 = "3 AGREE NOT AT ALL"  ;

 VALUE W200129W
    -7 = '-7 RF'
```

```
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $1,000,"
    2 = "2 $1,000 to less than $2,000,"
    3 = "3 $2,000 to less than $3,000,"
    4 = "4 $3,000 to less than $5,000, or"
    5 = "5 $5,000 or more?"  ;

   VALUE W200131W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    3 = "3 RETIRED/DON'T WORK ANYMORE"  ;

   VALUE W200132W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY WEEK"
    2 = "2 EVERY TWO WEEKS"
    3 = "3 TWO TIMES A MONTH"
    4 = "4 ONCE A MONTH"
    5 = "5 DAILY"
   91 = "91 OTHER SCHEDULE (SPECIFY)"  ;

   VALUE W200133W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 OWN"
    2 = "2 RENT"
    3 = "3 SOME OTHER ARRANGEMENT"  ;

   VALUE W200134W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PAID OFF"
    2 = "2 STILL MAKE PAYMENTS"
    3 = "3 REVERSE MORTGAGE"  ;

   VALUE W200135W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $250,"
    2 = "2 $250-$499,"
    3 = "3 $500-$999, or"
    4 = "4 $1,000 or more?"  ;
```

```
VALUE W200136W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 5 YEARS"
  2 = "2 10 YEARS"
  3 = "3 LONGER THAN 10 YEARS"  ;

VALUE W200137W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $50,000,"
  2 = "2 between $50,000 and $100,000, or"
  3 = "3 over $100,000?"  ;

VALUE W200138W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $50,000,"
  2 = "2 $50,000-$74,999,"
  3 = "3 $75,000-$99,999,"
  4 = "4 $100,000-$199,999,"
  5 = "5 $200,000-$299,999,"
  6 = "6 $300,000-$499,999,"
  7 = "7 $500,000-$749,999, or"
  8 = "8 $750,000 or more?"  ;

VALUE W200139W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 PAY OFF BALANCE"
  2 = "2 PAY MINIMUM"
  3 = "3 PAY MORE THAN MINIMUM, BUT NOT ENTIRE BALANCE"
  4 = "4 DON'T HAVE ANY CREDIT CARDS"  ;

VALUE W200140W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $1,000,"
  2 = "2 $1,000 - $1,999,"
  3 = "3 $2,000 - $3,999,"
  4 = "4 $4,000 - $5,999,"
  5 = "5 $6,000 - $9,999,"
  6 = "6 $10,000 - $19,999, or"
  7 = "7 $20,000 or more?"  ;

VALUE W200141W
```

```
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MOST"
   2 = "2 SOME"
   3 = "3 A LITTLE"  ;

 VALUE W200142W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 less than $500,"
   2 = "2 $500 - $999,"
   3 = "3 $1,000 - $1,999,"
   4 = "4 $2,000 - $3,999,"
   5 = "5 $4,000 - $5,999,"
   6 = "6 $6,000 - $9,999,"
   7 = "7 $10,000 - $19,999, or"
   8 = "8 $20,000 or more?"  ;

 VALUE W200146W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 NEARLY EVERY DAY"
   2 = "2 MORE THAN HALF THE DAYS"
   3 = "3 SEVERAL DAYS (LESS THAN HALF)"
   4 = "4 A FEW DAYS"  ;

 VALUE W200147W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 INCLUDED"
   2 = "2 EXTRA CHARGE"  ;

 VALUE W200148W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"  ;

VALUE F200006W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 FREE STANDING NURSING HOME"
   2 = "2 FREE STANDING ASSISTED LIVING FACILITY"
   3 = "3 NURSING HOME AND ASSISTED LIVING FACILITY"
   4 = "4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
   5 = "5 ADULT FAMILY CARE HOME"
```

```
    6 = "6 GROUP HOME"
    7 = "7 BOARD AND CARE HOME"
    8 = "8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
   91 = "91 OTHER (SPECIFY)"  ;

 VALUE F200007W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"  ;

 VALUE F200008W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 INDEPENDENT LIVING"
   2 = "2 ASSISTED LIVING"
   3 = "3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
   4 = "4 NURSING HOME"
   91 = "91 OTHER (SPECIFY)"  ;

 VALUE F200009W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 ASSISTED LIVING"
   2 = "2 NURSING HOME"  ;

 VALUE F200011W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES, SERVICE PROVIDED AS PART OF PACKAGE"
   2 = "2 YES, SERVICE PROVIDED AT AN EXTRA CHARGE"
   3 = "3 NO, SERVICE NOT PROVIDED"  ;

 VALUE F200012W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP/FAMILY"
   2 = "2 SOCIAL SECURITY/SSI"
   3 = "3 MEDICAID"
   4 = "4 MEDICARE"
   5 = "5 OTHER SOURCE"  ;

 VALUE I200002W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
```

```
     1 = "1 Yes"
     2 = "2 No"  ;

   VALUE I200003W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 English"
     2 = "2 Spanish"
     3 = "3 Other (specify)"  ;

   VALUE I200005W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Friendly and interested"
     2 = "2 Cooperative but not particularly interested"
     3 = "3 Impatient and restless"
     4 = "4 Hostile"  ;

   VALUE I200006W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Good"
     2 = "2 Fair"
     3 = "3 Poor"  ;

   VALUE I200008W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 All of the time"
     2 = "2 Most of the time"
     3 = "3 Some of the time"
     4 = "4 Only for the cognition and/or performance parts"
     5 = "5 None of the time"  ;

   VALUE I200010W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
     2 = "2 No"
     3 = "3 Interview was conducted by telephone"  ;

   VALUE I200012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
```

```
     2 = "2 No"
     3 = "3 Not Administered"  ;

   VALUE I200013W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
     2 = "2 No"  ;

   VALUE I200016W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
     2 = "2 No"
     3 = "3 Entire interview conducted by telephone"  ;

   VALUE I200017W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Not at all cluttered"
     2 = "2 Somewhat cluttered"
     3 = "3 Very cluttered"
     4 = "4 Could not see other rooms"  ;

   VALUE I200018W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 None"
     2 = "2 A little"
     3 = "3 Some"
     4 = "4 A lot"
     5 = "5 Could not observe"  ;

   VALUE I200019W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
     2 = "2 No"
     7 = "7 Could not observe"  ;


/* DERIVED VARIABLE FORMATS */
   VALUE LVGARRG
     1 = '1 Alone'
     2 = '2 With spouse/partner only (spouse/partner in household]'
     3 = '3 With spouse/partner and with others'
     4 = '4 With others only'
```

```
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';


  VALUE DOUTSFDF
     8 = '8 Not done in last month'
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE DOUTDEVI
     8 = '8 Not done in last month'
     1 = '1 No use of devices to go outside in last month'
     2 = '2 Use of devices to go outside in last month'
     3 = '3 DKRF If used devices to go outside in last month'
     4 = '4 DKRF If used devices in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';


  VALUE DOUTHELP
     8 = '8 Not done in last month'
     1 = '1 No help to go outside in last month'
     2 = '2 Had help to go outside in last month'
     3 = '3 DKRF If had help to go outside in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';


  VALUE DINSDSFD
     8 = '8 Not done in last month'
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';


  VALUE DINSDDEV
     8 = '8 Not done in last month'
     1 = '1 No use of devices inside in last month'
     2 = '2 Use of devices inside in last month'
     3 = '3 DKRF If used devices inside in last month'
     4 = '4 DKRF On use of devices'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';


  VALUE dinsdhlp
     8 = '8 Not done in last month'
     1 = '1 No help to go around inside in last month'
     2 = '2 Had help to go around inside in last month'
```

```
   3 = '3 DKRF If had help to go around inside in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbedsfdf
  1 = '1 Did not do by self in last month'
  2 = '2 Did by self in last month/No Difficulty'
  3 = '3 Did by self in last month/Difficulty'
  4 = '4 DKRF Did by self in last month/No Difficulty'
  5 = '5 DKRF Did by self in last month/Difficulty'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbeddevi
  1 = '1 No use of cane or walker to get out of bed in last month'
  2 = '2 Use of cane or walker to get out of bed in last month'
  3 = '3 DKRF If Used cane or walker to get out of bed in last month'
  4 = '4 DKRF If used cane or walker in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbedhelp
  1 = '1 No help to get out of bed in last month'
  2 = '2 Had help to get out of bed in last month'
  3 = '3 DKRF If had help to get out of bed in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';


VALUE dlaunsfd
  1 = '1 Did not do by self in last month'
  2 = '2 Did by self in last month/No Difficulty'
  3 = '3 Did by self in last month/Difficulty'
  4 = '4 DKRF Did by self in last month/No Difficulty'
  5 = '5 DKRF Did by self in last month/Difficulty'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';


VALUE dlaunrea
  1= '1 Health/functioning reason only'
  2= '2 Other reason only'
  3= '3 Both health/functioning and other'
  4= '4 Service/someone from the place SP lives'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dshopsfd
  1 = '1 Did not do by self in last month'
```

```
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dshoprea
   1= '1 Health/functioning reason only'
   2= '2 Other reason only'
   3= '3 Both health/functioning and other'
   4= '4 Service/someone from the place SP lives'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dmealsfd
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

   VALUE dmealrea
   1= '1 Health/functioning reason only'
   2= '2 Other reason only'
   3= '3 Both health/functioning and other'
   4= '4 Service/someone from the place SP lives'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbanksfd
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbankrea
```

```
      1= '1 Health/functioning reason only'
      2= '2 Other reason only'
      3= '3 Both health/functioning and other'
      4= '4 Service/someone from the place SP lives'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE deatdevi
    1 = '1 No use of adapted utensils in last month'
    2 = '2 Use of adapted utensils in last month'
    8 = '8 Not done in last month'
    3 = '3 DKRF If used adapted utensils in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE deathelp
    1 = '1 No help eating in last month'
    2 = '2 Had help eating in last month'
    3 = '3 DKRF If had help eating in last month'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE deatsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using utensils)'
    3 = '3 Difficulty by self (and when using utensils)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dbathdev
    1 = '1 No use of grab bars or bath seats in last month'
    2 = '2 Use of grab bars or bath seats in last month'
    3 = '3 DKRF If use of grab bars or bath seats in last month'
    4 = '4 DKRF If had grab bars or bath seats in last month'
    9 = '9 No bars/seats/shower/tub or washes up other way'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dbathhel
    1 = '1 No help bathing in last month'
    2 = '2 Had help bathing in last month'
    3 = '3 DKRF If had help bathing in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dbathsfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using grab bars or tub seat)'
    3 = '3 Difficulty by self (and when using grab bars or tub seat)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dtoildev
    1 = '1 No use of toileting devices in last month'
    2 = '2 Use of toileting devices in last month'
    3 = '3 DKRF of some and no use of other toileting devices in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dtoilhel
    1 = '1 No help toileting in last month'
    2 = '2 Had help toileting in last month'
    3 = '3 DKRF If had help toileting in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dtoilsfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using toileting devices)'
    3 = '3 Difficulty by self (and when using toileting devices)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE ddresdev
    8 = '8 Not done in last month'
    9 = '9 DKRF If dressed in last month'
    2 = '2 Use of dressing devices in last month'
    1 = '1 No use of dressing devices in last month'
    3 = '3 DKRF If use of dressing devices in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE ddreshel
    8 = '8 Not done in last month'
    9 = '9 DKRF If dressed in last month'
    1 = '1 No help dressing in last month'
    2 = '2 Had help dressing in last month'
    3 = '3 DKRF If had help dressing in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE ddressfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using dressing devices)'
    3 = '3 Difficulty by self (and when using dressing devices)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
  VALUE dmedssfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
```

```
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
   9 = '9 No or DKRF if medications taken in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dmedsrea
   1 = '1 HEALTH/FUNCTIONING REASON ONLY'
   2 = '2 OTHER REASON ONLY'
   3 = '3 BOTH HEALTH/FUNCTIONING AND OTHER'
   4 = '4 SERVICE/SOMEONE FROM THE PLACE SP LIVES'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dmarstat
   1 = '1 Married'
   2 = '2 Living with a partner'
   3 = '3 Separated'
   4 = '4 Divorced'
   5 = '5 Widowed'
   6 = '6 Never married'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
VALUE DSPSAGEC
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 UNDER 50"
   2 = " 2 50-54"
   3 = " 3 55-59"
   4 = " 4 60-64"
   5 = " 5 65-69"
   6 = " 6 70-74"
   7 = " 7 75-79"
   8 = " 8 80-84"
   9 = " 9 85-89"
  10 = "10 90 +"     ;

VALUE f_dresid
   1 = '1 Community '
   2 = '2 Residential care not nursing home (SP interview)'
   3 = '3 Residential care not nursing home (FQ only)'
   4 = '4 Nursing home (SP interview)'
   5 = '5 Nursing home (FQ only)'
   6 = '6 Deceased'
   7 = '7 Residential care not nursing home in R1 and R2 (FQ only)'
   8 = '8 Nursing home in R1 and R2 (FQ only)' ;
VALUE f3dresid
      -1='-1 Inapplicable'
```

```
         1 = '1 Community '
     2 = '2 Residential care not nursing home (SP interview)'
     3 = '3 Residential care not nursing home (FQ only)'
     4 = '4 Nursing home (SP interview)'
     5 = '5 Nursing home (FQ only)'
     6 = '6 Deceased'
     7 = '7 Residential care not nursing home in R1 and R3 (FQ only)'
     8 = '8 Nursing home in R1 and R3 (FQ only)' ;

VALUE QUARTILE
-9="-9 Missing"
-1="-1 Inapplicable";

VALUE SPPB
-9="-9 Missing"
-1="-1 Inapplicable";
VALUE SPPB_MIS
    -9="-9 Missing"
    -1="-1 Inapplicable"
    1="1 PROXY INTERVIEW"
    2="2 MISSING WALK AND REPEAT CHAIR AND BALANCE"
    3="3 MISSING WALK AND REPEAT CHAIR"
    4="4 MISSING WALK AND BALANCE"
    5="5 MISSING REPEAT CHAIR AND BALANCE"
    6="6 MISSING WALK"
    7="7 MISSING REPEAT CHAIR"
    8="8 MISSING BALANCE"
    9="9 NO SPACE"
    10="10 NO CHAIR"
    11="11 NO SPACE WALK AND NO CHAIR"
    12="12 NO SPACE WALK AND NON-SAFETY MISSING"
    13="13 NO CHAIR AND NON-SAFETY MISSING"
    14="14 NON-SAFETY WALK"
    15="15 NON-SAFETY CHAIR"
    16="16 NON-SAFETY BALANCE"
    17="17 NON-SAFETY WALK AND CHAIR"
    18="18 NON-SAFETY WALK AND BALANCE"
    19="19 NON-SAFETY CHAIR AND BALANCE"
    20="20 NON SAFETY WALK AND CHAIR AND BALANCE";

    VALUE DCLCKSC
      0 = '0 Not recognizable as a clock'
      1 = '1 Severely distorted depiction of a clock'
      2 = '2 Moderately distorted depection of a clock'
      3 = '3 Mildly distorted depiction of a clock'
      4 = '4 Reasonably accurate depiction of a clock'
      5 = '5 Accurate depiction of a clock (circular or square)'
     -7 = '-7 SP refused to draw clock'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -2 = '-2 Proxy says cannot ask SP'
     -3 = '-3 Proxy says can ask SP but SP unable to answer'
     -4 = '-4 SP did not attempt to draw clock'
     -9 = '-9 Missing';

    VALUE DCLCKCL
      1 = '1 Very clear'
```

```
    2 = '2 Somewhat clear'
    3 = '3 Somewhat unclear'
    4 = '4 Very unclear'
    5 = '5 Blank'
   -7 = '-7 SP refused to draw clock'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -2 = '-2 Proxy says cannot ask SP'
   -3 = '-3 Proxy says can ask SP but SP unable to answer'
   -4 = '-4 SP did not attempt to draw clock'
   -9 = '-9 Missing';

VALUE RESULT
   -9='-9: MISSING'
   1='1: COMPLETED W RESULTS'
   2='2: COMPLETED MISSING RESULTS'
   3='3: ATTEMPTED W RESULTS'
   4='4: ATTEMPTED MISSING RESULTS'
   5='5: NOT ATTEMPTED SAFETY'
   6='6: NOT ATTEMPTED NOT SAFETY REASON'
   7='7: NO CHAIR/NO SPACE'
   9='9: NOT ATTEMPTED/MISSING';

   VALUE RESULT_SCH
   -9='-9: MISSING'
   1='1: COMPLETED W/OUT ARMS'
   2='2: COMPLETED W ARMS'
   3='3: ATTEMPTED W RESULTS'
   4='4: ATTEMPTED MISSING RESULTS'
   5='5: NOT ATTEMPTED SAFETY'
   6='6: NOT ATTEMPTED NOT SAFETY REASON'
   7='7: NO CHAIR/SAFETY REASON'
   8='8: NO CHAIR/NOT SAFETY REAS'
   9='9: NOT ATTEMPTED/MISSING'
   10='10: CH4=1 SINGLE CHAIR NOT COMPL';

   VALUE RESULT_RCH
   -9='-9: MISSING'
   1='1: COMPLETED W/OUT ARMS'
   2='2: COMPLETED MISSING RESULTS'
   3='3: ATTEMPTED W RESULTS'
   4='4: ATTEMPTED MISSING RESULTS'
   5='5: NOT ATTEMPTED SAFETY'
   6='6: NOT ATTEMPTED NOT SAFETY REASON'
   9='9: NO CHAIR OR NOT ATTEMPTED/MISSING';

   VALUE ZEROSCORE
   1="1: NOT ELIGIBLE DUE TO EXCLUSION CRITERIA"
   2="2: NOT ATTEMPTED FOR SAFETY REASON"
   3="3: ATTEMPTED CHAIR STANDS/NOT ATTEMPTED FOR SAFETY"
   4="4: ATTEMPTED"
   5="5: NEW WALKING EXCLUSION"
   9="9: NOT ASSIGNED A ZERO SCORE";

  VALUE D_LMLLOC
   1 = '1 Community'
   2 = '2 Residential Care'
```

SAS ALGORITHM FOR DEMENTIA

```
-1 = '-1 Inapplicable'
-9 = '-9 Missing';

  VALUE D_LOCSP
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 Independent Living/Housing/Retirement"
    2 = "2 Assisted Living/Personal Care"
    3 = "3 Special Care, Memory or Alzheimer's Unit"
    4 = "4 Nursing Home"
    8 = "8 Not Reported" ;

   VALUE PA25FMT
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
111= '111 Sleeping Napping'
131= '131 Eating'
132= '132 Going out to eat'
199= '199 Other self care activities'
211= '211 Work and work-related activities'
221= '221 Other income generating activities'
241= '241 Volunteering'
299= '299 Other productive activities'
321= '321 Shopping for non-durable goods'
399= '399 Other shopping'
411= '411 Food and drink preparation'
434= '434 Outdoor Maintenance'
439= '439 Household chores (cannot tell if indoor/outdoor)'
441= '441 Animal and pet care'
442= '442 Walking and exercising pets'
449= '449 Other animal and pet care'
451= '451 Vehicle maintenance and repair'
471= '471 Financial management'
499= '499 Other household activities'
511= '511 Physical care and assistance to others'
599= '599 Other physical care'
611= '611 Socializing with others in person'
612= '612 Socializing with others on the phone'
616= '616 Socializing and communicating on the computer'
621= '621 Watching TV and movies'
631= '631 Doing puzzles or games not on computer or online'
632= '632 Gambling not online or at a casino'
636= '636 Doing puzzles or games on a computer or online'
641= '641 Arts and crafts or hobbies'
642= '642 Reading'
643= '643 Writing'
644= '644 Listening to music'
646= '646 Computer or online leisure activities'
651= '651 Smoking or other tobacco use'
652= '652 Drinking alcohol'
661= '661 Doing nothing/relaxing'
669= '669 No activity'
699= '699 Other non active leisure'
711= '711 Playing sports'
712= '712 Walking or jogging'
```

```
    713= '713 Other outdoor recreating activities'
    714= '714 Attending sporting events'
    715= '715 Other physical activity, exercise, yoga, swimming, working out,
dancing'
    718= '718 Watching sporting events'
    721= '721 Attending arts  including plays and concerts'
    723= '723 Attending movies'
    724= '724 Attending casinos'
    737= '737 Travel for leisure'
    799= '799 Other active leisure'
    811= '811 Attending religious activities'
    812= '812 Other religious and spirtual activities'
    821= '821 Attending meetings or events'
    899= '899 Other organizational activity'
    991= '991 Other miscellaneous'
    992= '992 No favorite activity'
    997= '997 Refused'
    998= '998 Dont Know'
    999= '999 Not Codeable';


         VALUE OCC_CODE
1   ='1 Management Occupations: 0010-0430'
2   ='2 Business and Financial Operations Occupations:  0500-0950'
3   ='3 Computer and mathematical occupations:  1000-1240'
4   ='4 Architecture and Engineering Occupations:   1300-1560'
5   ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6   ='6 Community and Social Service Occupations:   2000-2060'
7   ='7 Legal Occupations:  2100-2160'
8   ='8 Education, Training, and Library Occupations:   2200-2550'
9   ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10  ='10 Healthcare Practitioners and Technical Occupations:   3000-3540'
11  ='11 Healthcare Support Occupations:    3600-3655'
12  ='12 Protective Service Occupations:    3700-3955'
13  ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14  ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15  ='15 Personal Care and Service Occupations: 4300-4650'
16  ='16 Sales and Related Occupations: 4700-4965'
17  ='17 Office and Administrative Support Occupations: 5000-5940'
18  ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19  ='19 Construction and Extraction Occupations:   6200-6940'
20  ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21  ='21 Production Occupations:    7700-8965'
22  ='22 Transportation and Material Moving Occupations:    9000-9750'
23  ='23 Military Specific Occupations: 9800-9830'
24  ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';
```

```
    Value fl_Dfac
1 = '1 Should have routed as facility but did not'
2 = '2 Routed as facility but determined not facility resident'
-1 = '-1 Inapplicable';
VALUE PE_RSLT
    -9='-9 Missing'
    -1 = '-1 Inapplicable'
    1='1 Completed'
    2='2 Attempted'
    3='3 Not attempted' ;
VALUE dosfacd /* FOR FQ2dosfacd  */
        -9= "-9 Missing"
       -8 = "-8 DK"
       -1 = "-1 INAPPLICABLE"
        1 = " 1 FREE STANDING NURSING HOME"
        2 = " 2 FREE STANDING ASSISTED LIVING FACILITY / RESIDENTIAL CARE
FACILITY"
        3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
        4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
        5 = " 5 ADULT FAMILY CARE HOME"
        6 = " 6 GROUP HOME"
        7 = " 7 BOARD AND CARE HOME / PERSONAL CARE HOME"
        8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
        9 = " 9 INDEPENDENT LIVING"
       10 = " 10 ASSISTED AND INDEPENDENT/RETIREMENT (NO NURSING HOME)"
       11 = " 11 HOUSING (APT, CONDO, ETC.)";
        ;
    VALUE dosfaca /* FOR FQ2dosfaca */
        -9= "-9 Missing"
       -8 = "-8 DK"
       -1 = "-1 INAPPLICABLE"
        1 = " 1 INDEPENDENT LIVING / HOUSING / RETIREMENT "
        2 = " 2 ASSISTED LIVING / PERSONAL CARE"
        3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
        4 = " 4 NURSING HOME"    ;

VALUE INAP_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -1 = '-1 Inapplicable' ;
VALUE CENDIV /* RE1DCENSDIV - Updated for R2 - Re-Release */
    1 =  '1 Northeast Region: New England Division (ME, NH, VT, MA, RI, CT)'
    2 =  '2 Northeast Region: Middle Atlantic Division (NY, NJ, PA)'
    3 =  '3 Midwest Region: East North Central Division (OH, IN, IL, MI, WI)'
    4 =  '4 Midwest Region: West North Central Division (MN, IA, MO, ND, SD,
NE, KS)'
    5 =  '5 South Region: South Atlantic Division (DE, MD, DC, VA, WV, NC,
SC, GA, FL)'
    6 =  '6 South Region: East South Central Division (KY, TN, AL, MS)'
    7 =  '7 South Region: West South Central Division (AR, LA, OK, TX)'
    8 =  '8 West Region: Mountain Division (MT, ID, WY, CO, NM, AZ, UT, NV)'
    9 =  '9 West Region: Pacific Division (WA, OR, CA, AK, HI)'
    -9 = '-9 Missing';

    VALUE W000002W
       -7 = '-7 RF'
```

```
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MALE"
      2 = "2 FEMALE"   ;

   VALUE W000005W
    1 = ' 1 Yes'
    2 = ' 2 No'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

   VALUE R1DRESID
    1 = '1 Community '
    2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
    3 = '3 Residential Care Resident not nursing home (FQ only)'
    4 = '4 Nursing Home Resident';

  VALUE W200016W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MEDICAID"
    2 = "2 MEDICARE"
    3 = "3 STATE PROGRAM"
    91 = "91 OTHER (SPECIFY)"   ;

   VALUE W200012W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 REGULAR"
    2 = "2 VARIED"  ;

  VALUE W200061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
    8 = "8 OTHER REASON"    ;

  VALUE d2hrsmth
    -13= '-13 Deceased '
    -12= '-12 Zero days/wk'
    -11= '-11 Hours missing'
    -10= '-10 Days missing'
    -9 = ' -9 Days and hrs missing'
    -1 = ' -1 Inapplicable'
```

```
    -7 = ' -7 RF'
    -8 = ' -8 DK'
     0-<1  ='<1'
     1-<10 =' 1-<10'
    10-<20 ='10-<20'
    20-<30 ='20-<30'
    30-<40 ='30-<40'
    40-<60 ='40-<60'
    60-<120 ='60-<120'
   120-<180='120-<180'
   180-744='180-744 (24/7)'
     9999='9999 Not codeable, <1 hour/day' ;

  VALUE dhrsmth
    -11= '-11:hours missing'
    -10= '-10:days missing'
    -9 = '-9:days and hrs missing'
    -1 = '-1 Inapplicable'
    -7 = '-7 RF'
    -8 = '-8 DK'
     0-<1  ='<1'
     1-<10 =' 1-<10'
    10-<20 ='10-<20'
    20-<30 ='20-<30'
    30-<40 ='30-<40'
    40-<60 ='40-<60'
    60-<120 ='60-<120'
   120-<180='120-<180'
   180-744='180-744 (24/7)'
     9999='9999 Not codeable, <1 hour/day' ;

 Value dmissadd
-1='-1 not applicable'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section';

Value d2mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
```

```
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section';

Value dopage3c
 -9='-9 Missing'
 -8='-8 RF'
 -7='-7 DK'
 -1='-1 Inapplicable'
  1='1 UNDER 30'
  2='2 30-39'
  3='3 40-49'
  4='4 50-59'
  5='5 60-69'
  6='6 70-79'
  7='7 80-89'
  8='8 90 +';

 Value dopagect
-9='-9 Missing'
-8='-8 DK'
-7='-7 RF'
-1='-1 Inapplicable'
 1='1 UNDER 20'
 2='2 20-24'
 3='3 25-29'
 4='4 30-34'
 5='5 35-39'
 6='6 40-44'
 7='7 45-49'
 8='8 50-54'
 9='9 55-59'
10='10 60-64'
11='11 65-69'
12='12 70-74'
13='13 75-79'
14='14 80-84'
15='15 85-89'
16='16 90 +';


   VALUE W200008W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 UNDER 20"
     2 = "2 20-24"
     3 = "3 25-29"
     4 = "4 30-34"
     5 = "5 35-39"
     6 = "6 40-44"
     7 = "7 45-49"
     8 = "8 50-54"
     9 = "9 55-59"
```

```
     10 = "10 60-65"
     11 = "11 66-69"
     12 = "12 70-74"
     13 = "13 75-79"
     14 = "14 80-85"
     15 = "15 86-89"
     16 = "16 90-94"
     17 = "17 95-99"
     18 = "18 100 +"
  ;
     VALUE NumCigs
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
     999 = '999 SP smokes less than 1 cigarette / day';


   VALUE dlmlint
     1 = '1 Last month of life interview'
    -1 = '-1 Inapplicable'      ;

   VALUE d2intvra
     1 = '1 65 to 69'
     2 = '2 70 to 74'
     3 = '3 75 to 79'
     4 = '4 80 to 84'
     5 = '5 85 to 89'
     6 = '6 90+'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'      ;

   VALUE dad8dem
     1 = '1 DEMENTIA RESPONSE TO ANY AD8 ITEMS IN PRIOR ROUNDS'
    -1 = '-1 Inapplicable'    ;

   VALUE dwrdinon
   1 = '1 NO WORDS REMEMBERED'
    -1 = '-1 Inapplicable'
      -9 = '-9 Missing'      ;

   VALUE dwrdirre
     1 = '1 REFUSED WORD RECALL TASK'
    -1 = '-1 Inapplicable'
      -9 = '-9 Missing'      ;

  VALUE A0001AB
      1 = "1 AM"
      2 = "2 PM"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE A0002WA
      1 = "1 Yes, there is space to set up the walking course"
      2 = "2 No, there is not space to set up the walking course"
```

```
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0004WA
      1 = "1 None"
      2 = "2 Cane"
      3 = "3 Walker or rollator"
      9 = "9 Other, specify"
     -1 = '-1 Inapplicable'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -9 = '-9 Missing';

 VALUE A0004CH
      1 = "1 No, chair stand not completed"
      2 = "2 Yes, chair stand completed"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0008CH
      1 = "1 With arms"
      2 = "2 Without arms"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0014CH
      1 = "1 1 Chair stand completed"
      2 = "2 2 Chair stands completed"
      3 = "3 3 Chair stands completed"
      4 = "4 4 Chair stands completed"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE BA1SS
     1 = '1 Eligible and recorded result for SxS Balance'
     2 = '2 Eligible and no recorded result for SxS Balance'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1STAN
     1 = '1 Eligible and recorded result for Semi Tandem Balance'
     2 = '2 Eligible and no recorded result for Semi Tandem Balance'
     3 = '3 Not administered because did not complete prior balance test'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1TAN
     1 = '1 Eligible and recorded result for full tandem balance'
     2 = '2 Eligible and no recorded result for full tandem balance'
     3 = '3 Not administered because did not complete prior balance tests'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1OP
```

```
    1 = '1 Eligible and recorded result for one leg eyes open balance'
    2 = '2 Eligible and no recorded result for one leg eyes open balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1CL
    1 = '1 Eligible and recorded result for one leg eyes closed balance'
    2 = '2 Eligible and no recorded result for one leg eyes closed balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WA1WLK
    1 = '1 Eligible and recorded result for walking course'
    2 = '2 Eligible and no recorded result for walking course'
    4 = '4 Not Eligible due to exclusion criteria'
    5 = '5 Not Eligible on exclusion criteria but recorded result (SP changed
mind)'
   -1 = '-1 Inapplicable '
   -9 = '-9 Missing';

VALUE CH1SCH
    1 = '1 Eligible and recorded result for single chair stand'
    2 = '2 Eligible and no recorded result for single chair stand'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE CH1RSH
    1 = '1 Eligible and recorded result for repeated chair stand'
    2 = '2 Eligible and no recorded result for repeated chair stand'
    3 = '3 Not administered because did not complete single chair stand w/o
arms'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE GR1GRIP
    1 = '1 Eligible and recorded result for grip strength'
    2 = '2 Eligible and no recorded result for grip strength'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WC1WAIST
    1 = '1 Eligible and recorded result for waist circumference'
    2 = '2 Eligible and no recorded result for waist circumference'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE PK1PEAK
    1 = '1 Eligible and recorded result for peak air flow'
    2 = '2 Eligible and no recorded result for peak air flow'
   -1 = '-1 Inapplicable'
```

```
     -9 = '-9 Missing';

 VALUE RGT_LFT
   1 = '1 Right'
   2 = '2 Left'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

 VALUE PERSON
    1 = '1 Interviewer'
    2 = '2 Sample person'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE STAND
     1 = '1 Standing'
     2 = '2 Sitting'
     3 = '3 Lying down'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE EFFORT
      1 = '1 Full effort'
      2 = '2 Less effort for health reason'
      3 = '3 Less effort for other reason'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
     VALUE WORDREC
         1 = ' 1 LIST 1'
         2 = ' 2 LIST 2'
         3 = ' 3 LIST 3'
        -1 = '-1 Inapplicable '
        -9 = '-9 Missing';
     VALUE WORDRE_N
        -1 = '-1 Inapplicable'
        -2 = '-2 Proxy says cannot ask SP'
        -3 = '-3 Proxy says can ask SP but SP unable to answer'
        -7 = '-7 SP refused activity'
        -9 = '-9 Missing';

        VALUE  DMH_GRP
            1 = "1 Help started"
            2 = "2 Help ended"
            3 = "3 Help both interviews with gap"
            4 = "4 Help both interviews with no gap"
            5 = "5 Help between interviews only (month ended missing)"
            6 = "6 No help either interview or between"
           11 = "11 Help started (month started missing)"
           21 = "21 Help ended (month ended missing)"
           41 = "41 Help both interviews (DK whether gap)"
           61 = "61 No help either interview (DK whether help between)"
           -9 = "-9 Missing"
           -1 = "-1 Inapplicable"
         -999 = "-999 Not determined" ;

        VALUE  DMU_GRP
            1 = "1 Use started"
```

```
       2 = "2 Use ended"
       3 = "3 Use both interviews with gap"
       4 = "4 Use both interviews with no gap"
       5 = "5 Use between interviews only (month ended missing)"
       6 = "6 No use either interview or between"
      11 = "11 Use started (month started missing)"
      21 = "21 Use ended (month ended missing)"
      41 = "41 Use both interviews (DK whether gap)"
      61 = "61 No use either interview (DK whether use between)"
      -9 = "-9 Missing"
      -1 = "-1 Inapplicable"
    -999 = "-999 Not determined" ;

  VALUE  DS_GRP
       1 = "1 Help started"
       2 = "2 Help ended"
       3 = "3 Help both interviews with gap"
       4 = "4 Help both interviews with no gap"
       5 = "5 Help between interviews only"
       6 = "6 No help either interview or between"
      11 = "11 Help started (month started missing)"
      21 = "21 Help ended (month ended missing)"
      41 = "41 Help both interviews (DK whether gap)"
      61 = "61 No help either interview (DK whether help between)"
      -9 = "-9 Missing"
      -1 = "-1 Inapplicable"
    -999 = "-999 Not determined" ;

  VALUE   DMDSINTV
       0 = "0 Less than 1 month"
       1 = "1 Month"
       2 = "2 Months"
       3 = "3 Months"
       4 = "4 Months"
       5 = "5 Months"
       6 = "6 Months"
       7 = "7 Months"
       8 = "8 Months"
       9 = "9 Months"
      10 = "10 Months"
      11 = "11 Months"
      12 = "12 Months"
      13 = "13 Months"
      14 = "14 Months"
      15 = "15 Months"
      16 = "16 Months"
      17 = "17 Months"
      18 = "18 Months"
      19 = "19 Months"
      20 = "20 Months"
      21 = "21 Months"
      22 = "22 Months"
      23 = "23 Months"
      24 = "24 Months"
      90 = "90 Last round disputed"
      -1 = "-1 Inapplicable"
      -7 = "-7 Refused"
```

```
            -8 = "-8 Dont know"
            -9 = "-9 Missing" ;

        VALUE    DMDS_DUR
             0 = "0 Less than 1 month"
             1 = "1 Month"
             2 = "2 Months"
             3 = "3 Months"
             4 = "4 Months"
             5 = "5 Months"
             6 = "6 Months"
             7 = "7 Months"
             8 = "8 Months"
             9 = "9 Months"
            10 = "10 Months"
            11 = "11 Months"
            12 = "12 Months"
            13 = "13 Months"
            14 = "14 Months"
            15 = "15 Months"
            16 = "16 Months"
            17 = "17 Months"
            90 = "90 Last round disputed"
            -1 = "-1 Inapplicable"
            -7 = "-7 Refused"
            -8 = "-8 Dont know"
            -9 = "-9 Missing"
           -10 = "-10 Not ascertained"
           -12 = "-12 Outside of range"
           -13 = "-13 None"
          -999 = "-999 Not determined" ;

        VALUE    DMDSFLG
            -1 = "-1 Inapplicable"
             1 = "1 No SP interview last round"
             2 = "2 Died and month death missing"
             3 = "3 Died <=1 month after last interview"
             4 = "4 Died 12-13 months after last interview"
             5 = "5 Died and not mobile (fl2notmobile=1)"
             6 = "6 Died and not alert (fl2notalert =1)"
             7 = "7 Skipped 1 or more help questions" ;
        VALUE    DMDS3FLG
            -1 = "-1 Inapplicable"
             1 = "1 No SP interview last round"
             2 = "2 Died and month death missing"
             3 = "3 Died <=1 month after last interview"
             4 = "4 Died 12-13 months after last interview"
             5 = "5 Died and not mobile (fl3notmobile=1)"
             6 = "6 Died and not alert (fl3notalert =1)"
             7 = "7 Skipped 1 or more help questions" ;
  VALUE SP30051W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EXCELLENT"
    2 = "2 VERY GOOD"
```

```
     3 = "3 GOOD"
     4 = "4 FAIR"
     5 = "5 POOR"
     6 = "6 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"
   ;
     VALUE SP3019aW
        -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 JANUARY"
    2 = "2 FEBRUARY"
    3 = "3 MARCH"
    4 = "4 APRIL"
    5 = "5 MAY"
    6 = "6 JUNE"
    7 = "7 JULY"
    8 = "8 AUGUST"
    9 = "9 SEPTEMBER"
   10 = "10 OCTOBER"
   11 = "11 NOVEMBER"
   12 = "12 DECEMBER"
   90 = "90 LAST INTERVIEW INFORMATION INCORRECT"
   ;
  VALUE RACEHISP
        1 = ' 1 White, non-hispanic'
        2 = ' 2 Black, non-hispanic'
        3 = ' 3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic'
        4 = ' 4 Hispanic'
        5 = ' 5 More than one DKRF primary'
        6 = ' 6 DKRF'
       -9 = '-9 Missing';

/* The following may not need to be included on the public release file but
are
        needed for internal Westat File processing  */

    VALUE SPPB_MISSING
       -7 = '-7 RF'
   -8 = '-8 DK'
   -9 = '-9 Missing'
   -1="-1 Inapplicable"
   1="1 PROXY INTERVIEW"
   2="2 MISSING WALK AND REPEAT CHAIR AND BALANCE"
   3="3 MISSING WALK AND REPEAT CHAIR"
   4="4 MISSING WALK AND BALANCE"
   5="5 MISSING REPEAT CHAIR AND BALANCE"
   6="6 MISSING WALK"
   7="7 MISSING REPEAT CHAIR"
   8="8 MISSING BALANCE"
   9="9 NO SPACE"
   10="10 NO CHAIR"
   11="11 NO SPACE WALK AND NO CHAIR"
   12="12 NO SPACE WALK AND NON-SAFETY MISSING"
   13="13 NO CHAIR AND NON-SAFETY MISSING"
   14="14 NON-SAFETY WALK"
```

```
    15="15 NON-SAFETY CHAIR"
    16="16 NON-SAFETY BALANCE"
    17="17 NON-SAFETY WALK AND CHAIR"
    18="18 NON-SAFETY WALK AND BALANCE"
    19="19 NON-SAFETY CHAIR AND BALANCE"
    20="20 NON SAFETY WALK AND CHAIR AND BALANCE";

    VALUE QUARTILES
-9="-9 Missing"
-1="-1 Inapplicable"
;
  VALUE SP30025W
      -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
   2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
   3 = "3 MOBILE HOME OR TRAILER"
   4 = "4 MULTI-UNIT (2+) BUILDING"
   91 = "91 OTHER (SPECIFY)"
  ;
  VALUE SP30046W
      -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
    1 = "1 AT SP'S HOME"
     2 = "2 IN A HOSPITAL"
     3 = "3 IN A NURSING HOME"
     4 = "4 IN A HOSPICE RESIDENCE"
     5 = "5 AT SOMEONE ELSE'S HOME"
     91 = "91 SOMEWHERE ELSE (SPECIFY)"
  ;
  VALUE SP30076W
      -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 YES, DOESNT KNOW HOW TO USE"
   ;
  VALUE W300151W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 VERY GOOD"
     2 = "2 GOOD"
     3 = "3 FAIR"
     4 = "4 POOR"
    5 = "5 VERY POOR"  ;

     VALUE SP30076H
       -7 = '-7 RF'
```

```
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
      95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM DAY TO DAY"  ;
        VALUE SP30076G
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
      95 = "95 NO USUAL TIME OR DIFFERENT FROM DAY TO DAY"  ;
            VALUE SP30076I
             -7 = '-7 RF'
             -8 = '-8 DK'
             -1 = '-1 Inapplicable'
             -9 = '-9 Missing'
          95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM NIGHT TO NIGHT"
;
            VALUE SP30076J
             -7 = '-7 RF'
             -8 = '-8 DK'
             -1 = '-1 Inapplicable'
             -9 = '-9 Missing'
          95 = "95 NO USUAL TIME OR DIFFERENT FROM NIGHT TO NIGHT"  ;
            VALUE SP30076K
             -7 = '-7 RF'
             -8 = '-8 DK'
             -1 = '-1 Inapplicable'
             -9 = '-9 Missing'
              0 = "0 LESS THAN AN HOUR"
          90 = "90 FELL ASLEEP RIGHT AWAY"
          95 = "95 NO USUAL AMOUNT OF TIME TO FALL ASLEEP OR DIFFERENT FROM
NIGHT TO NIGHT"  ;
            VALUE SP30155W
             -7 = '-7 RF'
             -8 = '-8 DK'
             -1 = '-1 Inapplicable'
             -9 = '-9 Missing'
              1 = "1 NAPS PLANNED"
              2 = "2 FELL ASLEEP WITHOUT MEANING TO"
              3 = "3 BOTH (SOME PLANNED/SOME NOT)"
   ;
   VALUE SP30120W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 OFTEN"
     2 = "2 SOMETIMES"
     3 = "3 RARELY"
     4 = "4 NEVER"  ;
Value HOURSF
 -13='-13 SP deceased/section not administered'
 -12='-12 Valid skip/staff'
 -11='-11 Hours missing'
 -10='-10 Days missing'
  -9='-9 Days and hrs missing'
  -1='-1 Inapplicable'
```

```
 0-  1='0-<1'
 1.01- 10='1-<10'
10.01- 20='10-<20'
20.01- 30='20-<30'
30.01-40='30-<40'
40.01-60='40-<60'
60.01-120='60-<120'
120.01-180='120-<180'
180.01-744='180-744 (24/7)'
9999='9999 Not codeable, <1 hour/day';
  VALUE SP30120W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 OFTEN"
    2 = "2 SOMETIMES"
    3 = "3 RARELY"
    4 = "4 NEVER"
  ;
  VALUE SP30118W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 A LOT"
    2 = "2 SOME"
    3 = "3 A LITTLE"
    4 = "4 NOT AT ALL"
  ;
  VALUE SP30141W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "less than $27,600,"
    2 = "$27,600-$41,999,"
    3 = "$42,000-$63,999,"
    4 = "$64,000-$107,999, or"
    5 = "$108,000 or more?"
  ;

  VALUE SP30142W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "less than $14,000,"
    2 = "$14,000-$21,999,"
    3 = "$22,000-$35,999,"
    4 = "$36,000-$48,999, or"
    5 = "$49,000 or more?"
  ;
  VALUE INVENT
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
```

```
    -9 = '-9 Missing'
            104="104-Arthritis"
            107="107-Lung Disease"
            109="109-Dementia or Alzheimer's disease"
            110="110-Cancer"
            113="113-Other serious disease, illness, health problem"
            114="114-Knee surgery/problem"
            115="115-Hip repair or replacement/problem"
            117="117-Back or Spine Surgery/problem"
            121="121-Sleep Problems"
            201="201-Hearing problems"
            202="202-Sight problems"
            205="205-Pain"
            301="301-Breathing problems"
            302="302-Upper body strength movement"
            303="303-Lower body strength movement"
            304="304-Low energy"
            305="305-Balance or coordination problems"
            306="306-Walking distances"
            307="307-Climbing stairs"
            308="308-Lifting and carrying items"
            309="309-Kneeling"
            310="310-Bending"
            311="311-Reaching"
            312="312-Opening Jars"
            313="313-Grasping"
            401="401-Memory"
            501="501-Getting out of bed"
            502="502-Getting around inside"
            503="503-Getting outside"
            504="504-Travel/transportation"
            601="601-Eating"
            602="602-Washing"
            603="603-Toileting"
            604="604-Dressing"
            605="605-Grooming"
            701="701-Laundry"
            702="702-Shopping"
            703="703-Cooking"
            705="705-Money matters"
            706="706-Indoor cleaning and maintenance"
            707="707-Outdoor cleaning and maintenance"
            801="801-Medications"
            802="802-Doctor visits"
            804="804-Other medical self-care"
            1211="1211-Working"
            1442="1442-Walking/exercising pets"
            1451="1451-Vehicle repair and maintenance"
            1461="1461-Appliance tool, and toy use, set-up, repair, &
maintenance"
            1462="1462-Computer use, set-up, repair, maintenance, and
education"
            1473="1473-Household organization"
            1512="1512-Looking after someone else"
            1611="1611-Socializing and communicating with others-in person"
            1612="1612-Socializing and communication with others by talking
on telephone"
```

```
            1613="1613-Attending or hosting party, wedding or social
occasions"
            1614="1614-Reading and sorting through the mail"
            1621="1621-Watch television and movies"
            1631="1631-Games & puzzles"
            1641="1641-Arts and crafts, collecting, and hobbies, making
music"
            1642="1642-Reading"
            1643="1642-Writing (personal, not on computer)"
            1644="1644-Listening to recorded music or radio"
            1711="1711-Playing/practicing sports or taking physical activity
class/lessons"
            1712="1712-Walking/jogging for exercise or pleasure or working
out"
            1713="1713-Other outdoor recreation activities"
            1813="1813-Religious & spiritual volunteer activities"
            1901="1901-Other, no existing code"
            1998="1998-Don't know"
            1999="1999-Refused/blank";

VALUE Imp_Flg
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    0 = "0 No"
    1 = "1 Yes"  ;
run;


/*================================================================*/

/* NHATS_Round_4_Combined_PROC_FORMAT_Statement.sas */

PROC FORMAT ;

    VALUE release
        1 = '1 Main Sample'
        2 = '2 Reserve Sample'
        9 = '9 New Release Sample';

    VALUE STAT_DTa
          4 = " 4 April"
          5 = " 5 May"
          6 = " 6 June"
          7 = " 7 July"
          8 = " 8 August"
          9 = " 9 September"
         10 = "10 October"
         11 = "11 November"
         99 = "99 Prior to start of field work"
         -1 = '-1 Inapplicable';

    VALUE $DISP
         '10' = "10 Not Available "
         '11' = "11 Ready"
         '12' = "12 Started "
```

```
            '20' = "20 Final "
            '24' = "24 Not Required "
            '60' = "60 Complete "
            '61' = "61 Complete, NH facility"
            '62' = "62 Complete SP Deceased, Proxy Intv"
            '63' = "63 Complete SP, FQ not complete"
            '64' = "64 Complete FQ, SP not complete"
            '75' = "75 Physically/mentally unable to participate, no proxy"
            '76' = "76 Too ill to participate, no proxy"
            '77' = "77 Refusal, SP"
            '78' = "78 Language barrier"
            '79' = "79 Unable to locate"
            '80' = "80 Unavailable during field period"
            '82' = "82 Outside of PSU"
            '83' = "83 Ineligible"
            '85' = "85 Refusal, facility"
            '86' = "86 Deceased"
            '87' = "87 Refusal, proxy"
            '88' = "88 Work stopped"    ;

VALUE DISP_a
            10 = "10 Not Available"
            11 = "11 Ready"
            12 = "12 Started"
            20 = "20 Final"
            24 = "24 Not Required"
            60 = "60 Complete"
            61 = "61 Complete, NH facility"
            62 = "62 Complete SP Deceased, Proxy Intv"
            63 = "63 Complete SP, FQ not complete"
            64 = "64 Complete FQ, SP not complete "
            75 = "75 Physically/mentally unable to participate, no proxy"
            76 = "76 Too ill to participate, no proxy"
            77 = "77 Refusal, SP"
            78 = "78 Language barrier"
            79 = "79 Unable to locate"
            80 = "80 Unavailable during field period"
            82 = "82 Outside of PSU"
            83 = "83 Ineligible"
            85 = "85 Refusal, facility"
            86 = "86 Deceased"
            87 = "87 Refusal, proxy"
            88 = "88 Work stopped"    ;

    VALUE DISP_
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required";

    VALUE DISP_F
     -1 = '-1 Inapplicable'
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
```

```
            24 = "24 Not Required"
            60 = "60 Complete"
            61 = "61 Complete, NH facility"
            62 = "62 Complete SP Deceased, Proxy Intv"
            63 = "63 Complete SP, FQ not complete"
            64 = "64 Complete FQ, SP not complete "
            75 = "75 Physically/mentally unable to participate, no proxy"
            76 = "76 Too ill to participate, no proxy"
            77 = "77 Refusal, SP"
            78 = "78 Language barrier"
            79 = "79 Unable to locate"
            80 = "80 Unavailable during field period"
            82 = "82 Outside of PSU"
            83 = "83 Ineligible"
            85 = "85 Refusal, facility"
            86 = "86 Deceased"
            87 = "87 Refusal, proxy"
            88 = "88 Work stopped"
            89 = "89 Final, Other Specify";

    VALUE RFDK
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE $RFDK_F
    '-7' = '-7 RF'
    '-8' = '-8 DK'
    '-1' = '-1 Inapplicable'
    '-9' = '-9 Missing';

    VALUE RFDK_F
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE RFDK_B
    -1 = '-1 Inapplicable'
    1 = '1 Yes-Breakoff';

VALUE $RFDK_C
    '-1' = '-1 Inapplicable'
    'CL' ='CL - Closing'
    'EW' ='EW - Economic Well-Being'
    'FQ' ='FQ - Facility Questionnaire'
    'HL' ='HL - Helper'
    'HW' ='HW - Height and Weight'
    'IP' ='IP - Insurance Plans'
    'LF' ='LF - Labor Force'
    'PA' ='PA - Participation'
    'PE' ='PE - Performance'
    'WB' ='WB - Well-being' ;

VALUE $RFDK_2C
    '-1' = '-1 Inapplicable'
```

```
        '-7' = '-7 RF'
        '-8' = '-8 DK'
        '-9' = '-9 Missing';

VALUE $RFDK_3C
        '-1 ' = '-1 Inapplicable'
        '-7 ' = '-7 RF'
        '-8 ' = '-8 DK'
        '-9 ' = '-9 Missing';

        VALUE RFDK_Y
         1 = ' 1 Yes'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

        VALUE RFDK_YN
         1 = ' 1 Yes'
         2 = ' 2 No'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

        VALUE DSTRP_G
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 =  '1 X condition and word color condition accuracy below threshold
(less than .42)'
         2 =  '2 word condition only below threshold (less than .42)'
         3 =  '3 X condition and word color condition meet criteria for accuracy'
         4 =  '4 fewer than 50% of X and word color condition trials answered'
        999 = '999 X condition only below threshold (less than .42)';

        VALUE DSTRP_R
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -999 = '-999 Inapplicable'
        other = 'Values ranging between -.353 and 1.115';

        VALUE DSTRP_M
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -999 = '-999 Inapplicable'
        other = 'Values ranging between -544.732 and 924.863';

VALUE FQ_4F
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
               1='1 YES'
```

```
            2='2 NO';

    VALUE CHILDDEC
      1 =  '1 CHILD DECEASED'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

    VALUE W200001W
      12 = "12 STARTED"
      20 = "20 COMPLETE"
      21 = "21 INELIGIBLE - NOT 65+"   ;

    VALUE W200008x
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 UNDER 20"
      2 = "2 20-24"
      3 = "3 25-29"
      4 = "4 30-34"
      5 = "5 35-39"
      6 = "6 40-44"
      7 = "7 45-49"
      8 = "8 50-54"
      9 = "9 55-59"
      10 = "10 60-64"
      11 = "11 65-69"
      12 = "12 70-74"
      13 = "13 75-79"
      14 = "14 80-84"
      15 = "15 85-89"
      16 = "16 90 +";

    VALUE W200009W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 =  "1 SAMPLE PERSON"
      2 = "2 SPOUSE/ PARTNER"
      3 = "3 DAUGHTER"
      4 = "4 SON"
      5 = "5 DAUGHTER-IN-LAW"
      6 = "6 SON-IN-LAW"
      7 = "7 STEPDAUGHTER"
      8 = "8 STEPSON"
      9 = "9 SISTER"
      10 = "10 BROTHER"
      11 = "11 SISTER-IN-LAW"
      12 = "12 BROTHER-IN-LAW"
      13 = "13 MOTHER"
      14 = "14 STEPMOTHER"
      15 = "15 MOTHER-IN-LAW"
      16 = "16 FATHER"
```

```
    17 = "17 STEPFATHER"
    18 = "18 FATHER-IN-LAW"
    19 = "19 GRANDDAUGHTER"
    20 = "20 GRANDSON"
    21 = "21 NIECE"
    22 = "22 NEPHEW"
    23 = "23 AUNT"
    24 = "24 UNCLE"
    25 = "25 COUSIN"
    26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
    27 = "27 STEPSON'S SON/ DAUGHTER"
    28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
    29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
    30 = "30 BOARDER/RENTER"
    31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
    32 = "32 ROOMMATE"
    33 = "33 EX-WIFE/ EX-HUSBAND"
    34 = "34 BOYFRIEND/ GIRLFRIEND"
    35 = "35 NEIGHBOR"
    36 = "36 FRIEND"
    37 = "37 SOMEONE/SERVICE AT THE PLACE SP LIVES/LIVED"
    38 = "38 CO-WORKER"
    39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
    40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
    41 = "41 DECEASED SPOUSE/PARTNER"
    91 = "91 OTHER RELATIVE"
    92 = "92 OTHER NONRELATIVE"    ;

   VALUE W200002W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MALE"
    2 = "2 FEMALE";

   VALUE W200005W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 NO SCHOOLING COMPLETED"
    2 = "2 1ST-8TH GRADE"
    3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
    4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
    5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
    6 = "6 SOME COLLEGE BUT NO DEGREE"
    7 = "7 ASSOCIATE'S DEGREE"
    8 = "8 BACHELOR'S DEGREE"
    9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"  ;

   VALUE W200010W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
```

```
    1 = "1 MARRIED"
    2 = "2 LIVING WITH A PARTNER"
    3 = "3 SEPARATED"
    4 = "4 DIVORCED"
    5 = "5 WIDOWED"
    6 = "6 NEVER MARRIED";

  VALUE W200011W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 PREVIOUSLY REPORTED"  ;
VALUE W200012W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 REGULAR"
    2 = "2 VARIED"  ;

  VALUE W200013W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SP AND/OR FAMILY"
    2 = "2 GOVERNMENT PROGRAM"
    3 = "3 INSURANCE"
    91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200015W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1='1 HOURLY'
    2='2 WEEKLY'
    3='3 MONTHLY'
    4='4 DID NOT PAY IN LAST MONTH'
      91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200016W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MEDICAID"
    2 = "2 MEDICARE"
    3 = "3 STATE PROGRAM"
    91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200018W
   -7 = '-7 RF'
   -8 = '-8 DK'
```

```
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
    2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
    3 = "3 MOBILE HOME OR TRAILER"
    4 = "4 MULTI-UNIT (2+) BUILDING"
   91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200020W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HOME"
    2 = "2 MULTI-UNIT"
    3 = "3 OTHER"  ;

  VALUE W200021W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 BUILDING HAS ONE FLOOR"
    2 = "2 BUILDING HAS MULTIPLE FLOORS"   ;

  VALUE W200022W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HOME"
    2 = "2 APARTMENT"
    3 = "3 ROOM"
    4 = "4 UNIT"
    5 = "5 SUITE"
    6 = "6 SOMETHING ELSE (SPECIFY)"  ;

  VALUE W200030W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SAMPLE PERSON (SP)"
    2 = "2 PROXY"  ;

  VALUE W200032W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HOSPITAL"
    2 = "2 NURSING HOME/REHAB CENTER"
   91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200035W
   -1 = '-1 Inapplicable'
```

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```
 -9 = '-9 Missing'
  1 = "1 SELF"
  2 = "2 SPOUSE/ PARTNER"
  3 = "3 DAUGHTER"
  4 = "4 SON"
  5 = "5 DAUGHTER-IN-LAW"
  6 = "6 SON-IN-LAW"
  7 = "7 STEPDAUGHTER"
  8 = "8 STEPSON"
  9 = "9 SISTER"
 10 = "10 BROTHER"
 11 = "11 SISTER-IN-LAW"
 12 = "12 BROTHER-IN-LAW"
 13 = "13 MOTHER"
 14 = "14 STEPMOTHER"
 15 = "15 MOTHER-IN-LAW"
 16 = "16 FATHER"
 17 = "17 STEPFATHER"
 18 = "18 FATHER-IN-LAW"
 19 = "19 GRANDDAUGHTER"
 20 = "20 GRANDSON"
 21 = "21 NIECE"
 22 = "22 NEPHEW"
 23 = "23 AUNT"
 24 = "24 UNCLE"
 25 = "25 COUSIN"
 26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
 27 = "27 STEPSON'S SON/ DAUGHTER"
 28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
 29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
 30 = "30 BOARDER/RENTER"
 31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
 32 = "32 ROOMMATE"
 33 = "33 EX-WIFE/ EX-HUSBAND"
 34 = "34 BOYFRIEND/ GIRLFRIEND"
 35 = "35 NEIGHBOR"
 36 = "36 FRIEND"
 37 = "37 SOMEONE/SERVICE FROM THE PLACE SP LIVES/DIED"
 38 = "38 CO-WORKER"
 39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
 40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
 91 = "91 OTHER RELATIVE"
 92 = "92 OTHER NONRELATIVE"  ;

VALUE W200036W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 VERY FAMILIAR"
  2 = "2 SOMEWHAT FAMILIAR"
  3 = "3 A LITTLE FAMILIAR"
  4 = "4 NOT AT ALL FAMILIAR"  ;

VALUE W200037W
 -7 = '-7 RF'
 -8 = '-8 DK'
```

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, SAME ADDRESS"
  2 = "2 NO, DIFFERENT ADDRESS"
  3 = "3 YES, SAME ADDRESS WITH MINOR CORRECTIONS"  ;

VALUE W200038W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
 10 = "10 OCTOBER"
 11 = "11 NOVEMBER"
 12 = "12 DECEMBER"  ;

VALUE W200039W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"
  3 = "3 YEAR2013"
  4 = "4 YEAR2014"
  5 = "5 YEAR2015"
  6 = "6 YEAR2016"
  7 = "7 YEAR2017"
  8 = "8 YEAR2018"
  9 = "9 YEAR2019"
 10 = "10 YEAR2020"  ;

VALUE W200040W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"  ;

VALUE W200041W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AT SPS OR SOMEONE ELSES HOME"
  2 = "2 IN A HOSPITAL"
  3 = "3 IN A NURSING HOME"
  4 = "4 IN A HOSPICE RESIDENCE"
```

```
     5 = "5 IN TRANSIT (AMBULANCE TO HOSPITAL)"
    91 = "91 SOMEWHERE ELSE (SPECIFY)";

  VALUE W200042W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SP'S HOME"
    2 = "2 SOMEONE ELSE'S HOME"  ;

  VALUE W200043W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 INTENSIVE CARE UNIT"
    2 = "2 PALLIATIVE CARE UNIT"
    3 = "3 INPATIENT HOSPICE UNIT"
    4 = "4 EMERGENCY ROOM"
    5 = "5 ANOTHER KIND OF UNIT"  ;

  VALUE W200044W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HOSPICE AT A HOSPITAL"
    2 = "2 HOSPICE AT A NURSING HOME"
    3 = "3 RESIDENTIAL HOSPICE"
    4 = "4 OTHER HOSPICE"  ;

  VALUE W200045W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 DAYS"
    2 = "2 WEEKS"
    3 = "3 MONTHS"
    4 = "4 YEARS"  ;

  VALUE W200046W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 AT SP'S HOME"
    2 = "2 IN A HOSPITAL"
    3 = "3 IN A NURSING HOME"
    4 = "4 IN A HOSPICE RESIDENCE"
   91 = "91 SOMEWHERE ELSE (SPECIFY)"  ;

  VALUE W200047W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
```

```
   -9 = '-9 Missing'
    1 = "1 EVERY DAY"
    2 = "2 MOST DAYS"
    3 = "3 SOME DAYS"
    4 = "4 RARELY"
    5 = "5 NOT AT ALL"  ;

  VALUE W200048W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN WAS NEEDED"
    2 = "2 MORE THAN WAS NEEDED"
    3 = "3 ABOUT RIGHT AMOUNT"  ;

  VALUE W200049W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    3 = "3 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

  VALUE W200050W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 ALWAYS"
    2 = "2 USUALLY"
    3 = "3 SOMETIMES"
    4 = "4 NEVER"
    5 = "5 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

  VALUE W200051W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EXCELLENT"
    2 = "2 VERY GOOD"
    3 = "3 GOOD"
    4 = "4 FAIR"
    5 = "5 POOR"  ;

  VALUE W200052W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 NOT AT ALL"
    2 = "2 SEVERAL DAYS"
    3 = "3 MORE THAN HALF THE DAYS"
    4 = "4 NEARLY EVERY DAY"  ;
```

```
   VALUE W200053W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
     2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
     3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
     4 = "4 RARELY (ONCE A WEEK OR LESS)"
     5 = "5 NEVER"  ;

   VALUE W200054W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
     2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
     3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
     4 = "4 RARELY (ONCE A WEEK OR LESS)"
     5 = "5 NEVER"
     7 = "7 DON'T WAKE UP/NOT A PROBLEM"  ;

   VALUE W200055W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 PRIVATE RESIDENCE"
     2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
     3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
     4 = "4 RELIGIOUS GROUP QUARTERS"
     91 = "91 OTHER (SPECIFY)"  ;

   VALUE W200056W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 PLACE DOES NOT HAVE A NAME"  ;

   VALUE W200057W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 APARTMENT"
     2 = "2 ROOM"
     3 = "3 UNIT"
     4 = "4 SUITE"
     91 = "91 SOMETHING ELSE (SPECIFY)"  ;

   VALUE W200058W
    -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO, DIFFERENT PERSON"
     3 = "3 NO, NAME MISSPELLED"  ;

    VALUE W200060W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 PRIVATE RESIDENCE"
     2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
     3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
     5 = "5 NURSING HOME"
    91 = "91 OTHER (SPECIFY)"  ;

   VALUE W200061W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 SEPARATION OR DIVORCE"
     2 = "2 DECEASED"
     3 = "3 MOVED ELSEWHERE"
     5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
     8 = "8 OTHER REASON"   ;

   VALUE W200067W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 COMMON OR SHARED ENTRANCE"
     2 = "2 ENTRANCE DIRECTLY INTO HOME"  ;

   VALUE W200068W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1"
     2 = "2"
     3 = "3"
     4 = "4+"  ;

   VALUE W200069W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ALL ITEMS HERE"
     2 = "2 ADDED ONE OR MORE ITEMS"  ;

   VALUE W200070W
```

```
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE THAN $500"
   2 = "2 LESS THAN $500"
   3 = "3 JUST ABOUT $500"  ;

  VALUE W200071W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE THAN $1,000"
   2 = "2 LESS THAN $1,000"
   3 = "3 JUST ABOUT $1,000"  ;

  VALUE W200072W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE THAN $100"
   2 = "2 LESS THAN $100"
   3 = "3 JUST ABOUT $100"  ;

  VALUE W200073W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 YES, DOESNT KNOW HOW TO USE A COMPUTER"  ;

  VALUE W200074W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MOST DAYS"
   2 = "2 SOME DAYS"
   3 = "3 RARELY"  ;

  VALUE W200076W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 DEAF"  ;

  VALUE W200077W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
```

```
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 BLIND"  ;

VALUE W200078W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY DAY (7 DAYS A WEEK)"
  2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
  3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"  ;

VALUE W200080W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, A CHANGE"
  2 = "2 NO, NO CHANGE"
  3 = "3 DEMENTIA/ALZHEIMER'S REPORTED BY PROXY"  ;

VALUE W200081W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE"
  2 = "2 SP IS UNABLE TO SPEAK"
  3 = "3 SP IS UNABLE TO HEAR"
  4 = "4 SP REFUSED"
  5 = "5 PROXY REFUSED"
  6 = "6 SP NOT PRESENT"
  7 = "7 SP TOO ILL"
  8 = "8 SP LANGUAGE BARRIER"
  91 = "91 OTHER (SPECIFY)"  ;

VALUE W200082W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MUCH BETTER"
  2 = "2 BETTER"
  3 = "3 SAME"
  4 = "4 WORSE"
  5 = "5 MUCH WORSE"  ;

VALUE W200083W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
```

```
     2 = "2 NO/DON'T KNOW"   ;

  VALUE W200084W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 CONTINUE WITH ACTIVITY"
    2 = "2 SP REFUSES ACTIVITY"  ;

  VALUE W200085W
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "Word[1]"
    2 = "Word[2]"
    3 = "Word[3]"
    4 = "Word[4]"
    5 = "Word[5]"
    6 = "Word[6]"
    7 = "Word[7]"
    8 = "Word[8]"
    9 = "Word[9]"
   10 = "Word[10]"
   91 = "91 NO WORDS REMEMBERED"
   92 = "92 REFUSED"  ;

  VALUE W200086W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 DIFFICULTY HEARING ANY OF THE WORDS"
    2 = "2 INTERRUPTION OCCURRED WHILE LIST WAS BEING READ"
   91 = "91 OTHER PROBLEM (SPECIFY)"
   92 = "92 NO PROBLEMS OCCURRED"
   97 = "97 SP REFUSED WORD RECALL TASK"  ;

  VALUE W200087W
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SP ATTEMPTED CLOCK DRAWING"
    2 = "2 SP DID NOT ATTEMPT CLOCK DRAWING"
   97 = "3 SP REFUSED CLOCK DRAWING"  ;

  VALUE W200089W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY DAY (7 DAYS A WEEK)"
    2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
    3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
    4 = "4 RARELY (ONCE A WEEK OR LESS)"
    5 = "5 NEVER"  ;

  VALUE W200090W
   -7 = '-7 RF'
```

```
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY TIME"
   2 = "2 MOST TIMES"
   3 = "3 SOMETIMES"
   4 = "4 RARELY"
   5 = "5 NEVER"  ;

  VALUE W200092W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MOST TIMES"
   2 = "2 SOMETIMES"
   3 = "3 RARELY"
   4 = "4 NEVER"  ;

  VALUE W200093W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 NONE"
   2 = "2 A LITTLE"
   3 = "3 SOME"
   4 = "4 A LOT"  ;

  VALUE W200094W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE OFTEN"
   2 = "2 LESS OFTEN"
   3 = "3 ABOUT THE SAME"  ;

  VALUE W200095W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 JANUARY"
   2 = "2 FEBRUARY"
   3 = "3 MARCH"
   4 = "4 APRIL"
   5 = "5 MAY"
   6 = "6 JUNE"
   7 = "7 JULY"
   8 = "8 AUGUST"
   9 = "9 SEPTEMBER"
  10 = "10 OCTOBER"
  11 = "11 NOVEMBER"
  12 = "12 DECEMBER"
  90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W200096W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

VALUE W200097W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO / NO LONGER DRIVE"  ;

VALUE W200098W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 NO, NO RAIN OR BAD WEATHER"  ;

VALUE W200099W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ALWAYS DID IT BY SELF"
  2 = "2 ALWAYS DID IT TOGETHER WITH SOMEONE ELSE"
  3 = "3 SOMEONE ELSE ALWAYS DID IT"
  4 = "4 IT VARIED (MORE THAN ONE WAY)"
  5 = "5 NOT DONE IN LAST MONTH"  ;

VALUE W200102W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE OFTEN"
  2 = "2 LESS OFTEN"
  3 = "3 SAME"  ;

VALUE W200106W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 ALWAYS FED THROUGH IV OR TUBE"  ;

VALUE W200107W
 -7 = '-7 RF'
```

```
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY TIME"
    2 = "2 MOST TIMES"
    3 = "3 SOMETIMES"
    4 = "4 RARELY"   ;

   VALUE W200109W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SHOWERING"
    2 = "2 TAKING BATHS"
    3 = "3 WASHING UP SOME OTHER WAY"  ;


   VALUE W200114W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 VERY IMPORTANT"
    2 = "2 SOMEWHAT IMPORTANT"
    3 = "3 NOT SO IMPORTANT"   ;

   VALUE W200115W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
   95 = "95 NO ACTIVITY LISTED"   ;

   VALUE W200116W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LEFT"
    2 = "2 RIGHT"
    3 = "3 BOTH"   ;

   VALUE W200117W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LEFT SIDE"
    2 = "2 RIGHT SIDE"
    3 = "3 BOTH SIDES"   ;

   VALUE W200118W
   -7 = '-7 RF'
   -8 = '-8 DK'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ONE SIDE"
     2 = "2 BOTH SIDES"  ;

  VALUE W200119W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 RECEIVE ALL TREATMENTS"
    2 = "2 STOP/REJECT ALL TREATMENTS"  ;

  VALUE W200120W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
    2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
    3 = "3 LIVING WITH AN ADULT CHILD"
    4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
    5 = "5 LIVING IN A NURSING HOME"  ;

  VALUE W200121W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
    4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

  VALUE W200122W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MAKE DECISIONS WITHOUT MUCH ADVICE FROM THEM"
    2 = "2 GET THEIR ADVICE AND THEN MAKE DECISIONS"
    3 = "3 MAKE DECISIONS TOGETHER"
    4 = "4 LEAVE DECISIONS UP TO THEM"  ;

  VALUE W200123W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HANDLE MOSTLY BY SELF"
    2 = "2 HANDLE TOGETHER WITH FAMILY OR CLOSE FRIENDS"
    3 = "3 FAMILY OR CLOSE FRIENDS MOSTLY HANDLE THESE THINGS"
    4 = "4 IT VARIES"  ;

  VALUE W200124W
   -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NEVER"
  2 = "2 RARELY"
  3 = "3 SOMETIMES"
  4 = "4 OFTEN"  ;

VALUE W200126W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AGREE A LOT"
  2 = "2 AGREE A LITTLE"
  3 = "3 DO NOT AGREE"  ;

VALUE W200127W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AGREE A LOT"
  2 = "2 AGREE A LITTLE"
  3 = "3 AGREE NOT AT ALL"  ;

VALUE W200129W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $1,000,"
  2 = "2 $1,000 to less than $2,000,"
  3 = "3 $2,000 to less than $3,000,"
  4 = "4 $3,000 to less than $5,000, or"
  5 = "5 $5,000 or more?"  ;

VALUE W200131W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 RETIRED/DON'T WORK ANYMORE"  ;

VALUE W200132W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY WEEK"
  2 = "2 EVERY TWO WEEKS"
  3 = "3 TWO TIMES A MONTH"
  4 = "4 ONCE A MONTH"
  5 = "5 DAILY"
 91 = "91 OTHER SCHEDULE (SPECIFY)"  ;
```

```
    VALUE W200133W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 OWN"
      2 = "2 RENT"
      3 = "3 SOME OTHER ARRANGEMENT"  ;

    VALUE W200134W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 PAID OFF"
      2 = "2 STILL MAKE PAYMENTS"
      3 = "3 REVERSE MORTGAGE"  ;

    VALUE W200135W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 less than $250,"
      2 = "2 $250-$499,"
      3 = "3 $500-$999, or"
      4 = "4 $1,000 or more?"  ;

    VALUE W200136W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 5 YEARS"
      2 = "2 10 YEARS"
      3 = "3 LONGER THAN 10 YEARS"  ;

    VALUE W200137W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 less than $50,000,"
      2 = "2 between $50,000 and $100,000, or"
      3 = "3 over $100,000?"  ;

    VALUE W200138W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 less than $50,000,"
      2 = "2 $50,000-$74,999,"
      3 = "3 $75,000-$99,999,"
      4 = "4 $100,000-$199,999,"
      5 = "5 $200,000-$299,999,"
```

```
      6 = "6 $300,000-$499,999,"
      7 = "7 $500,000-$749,999, or"
      8 = "8 $750,000 or more?"  ;

   VALUE W200139W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 PAY OFF BALANCE"
     2 = "2 PAY MINIMUM"
     3 = "3 PAY MORE THAN MINIMUM, BUT NOT ENTIRE BALANCE"
     4 = "4 DON'T HAVE ANY CREDIT CARDS"  ;

   VALUE W200140W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 less than $1,000,"
     2 = "2 $1,000 - $1,999,"
     3 = "3 $2,000 - $3,999,"
     4 = "4 $4,000 - $5,999,"
     5 = "5 $6,000 - $9,999,"
     6 = "6 $10,000 - $19,999, or"
     7 = "7 $20,000 or more?"  ;

   VALUE W200141W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MOST"
     2 = "2 SOME"
     3 = "3 A LITTLE"  ;

   VALUE W200142W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 less than $500,"
     2 = "2 $500 - $999,"
     3 = "3 $1,000 - $1,999,"
     4 = "4 $2,000 - $3,999,"
     5 = "5 $4,000 - $5,999,"
     6 = "6 $6,000 - $9,999,"
     7 = "7 $10,000 - $19,999, or"
     8 = "8 $20,000 or more?"  ;

   VALUE W200146W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 NEARLY EVERY DAY"
     2 = "2 MORE THAN HALF THE DAYS"
```

```
      3 = "3 SEVERAL DAYS (LESS THAN HALF)"
      4 = "4 A FEW DAYS"  ;

   VALUE W200147W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 INCLUDED"
     2 = "2 EXTRA CHARGE"  ;

   VALUE W200148W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"  ;

VALUE F200006W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 FREE STANDING NURSING HOME"
     2 = "2 FREE STANDING ASSISTED LIVING FACILITY"
     3 = "3 NURSING HOME AND ASSISTED LIVING FACILITY"
     4 = "4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
     5 = "5 ADULT FAMILY CARE HOME"
     6 = "6 GROUP HOME"
     7 = "7 BOARD AND CARE HOME"
     8 = "8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
     91 = "91 OTHER (SPECIFY)"  ;

   VALUE F200007W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"  ;

   VALUE F200008W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 INDEPENDENT LIVING"
     2 = "2 ASSISTED LIVING"
     3 = "3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
     4 = "4 NURSING HOME"
     91 = "91 OTHER (SPECIFY)"  ;

   VALUE F200009W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
```

```
      1 = "1 ASSISTED LIVING"
      2 = "2 NURSING HOME"   ;

   VALUE F200011W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES, SERVICE PROVIDED AS PART OF PACKAGE"
     2 = "2 YES, SERVICE PROVIDED AT AN EXTRA CHARGE"
     3 = "3 NO, SERVICE NOT PROVIDED"  ;

   VALUE F200012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 SP/FAMILY"
     2 = "2 SOCIAL SECURITY/SSI"
     3 = "3 MEDICAID"
     4 = "4 MEDICARE"
     5 = "5 OTHER SOURCE"   ;

   VALUE I200002W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
     2 = "2 No"   ;

   VALUE I200003W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 English"
     2 = "2 Spanish"
     3 = "3 Other (specify)"   ;

   VALUE I200005W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Friendly and interested"
     2 = "2 Cooperative but not particularly interested"
     3 = "3 Impatient and restless"
     4 = "4 Hostile"   ;

   VALUE I200006W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Good"
     2 = "2 Fair"
```

```
    3 = "3 Poor"  ;

 VALUE I200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 All of the time"
  2 = "2 Most of the time"
  3 = "3 Some of the time"
  4 = "4 Only for the cognition and/or performance parts"
  5 = "5 None of the time"  ;

 VALUE I200010W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Interview was conducted by telephone"  ;

 VALUE I200012W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Not Administered"  ;

 VALUE I200013W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"  ;

 VALUE I200016W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Entire interview conducted by telephone"  ;

 VALUE I200017W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Not at all cluttered"
  2 = "2 Somewhat cluttered"
  3 = "3 Very cluttered"
  4 = "4 Could not see other rooms"  ;
```

```
   VALUE I200018W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 None"
     2 = "2 A little"
     3 = "3 Some"
     4 = "4 A lot"
     5 = "5 Could not observe"  ;

   VALUE I200019W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
     2 = "2 No"
     7 = "7 Could not observe"  ;


/* DERIVED VARIABLE FORMATS */
   VALUE LVGARRG
     1 = '1 Alone'
     2 = '2 With spouse/partner only (spouse/partner in household]'
     3 = '3 With spouse/partner and with others'
     4 = '4 With others only'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

   VALUE DOUTSFDF
     8 = '8 Not done in last month'
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE DOUTDEVI
     8 = '8 Not done in last month'
     1 = '1 No use of devices to go outside in last month'
     2 = '2 Use of devices to go outside in last month'
     3 = '3 DKRF If used devices to go outside in last month'
     4 = '4 DKRF If used devices in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

   VALUE DOUTHELP
     8 = '8 Not done in last month'
     1 = '1 No help to go outside in last month'
     2 = '2 Had help to go outside in last month'
     3 = '3 DKRF If had help to go outside in last month'
```

```
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE DINSDSFD
   8 = '8 Not done in last month'
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE DINSDDEV
   8 = '8 Not done in last month'
   1 = '1 No use of devices inside in last month'
   2 = '2 Use of devices inside in last month'
   3 = '3 DKRF If used devices inside in last month'
   4 = '4 DKRF On use of devices'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE dinsdhlp
   8 = '8 Not done in last month'
   1 = '1 No help to go around inside in last month'
   2 = '2 Had help to go around inside in last month'
   3 = '3 DKRF If had help to go around inside in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE dbedsfdf
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE dbeddevi
   1 = '1 No use of cane or walker to get out of bed in last month'
   2 = '2 Use of cane or walker to get out of bed in last month'
   3 = '3 DKRF If Used cane or walker to get out of bed in last month'
   4 = '4 DKRF If used cane or walker in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE dbedhelp
   1 = '1 No help to get out of bed in last month'
   2 = '2 Had help to get out of bed in last month'
   3 = '3 DKRF If had help to get out of bed in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE dlaunsfd
  1 = '1 Did not do by self in last month'
  2 = '2 Did by self in last month/No Difficulty'
  3 = '3 Did by self in last month/Difficulty'
  4 = '4 DKRF Did by self in last month/No Difficulty'
  5 = '5 DKRF Did by self in last month/Difficulty'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';


VALUE dlaunrea
  1= '1 Health/functioning reason only'
  2= '2 Other reason only'
  3= '3 Both health/functioning and other'
  4= '4 Service/someone from the place SP lives'
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dshopsfd
  1 = '1 Did not do by self in last month'
  2 = '2 Did by self in last month/No Difficulty'
  3 = '3 Did by self in last month/Difficulty'
  4 = '4 DKRF Did by self in last month/No Difficulty'
  5 = '5 DKRF Did by self in last month/Difficulty'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dshoprea
  1= '1 Health/functioning reason only'
  2= '2 Other reason only'
  3= '3 Both health/functioning and other'
  4= '4 Service/someone from the place SP lives'
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dmealsfd
  1 = '1 Did not do by self in last month'
  2 = '2 Did by self in last month/No Difficulty'
  3 = '3 Did by self in last month/Difficulty'
  4 = '4 DKRF Did by self in last month/No Difficulty'
  5 = '5 DKRF Did by self in last month/Difficulty'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE dmealrea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
    4= '4 Service/someone from the place SP lives'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dbanksfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dbankrea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
    4= '4 Service/someone from the place SP lives'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE deatdevi
    1 = '1 No use of adapted utensils in last month'
    2 = '2 Use of adapted utensils in last month'
    8 = '8 Not done in last month'
    3 = '3 DKRF If used adapted utensils in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE deathelp
    1 = '1 No help eating in last month'
    2 = '2 Had help eating in last month'
    3 = '3 DKRF If had help eating in last month'
    8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE deatsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using utensils)'
    3 = '3 Difficulty by self (and when using utensils)'
```

```
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbathdev
    1 = '1 No use of grab bars or bath seats in last month'
    2 = '2 Use of grab bars or bath seats in last month'
    3 = '3 DKRF If use of grab bars or bath seats in last month'
    4 = '4 DKRF If had grab bars or bath seats in last month'
    9 = '9 No bars/seats/shower/tub or washes up other way'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbathhel
    1 = '1 No help bathing in last month'
    2 = '2 Had help bathing in last month'
    3 = '3 DKRF If had help bathing in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbathsfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using grab bars or tub seat)'
    3 = '3 Difficulty by self (and when using grab bars or tub seat)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dtoildev
    1 = '1 No use of toileting devices in last month'
    2 = '2 Use of toileting devices in last month'
    3 = '3 DKRF of some and no use of other toileting devices in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dtoilhel
    1 = '1 No help toileting in last month'
    2 = '2 Had help toileting in last month'
    3 = '3 DKRF If had help toileting in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dtoilsfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using toileting devices)'
    3 = '3 Difficulty by self (and when using toileting devices)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE ddresdev
    8 = '8 Not done in last month'
    9 = '9 DKRF If dressed in last month'
```

SAS ALGORITHM FOR DEMENTIA

```
      2 = '2 Use of dressing devices in last month'
      1 = '1 No use of dressing devices in last month'
      3 = '3 DKRF If use of dressing devices in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE ddreshel
      8 = '8 Not done in last month'
      9 = '9 DKRF If dressed in last month'
      1 = '1 No help dressing in last month'
      2 = '2 Had help dressing in last month'
      3 = '3 DKRF If had help dressing in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE ddressfd
      1 = '1 Did not do by self in last month'
      2 = '2 No Difficulty by self (and when using dressing devices)'
      3 = '3 Difficulty by self (and when using dressing devices)'
      6 = '6 Did by self in last month/DKRF Difficulty'
      7 = '7 DKRF Did by self in last month/DKRF Difficulty'
      8 = '8 Not done in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
  VALUE dmedssfd
      1 = '1 Did not do by self in last month'
      2 = '2 Did by self in last month/No Difficulty'
      3 = '3 Did by self in last month/Difficulty'
      4 = '4 DKRF Did by self in last month/No Difficulty'
      5 = '5 DKRF Did by self in last month/Difficulty'
      6 = '6 Did by self in last month/DKRF Difficulty'
      7 = '7 DKRF Did by self in last month/DKRF Difficulty'
      8 = '8 Not done in last month'
      9 = '9 No or DKRF if medications taken in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE dmedsrea
      1 = '1 HEALTH/FUNCTIONING REASON ONLY'
      2 = '2 OTHER REASON ONLY'
      3 = '3 BOTH HEALTH/FUNCTIONING AND OTHER'
      4 = '4 SERVICE/SOMEONE FROM THE PLACE SP LIVES'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE dmarstat
      1 = '1 Married'
      2 = '2 Living with a partner'
      3 = '3 Separated'
      4 = '4 Divorced'
      5 = '5 Widowed'
      6 = '6 Never married'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
```

```
    -9 = '-9 Missing';
  VALUE DSPSAGEC
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 UNDER 50"
     2 = " 2 50-54"
     3 = " 3 55-59"
     4 = " 4 60-64"
     5 = " 5 65-69"
     6 = " 6 70-74"
     7 = " 7 75-79"
     8 = " 8 80-84"
     9 = " 9 85-89"
    10 = "10 90 +"      ;
  VALUE dresid
     1 = '1 Community '
     2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
     3 = '3 Residential Care Resident not nursing home (FQ only)'
     4 = '4 Nursing Home Resident';
  VALUE f_dresid
     1 = '1 Community '
     2 = '2 Residential care not nursing home (SP interview)'
     3 = '3 Residential care not nursing home (FQ only)'
     4 = '4 Nursing home (SP interview)'
     5 = '5 Nursing home (FQ only)'
     6 = '6 Deceased'
     7 = '7 Residential care not nursing home in R1 and R2 (FQ only)'
     8 = '8 Nursing home in R1 and R2 (FQ only)' ;
  VALUE f2dresid
       -1='-1 Inapplicable'
        1 = '1 Community '
     2 = '2 Residential care not nursing home (SP interview)'
     3 = '3 Residential care not nursing home (FQ only)'
     4 = '4 Nursing home (SP interview)'
     5 = '5 Nursing home (FQ only)'
     6 = '6 Deceased'
     7 = '7 Residential care not nursing home in R1 and R2 (FQ only)'
     8 = '8 Nursing home in R1 and R2 (FQ only)' ;
  VALUE f3dresid
       -1='-1 Inapplicable'
        1 = '1 Community '
     2 = '2 Residential care not nursing home (SP interview)'
     3 = '3 Residential care not nursing home (FQ only)'
     4 = '4 Nursing home (SP interview)'
     5 = '5 Nursing home (FQ only)'
     6 = '6 Deceased'
     7 = '7 Residential care not nursing home in R1 and R3 (FQ only)'
     8 = '8 Nursing home in R1 and R3 (FQ only)' ;
  VALUE f4dresid
       -1='-1 Inapplicable'
        1 = '1 Community '
     2 = '2 Residential care not nursing home (SP interview)'
     3 = '3 Residential care not nursing home (FQ only)'
     4 = '4 Nursing home (SP interview)'
```

```
        5 = '5 Nursing home (FQ only)'
        6 = '6 Deceased'
        7 = '7 Residential care not nursing home in R1 and R4 (FQ only)'
        8 = '8 Nursing home in R1 and R4 (FQ only)' ;

VALUE QUARTILE
-9="-9 Missing"
-1="-1 Inapplicable";

VALUE SPPB
-9="-9 Missing"
-1="-1 Inapplicable";
VALUE SPPB_MIS
    -9="-9 Missing"
    -1="-1 Inapplicable"
    1="1 PROXY INTERVIEW"
    2="2 MISSING WALK AND REPEAT CHAIR AND BALANCE"
    3="3 MISSING WALK AND REPEAT CHAIR"
    4="4 MISSING WALK AND BALANCE"
    5="5 MISSING REPEAT CHAIR AND BALANCE"
    6="6 MISSING WALK"
    7="7 MISSING REPEAT CHAIR"
    8="8 MISSING BALANCE"
    9="9 NO SPACE"
    10="10 NO CHAIR"
    11="11 NO SPACE WALK AND NO CHAIR"
    12="12 NO SPACE WALK AND NON-SAFETY MISSING"
    13="13 NO CHAIR AND NON-SAFETY MISSING"
    14="14 NON-SAFETY WALK"
    15="15 NON-SAFETY CHAIR"
    16="16 NON-SAFETY BALANCE"
    17="17 NON-SAFETY WALK AND CHAIR"
    18="18 NON-SAFETY WALK AND BALANCE"
    19="19 NON-SAFETY CHAIR AND BALANCE"
    20="20 NON SAFETY WALK AND CHAIR AND BALANCE";

    VALUE DCLCKSC
      0 = '0 Not recognizable as a clock'
      1 = '1 Severely distorted depiction of a clock'
      2 = '2 Moderately distorted depection of a clock'
      3 = '3 Mildly distorted depiction of a clock'
      4 = '4 Reasonably accurate depiction of a clock'
      5 = '5 Accurate depiction of a clock (circular or square)'
     -7 = '-7 SP refused to draw clock'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -2 = '-2 Proxy says cannot ask SP'
     -3 = '-3 Proxy says can ask SP but SP unable to answer'
     -4 = '-4 SP did not attempt to draw clock'
     -9 = '-9 Missing';

    VALUE DCLCKCL
      1 = '1 Very clear'
      2 = '2 Somewhat clear'
      3 = '3 Somewhat unclear'
      4 = '4 Very unclear'
      5 = '5 Blank'
```

```
    -7 = '-7 SP refused to draw clock'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -2 = '-2 Proxy says cannot ask SP'
    -3 = '-3 Proxy says can ask SP but SP unable to answer'
    -4 = '-4 SP did not attempt to draw clock'
    -9 = '-9 Missing';

VALUE RESULT
    -9='-9: MISSING'
    1='1: COMPLETED W RESULTS'
    2='2: COMPLETED MISSING RESULTS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    7='7: NO CHAIR/NO SPACE'
    9='9: NOT ATTEMPTED/MISSING';

    VALUE RESULT_SCH
    -9='-9: MISSING'
    1='1: COMPLETED W/OUT ARMS'
    2='2: COMPLETED W ARMS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    7='7: NO CHAIR/SAFETY REASON'
    8='8: NO CHAIR/NOT SAFETY REAS'
    9='9: NOT ATTEMPTED/MISSING'
    10='10: CH4=1 SINGLE CHAIR NOT COMPL';

    VALUE RESULT_RCH
    -9='-9: MISSING'
    1='1: COMPLETED W/OUT ARMS'
    2='2: COMPLETED MISSING RESULTS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    9='9: NO CHAIR OR NOT ATTEMPTED/MISSING';

    VALUE ZEROSCORE
    1="1: NOT ELIGIBLE DUE TO EXCLUSION CRITERIA"
    2="2: NOT ATTEMPTED FOR SAFETY REASON"
    3="3: ATTEMPTED CHAIR STANDS/NOT ATTEMPTED FOR SAFETY"
    4="4: ATTEMPTED"
    5="5: NEW WALKING EXCLUSION"
    9="9: NOT ASSIGNED A ZERO SCORE";

    VALUE D_LMLLOC
    1 = '1 Community'
    2 = '2 Residential Care'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

       VALUE D_LOCSP
```

```
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = "1 Independent Living/Housing/Retirement"
         2 = "2 Assisted Living/Personal Care"
         3 = "3 Special Care, Memory or Alzheimer's Unit"
         4 = "4 Nursing Home"
         8 = "8 Not Reported" ;

        VALUE PA25FMT
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    111= '111 Sleeping Napping'
    131= '131 Eating'
    132= '132 Going out to eat'
    199= '199 Other self care activities'
    211= '211 Work and work-related activities'
    221= '221 Other income generating activities'
    241= '241 Volunteering'
    299= '299 Other productive activities'
    321= '321 Shopping for non-durable goods'
    399= '399 Other shopping'
    411= '411 Food and drink preparation'
    434= '434 Outdoor Maintenance'
    439= '439 Household chores (cannot tell if indoor/outdoor)'
    441= '441 Animal and pet care'
    442= '442 Walking and exercising pets'
    449= '449 Other animal and pet care'
    451= '451 Vehicle maintenance and repair'
    471= '471 Financial management'
    499= '499 Other household activities'
    511= '511 Physical care and assistance to others'
    599= '599 Other physical care'
    611= '611 Socializing with others in person'
    612= '612 Socializing with others on the phone'
    616= '616 Socializing and communicating on the computer'
    621= '621 Watching TV and movies'
    631= '631 Doing puzzles or games not on computer or online'
    632= '632 Gambling not online or at a casino'
    636= '636 Doing puzzles or games on a computer or online'
    641= '641 Arts and crafts or hobbies'
    642= '642 Reading'
    643= '643 Writing'
    644= '644 Listening to music'
    646= '646 Computer or online leisure activities'
    651= '651 Smoking or other tobacco use'
    652= '652 Drinking alcohol'
    661= '661 Doing nothing/relaxing'
    669= '669 No activity'
    699= '699 Other non active leisure'
    711= '711 Playing sports'
    712= '712 Walking or jogging'
    713= '713 Other outdoor recreating activities'
    714= '714 Attending sporting events'
    715= '715 Other physical activity, exercise, yoga, swimming, working out,
dancing'
```

```
     718= '718 Watching sporting events'
     721= '721 Attending arts  including plays and concerts'
     723= '723 Attending movies'
     724= '724 Attending casinos'
     737= '737 Travel for leisure'
     799= '799 Other active leisure'
     811= '811 Attending religious activities'
     812= '812 Other religious and spirtual activities'
     821= '821 Attending meetings or events'
     899= '899 Other organizational activity'
     991= '991 Other miscellaneous'
     992= '992 No favorite activity'
     997= '997 Refused'
     998= '998 Dont Know'
     999= '999 Not Codeable';


          VALUE OCC_CODE
1    ='1 Management Occupations: 0010-0430'
2    ='2 Business and Financial Operations Occupations:  0500-0950'
3    ='3 Computer and mathematical occupations:  1000-1240'
4    ='4 Architecture and Engineering Occupations:   1300-1560'
5    ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6    ='6 Community and Social Service Occupations:   2000-2060'
7    ='7 Legal Occupations:  2100-2160'
8    ='8 Education, Training, and Library Occupations:   2200-2550'
9    ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10   ='10 Healthcare Practitioners and Technical Occupations:    3000-3540'
11   ='11 Healthcare Support Occupations:    3600-3655'
12   ='12 Protective Service Occupations:    3700-3955'
13   ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14   ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15   ='15 Personal Care and Service Occupations: 4300-4650'
16   ='16 Sales and Related Occupations: 4700-4965'
17   ='17 Office and Administrative Support Occupations: 5000-5940'
18   ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19   ='19 Construction and Extraction Occupations:   6200-6940'
20   ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21   ='21 Production Occupations:    7700-8965'
22   ='22 Transportation and Material Moving Occupations:    9000-9750'
23   ='23 Military Specific Occupations: 9800-9830'
24   ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';


    Value fl_Dfac
1 = '1 Should have routed as facility but did not'
2 = '2 Routed as facility but determined not facility resident'
```

SAS ALGORITHM FOR DEMENTIA


```
-1 = '-1 Inapplicable';
VALUE PE_RSLT
    -9='-9 Missing'
    -1 = '-1 Inapplicable'
    1='1 Completed'
    2='2 Attempted'
    3='3 Not attempted' ;
VALUE dosfacd /* FOR FQ2dosfacd  */
      -9= "-9 Missing"
      -8 = "-8 DK"
      -1 = "-1 INAPPLICABLE"
       1 = " 1 FREE STANDING NURSING HOME"
       2 = " 2 FREE STANDING ASSISTED LIVING FACILITY / RESIDENTIAL CARE
FACILITY"
       3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
       4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
       5 = " 5 ADULT FAMILY CARE HOME"
       6 = " 6 GROUP HOME"
       7 = " 7 BOARD AND CARE HOME / PERSONAL CARE HOME"
       8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
       9 = " 9 INDEPENDENT LIVING"
      10 = " 10 ASSISTED AND INDEPENDENT/RETIREMENT (NO NURSING HOME)"
      11 = " 11 HOUSING (APT, CONDO, ETC.)";
       ;
    VALUE dosfaca /* FOR FQ2dosfaca */
      -9= "-9 Missing"
      -8 = "-8 DK"
      -1 = "-1 INAPPLICABLE"
       1 = " 1 INDEPENDENT LIVING / HOUSING / RETIREMENT "
       2 = " 2 ASSISTED LIVING / PERSONAL CARE"
       3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
       4 = " 4 NURSING HOME"   ;

VALUE INAP_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -1 = '-1 Inapplicable' ;
VALUE CENDIV /* RE1DCENSDIV - Updated for R2 - Re-Release */
    1 =  '1 Northeast Region: New England Division (ME, NH, VT, MA, RI, CT)'
    2 =  '2 Northeast Region: Middle Atlantic Division (NY, NJ, PA)'
    3 =  '3 Midwest Region: East North Central Division (OH, IN, IL, MI, WI)'
    4 =  '4 Midwest Region: West North Central Division (MN, IA, MO, ND, SD,
NE, KS)'
    5 =  '5 South Region: South Atlantic Division (DE, MD, DC, VA, WV, NC,
SC, GA, FL)'
    6 =  '6 South Region: East South Central Division (KY, TN, AL, MS)'
    7 =  '7 South Region: West South Central Division (AR, LA, OK, TX)'
    8 =  '8 West Region: Mountain Division (MT, ID, WY, CO, NM, AZ, UT, NV)'
    9 =  '9 West Region: Pacific Division (WA, OR, CA, AK, HI)'
    -9 = '-9 Missing';

    VALUE W000002W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 MALE"
```

```
        2 = "2 FEMALE"   ;

    VALUE W000005W
     1 = ' 1 Yes'
     2 = ' 2 No'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE R1DRESID
     1 = '1 Community '
     2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
     3 = '3 Residential Care Resident not nursing home (FQ only)'
     4 = '4 Nursing Home Resident';

  VALUE W200016W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MEDICAID"
    2 = "2 MEDICARE"
    3 = "3 STATE PROGRAM"
   91 = "91 OTHER (SPECIFY)"   ;

    VALUE W200012W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 REGULAR"
    2 = "2 VARIED"  ;

  VALUE W200061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
    8 = "8 OTHER REASON"   ;

  VALUE d2hrsmth
   -13= '-13 Deceased '
   -12= '-12 Zero days/wk'
   -11= '-11 Hours missing'
   -10= '-10 Days missing'
   -9 = ' -9 Days and hrs missing'
   -1 = ' -1 Inapplicable'
   -7 = ' -7 RF'
   -8 = ' -8 DK'
    0-<1  ='<1'
    1-<10 =' 1-<10'
```

```
    10-<20 ='10-<20'
    20-<30 ='20-<30'
    30-<40 ='30-<40'
    40-<60 ='40-<60'
    60-<120 ='60-<120'
    120-<180='120-<180'
    180-744='180-744 (24/7)'
     9999='9999 Not codeable, <1 hour/day' ;

  VALUE dhrsmth
    -11= '-11:hours missing'
    -10= '-10:days missing'
    -9 = '-9:days and hrs missing'
    -1 = '-1 Inapplicable'
    -7 = '-7 RF'
    -8 = '-8 DK'
     0-<1  ='<1'
     1-<10 =' 1-<10'
    10-<20 ='10-<20'
    20-<30 ='20-<30'
    30-<40 ='30-<40'
    40-<60 ='40-<60'
    60-<120 ='60-<120'
    120-<180='120-<180'
    180-744='180-744 (24/7)'
     9999='9999 Not codeable, <1 hour/day' ;

 Value dmissadd
-1='-1 Inapplicable'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section';

Value d2mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
```

```
14='14 no flags and added at IS section';

Value d4mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section'
15='15 no flags and added at HL section'
16='16 no flags and added at SL section';

Value dopage3c
 -9='-9 Missing'
 -8='-8 RF'
 -7='-7 DK'
 -1='-1 Inapplicable'
  1='1 UNDER 30'
  2='2 30-39'
  3='3 40-49'
  4='4 50-59'
  5='5 60-69'
  6='6 70-79'
  7='7 80-89'
  8='8 90 +';

 Value dopagect
-9='-9 Missing'
-8='-8 DK'
-7='-7 RF'
-1='-1 Inapplicable'
 1='1 UNDER 20'
 2='2 20-24'
 3='3 25-29'
 4='4 30-34'
 5='5 35-39'
 6='6 40-44'
 7='7 45-49'
 8='8 50-54'
 9='9 55-59'
10='10 60-64'
11='11 65-69'
12='12 70-74'
13='13 75-79'
14='14 80-84'
15='15 85-89'
16='16 90 +';
```

```
VALUE W200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 UNDER 20"
  2 = "2 20-24"
  3 = "3 25-29"
  4 = "4 30-34"
  5 = "5 35-39"
  6 = "6 40-44"
  7 = "7 45-49"
  8 = "8 50-54"
  9 = "9 55-59"
 10 = "10 60-65"
 11 = "11 66-69"
 12 = "12 70-74"
 13 = "13 75-79"
 14 = "14 80-85"
 15 = "15 86-89"
 16 = "16 90-94"
 17 = "17 95-99"
 18 = "18 100 +"
;
  VALUE NumCigs
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
 999 = '999 SP smokes less than 1 cigarette / day';


  VALUE dlmlint
  1 = '1 Last month of life interview'
 -1 = '-1 Inapplicable'     ;

VALUE d2intvra
   1 = '1 65 to 69'
   2 = '2 70 to 74'
   3 = '3 75 to 79'
   4 = '4 80 to 84'
   5 = '5 85 to 89'
   6 = '6 90+'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'       ;

VALUE dad8dem
  1 = '1 DEMENTIA RESPONSE TO ANY AD8 ITEMS IN PRIOR ROUNDS'
 -1 = '-1 Inapplicable'    ;

VALUE dwrdinon
1 = '1 NO WORDS REMEMBERED'
 -1 = '-1 Inapplicable'
```

```
     -9 = '-9 Missing'      ;

  VALUE dwrdirre
    1 = '1 REFUSED WORD RECALL TASK'
   -1 = '-1 Inapplicable'
     -9 = '-9 Missing'      ;

 VALUE A0001AB
     1 = "1 AM"
     2 = "2 PM"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0002WA
     1 = "1 Yes, there is space to set up the walking course"
     2 = "2 No, there is not space to set up the walking course"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0004WA
     1 = "1 None"
     2 = "2 Cane"
     3 = "3 Walker or rollator"
     9 = "9 Other, specify"
    -1 = '-1 Inapplicable'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -9 = '-9 Missing';

 VALUE A0004CH
     1 = "1 No, chair stand not completed"
     2 = "2 Yes, chair stand completed"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0008CH
     1 = "1 With arms"
     2 = "2 Without arms"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE A0014CH
     1 = "1 1 Chair stand completed"
     2 = "2 2 Chair stands completed"
     3 = "3 3 Chair stands completed"
     4 = "4 4 Chair stands completed"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1SS
    1 = '1 Eligible and recorded result for SxS Balance'
    2 = '2 Eligible and no recorded result for SxS Balance'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1STAN
```

```
      1 = '1 Eligible and recorded result for Semi Tandem Balance'
      2 = '2 Eligible and no recorded result for Semi Tandem Balance'
      3 = '3 Not administered because did not complete prior balance test'
      4 = '4 Not Eligible due to exclusion criteria'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE BA1TAN
      1 = '1 Eligible and recorded result for full tandem balance'
      2 = '2 Eligible and no recorded result for full tandem balance'
      3 = '3 Not administered because did not complete prior balance tests'
      4 = '4 Not Eligible due to exclusion criteria'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE BA1OP
      1 = '1 Eligible and recorded result for one leg eyes open balance'
      2 = '2 Eligible and no recorded result for one leg eyes open balance'
      3 = '3 Not administered because did not complete prior balance tests'
      4 = '4 Not Eligible due to exclusion criteria'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE BA1CL
      1 = '1 Eligible and recorded result for one leg eyes closed balance'
      2 = '2 Eligible and no recorded result for one leg eyes closed balance'
      3 = '3 Not administered because did not complete prior balance tests'
      4 = '4 Not Eligible due to exclusion criteria'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE WA1WLK
      1 = '1 Eligible and recorded result for walking course'
      2 = '2 Eligible and no recorded result for walking course'
      4 = '4 Not Eligible due to exclusion criteria'
      5 = '5 Not Eligible on exclusion criteria but recorded result (SP changed
mind)'
     -1 = '-1 Inapplicable '
     -9 = '-9 Missing';

VALUE CH1SCH
      1 = '1 Eligible and recorded result for single chair stand'
      2 = '2 Eligible and no recorded result for single chair stand'
      4 = '4 Not Eligible due to exclusion criteria'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE CH1RSH
      1 = '1 Eligible and recorded result for repeated chair stand'
      2 = '2 Eligible and no recorded result for repeated chair stand'
      3 = '3 Not administered because did not complete single chair stand w/o
arms'
      4 = '4 Not Eligible due to exclusion criteria'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE GR1GRIP
```

```
    1 = '1 Eligible and recorded result for grip strength'
    2 = '2 Eligible and no recorded result for grip strength'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WC1WAIST
    1 = '1 Eligible and recorded result for waist circumference'
    2 = '2 Eligible and no recorded result for waist circumference'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE PK1PEAK
    1 = '1 Eligible and recorded result for peak air flow'
    2 = '2 Eligible and no recorded result for peak air flow'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE RGT_LFT
   1 = '1 Right'
   2 = '2 Left'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

 VALUE PERSON
    1 = '1 Interviewer'
    2 = '2 Sample person'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE STAND
    1 = '1 Standing'
    2 = '2 Sitting'
    3 = '3 Lying down'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE EFFORT
     1 = '1 Full effort'
     2 = '2 Less effort for health reason'
     3 = '3 Less effort for other reason'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
    VALUE WORDREC
        1 = ' 1 LIST 1'
        2 = ' 2 LIST 2'
        3 = ' 3 LIST 3'
       -1 = '-1 Inapplicable '
       -9 = '-9 Missing';
    VALUE WORDRE_N
       -1 = '-1 Inapplicable'
       -2 = '-2 Proxy says cannot ask SP'
       -3 = '-3 Proxy says can ask SP but SP unable to answer'
       -7 = '-7 SP refused activity'
       -9 = '-9 Missing';

       VALUE  DMH_GRP
```

```
       1 = "1 Help started"
       2 = "2 Help ended"
       3 = "3 Help both interviews with gap"
       4 = "4 Help both interviews with no gap"
       5 = "5 Help between interviews only (month ended missing)"
       6 = "6 No help either interview or between"
      11 = "11 Help started (month started missing)"
      21 = "21 Help ended (month ended missing)"
      41 = "41 Help both interviews (DK whether gap)"
      61 = "61 No help either interview (DK whether help between)"
      -9 = "-9 Missing"
      -1 = "-1 Inapplicable"
    -999 = "-999 Not determined" ;

   VALUE   DMU_GRP
       1 = "1 Use started"
       2 = "2 Use ended"
       3 = "3 Use both interviews with gap"
       4 = "4 Use both interviews with no gap"
       5 = "5 Use between interviews only (month ended missing)"
       6 = "6 No use either interview or between"
      11 = "11 Use started (month started missing)"
      21 = "21 Use ended (month ended missing)"
      41 = "41 Use both interviews (DK whether gap)"
      61 = "61 No use either interview (DK whether use between)"
      -9 = "-9 Missing"
      -1 = "-1 Inapplicable"
    -999 = "-999 Not determined" ;

   VALUE   DS_GRP
       1 = "1 Help started"
       2 = "2 Help ended"
       3 = "3 Help both interviews with gap"
       4 = "4 Help both interviews with no gap"
       5 = "5 Help between interviews only"
       6 = "6 No help either interview or between"
      11 = "11 Help started (month started missing)"
      21 = "21 Help ended (month ended missing)"
      41 = "41 Help both interviews (DK whether gap)"
      61 = "61 No help either interview (DK whether help between)"
      -9 = "-9 Missing"
      -1 = "-1 Inapplicable"
    -999 = "-999 Not determined" ;

   VALUE   DMDSINTV
       0 = "0 Less than 1 month"
       1 = "1 Month"
       2 = "2 Months"
       3 = "3 Months"
       4 = "4 Months"
       5 = "5 Months"
       6 = "6 Months"
       7 = "7 Months"
       8 = "8 Months"
       9 = "9 Months"
      10 = "10 Months"
      11 = "11 Months"
```

```
        12 = "12 Months"
        13 = "13 Months"
        14 = "14 Months"
        15 = "15 Months"
        16 = "16 Months"
        17 = "17 Months"
        18 = "18 Months"
        19 = "19 Months"
        20 = "20 Months"
        90 = "90 Last round disputed"
        -1 = "-1 Inapplicable"
        -7 = "-7 Refused"
        -8 = "-8 Dont know"
        -9 = "-9 Missing" ;

    VALUE   DMDS_DUR
         0 = "0 Less than 1 month"
         1 = "1 Month"
         2 = "2 Months"
         3 = "3 Months"
         4 = "4 Months"
         5 = "5 Months"
         6 = "6 Months"
         7 = "7 Months"
         8 = "8 Months"
         9 = "9 Months"
        10 = "10 Months"
        11 = "11 Months"
        12 = "12 Months"
        13 = "13 Months"
        14 = "14 Months"
        15 = "15 Months"
        16 = "16 Months"
        17 = "17 Months"
        90 = "90 Last round disputed"
        -1 = "-1 Inapplicable"
        -7 = "-7 Refused"
        -8 = "-8 Dont know"
        -9 = "-9 Missing"
       -10 = "-10 Not ascertained"
       -12 = "-12 Outside of range"
       -13 = "-13 None" ;

    VALUE   DMDSFLG
        -1 = "-1 Inapplicable"
         1 = "1 No SP interview last round"
         2 = "2 Died and month death missing"
         3 = "3 Died <=1 month after last interview"
         4 = "4 Died 12-13 months after last interview"
         5 = "5 Died and not mobile (fl2notmobile=1)"
         6 = "6 Died and not alert (fl2notalert =1)"
         7 = "7 Skipped 1 or more help questions" ;
VALUE SP30051W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
```

```
    1 = "1 EXCELLENT"
    2 = "2 VERY GOOD"
    3 = "3 GOOD"
    4 = "4 FAIR"
    5 = "5 POOR"
    6 = "6 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"
  ;
    VALUE SP3019aW
       -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 JANUARY"
   2 = "2 FEBRUARY"
   3 = "3 MARCH"
   4 = "4 APRIL"
   5 = "5 MAY"
   6 = "6 JUNE"
   7 = "7 JULY"
   8 = "8 AUGUST"
   9 = "9 SEPTEMBER"
  10 = "10 OCTOBER"
  11 = "11 NOVEMBER"
  12 = "12 DECEMBER"
  90 = "90 LAST INTERVIEW INFORMATION INCORRECT"
  ;
  VALUE RACEHISP
        1 = ' 1 White, non-hispanic'
        2 = ' 2 Black, non-hispanic'
        3 = ' 3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic'
        4 = ' 4 Hispanic'
        5 = ' 5 More than one DKRF primary'
        6 = ' 6 DKRF'
       -9 = '-9 Missing';

/* The following may not need to be included on the public release file but
are
        needed for internal Westat File processing  */

    VALUE SPPB_MISSING
       -7 = '-7 RF'
  -8 = '-8 DK'
  -9 = '-9 Missing'
  -1="-1 Inapplicable"
  1="1 PROXY INTERVIEW"
  2="2 MISSING WALK AND REPEAT CHAIR AND BALANCE"
  3="3 MISSING WALK AND REPEAT CHAIR"
  4="4 MISSING WALK AND BALANCE"
  5="5 MISSING REPEAT CHAIR AND BALANCE"
  6="6 MISSING WALK"
  7="7 MISSING REPEAT CHAIR"
  8="8 MISSING BALANCE"
  9="9 NO SPACE"
  10="10 NO CHAIR"
  11="11 NO SPACE WALK AND NO CHAIR"
  12="12 NO SPACE WALK AND NON-SAFETY MISSING"
```

```
    13="13 NO CHAIR AND NON-SAFETY MISSING"
    14="14 NON-SAFETY WALK"
    15="15 NON-SAFETY CHAIR"
    16="16 NON-SAFETY BALANCE"
    17="17 NON-SAFETY WALK AND CHAIR"
    18="18 NON-SAFETY WALK AND BALANCE"
    19="19 NON-SAFETY CHAIR AND BALANCE"
    20="20 NON SAFETY WALK AND CHAIR AND BALANCE";

    VALUE QUARTILES
-9="-9 Missing"
-1="-1 Inapplicable"
;

  VALUE SP30025W
     -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
   2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
   3 = "3 MOBILE HOME OR TRAILER"
   4 = "4 MULTI-UNIT (2+) BUILDING"
   91 = "91 OTHER (SPECIFY)"
  ;
  VALUE SP30046W
     -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
    1 = "1 AT SP'S HOME"
    2 = "2 IN A HOSPITAL"
    3 = "3 IN A NURSING HOME"
    4 = "4 IN A HOSPICE RESIDENCE"
    5 = "5 AT SOMEONE ELSE'S HOME"
    91 = "91 SOMEWHERE ELSE (SPECIFY)"
  ;
  VALUE SP30076W
     -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 YES, DOESNT KNOW HOW TO USE"
  ;
  VALUE W300151W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1 = "1 VERY GOOD"
    2 = "2 GOOD"
    3 = "3 FAIR"
    4 = "4 POOR"
   5 = "5 VERY POOR"  ;
```

```
    VALUE SP30076H
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
    95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM DAY TO DAY"  ;
    VALUE SP30076G
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
    95 = "95 NO USUAL TIME OR DIFFERENT FROM DAY TO DAY"  ;
        VALUE SP30076I
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
        95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM NIGHT TO NIGHT"
;
        VALUE SP30076J
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
        95 = "95 NO USUAL TIME OR DIFFERENT FROM NIGHT TO NIGHT"  ;
        VALUE SP30076K
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          0 = "0 LESS THAN AN HOUR"
        90 = "90 FELL ASLEEP RIGHT AWAY"
        95 = "95 NO USUAL AMOUNT OF TIME TO FALL ASLEEP OR DIFFERENT FROM
NIGHT TO NIGHT"  ;
        VALUE SP30155W
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          1 = "1 NAPS PLANNED"
          2 = "2 FELL ASLEEP WITHOUT MEANING TO"
          3 = "3 BOTH (SOME PLANNED/SOME NOT)"
  ;
  VALUE SP30120W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 OFTEN"
    2 = "2 SOMETIMES"
    3 = "3 RARELY"
    4 = "4 NEVER"  ;
Value HOURSF
 -13='-13 SP deceased/section not administered'
 -12='-12 Valid skip/staff'
 -11='-11 Hours missing'
```

```
 -10='-10 Days missing'
  -9='-9 Days and hrs missing'
  -1='-1 Inapplicable'
 0-  1='0-<1'
 1.01- 10='1-<10'
10.01- 20='10-<20'
20.01- 30='20-<30'
30.01-40='30-<40'
40.01-60='40-<60'
60.01-120='60-<120'
120.01-180='120-<180'
180.01-744='180-744 (24/7)'
9999='9999 Not codeable, <1 hour/day';
  VALUE SP30120W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 OFTEN"
    2 = "2 SOMETIMES"
    3 = "3 RARELY"
    4 = "4 NEVER"
  ;
  VALUE SP30118W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 A LOT"
    2 = "2 SOME"
    3 = "3 A LITTLE"
    4 = "4 NOT AT ALL"
  ;
  VALUE SP30141W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "less than $27,600,"
    2 = "$27,600-$41,999,"
    3 = "$42,000-$63,999,"
    4 = "$64,000-$107,999, or"
    5 = "$108,000 or more?"
  ;

  VALUE SP30142W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "less than $14,000,"
    2 = "$14,000-$21,999,"
    3 = "$22,000-$35,999,"
    4 = "$36,000-$48,999, or"
    5 = "$49,000 or more?"
  ;
  VALUE INVENT
```

SAS ALGORITHM FOR DEMENTIA

```
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
          104="104-Arthritis"
          107="107-Lung Disease"
          109="109-Dementia or Alzheimer's disease"
          110="110-Cancer"
          113="113-Other serious disease, illness, health problem"
          114="114-Knee surgery/problem"
          115="115-Hip repair or replacement/problem"
          117="117-Back or Spine Surgery/problem"
          121="121-Sleep Problems"
          201="201-Hearing problems"
          202="202-Sight problems"
          205="205-Pain"
          301="301-Breathing problems"
          302="302-Upper body strength movement"
          303="303-Lower body strength movement"
          304="304-Low energy"
          305="305-Balance or coordination problems"
          306="306-Walking distances"
          307="307-Climbing stairs"
          308="308-Lifting and carrying items"
          309="309-Kneeling"
          310="310-Bending"
          311="311-Reaching"
          312="312-Opening Jars"
          313="313-Grasping"
          401="401-Memory"
          501="501-Getting out of bed"
          502="502-Getting around inside"
          503="503-Getting outside"
          504="504-Travel/transportation"
          601="601-Eating"
          602="602-Washing"
          603="603-Toileting"
          604="604-Dressing"
          605="605-Grooming"
          701="701-Laundry"
          702="702-Shopping"
          703="703-Cooking"
          705="705-Money matters"
          706="706-Indoor cleaning and maintenance"
          707="707-Outdoor cleaning and maintenance"
          801="801-Medications"
          802="802-Doctor visits"
          804="804-Other medical self-care"
          1211="1211-Working"
          1442="1442-Walking/exercising pets"
          1451="1451-Vehicle repair and maintenance"
          1461="1461-Appliance tool, and toy use, set-up, repair, &
maintenance"
          1462="1462-Computer use, set-up, repair, maintenance, and
education"
          1473="1473-Household organization"
          1512="1512-Looking after someone else"
```

```
            1611="1611-Socializing and communicating with others-in person"
            1612="1612-Socializing and communication with others by talking
on telephone"
            1613="1613-Attending or hosting party, wedding or social
occasions"
            1614="1614-Reading and sorting through the mail"
            1621="1621-Watch television and movies"
            1631="1631-Games & puzzles"
            1641="1641-Arts and crafts, collecting, and hobbies, making
music"
            1642="1642-Reading"
            1643="1642-Writing (personal, not on computer)"
            1644="1644-Listening to recorded music or radio"
            1711="1711-Playing/practicing sports or taking physical activity
class/lessons"
            1712="1712-Walking/jogging for exercise or pleasure or working
out"
            1713="1713-Other outdoor recreation activities"
            1813="1813-Religious & spiritual volunteer activities"
            1901="1901-Other, no existing code"
            1998="1998-Don't know"
            1999="1999-Refused/blank";

VALUE Imp_Flg
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    0 = "0 No"
    1 = "1 Yes"  ;

        VALUE  DMH_GRP
           1 = "1 Help started"
           2 = "2 Help ended"
           3 = "3 Help both interviews with gap"
           4 = "4 Help both interviews with no gap"
           5 = "5 Help between interviews only (month ended missing)"
           6 = "6 No help either interview or between"
          11 = "11 Help started (month started missing)"
          21 = "21 Help ended (month ended missing)"
          41 = "41 Help both interviews (DK whether gap)"
          61 = "61 No help either interview (DK whether help between)"
          -9 = "-9 Missing"
          -1 = "-1 Inapplicable"
        -999 = "-999 Not determined" ;

        VALUE  DMU_GRP
           1 = "1 Use started"
           2 = "2 Use ended"
           3 = "3 Use both interviews with gap"
           4 = "4 Use both interviews with no gap"
           5 = "5 Use between interviews only (month ended missing)"
           6 = "6 No use either interview or between"
          11 = "11 Use started (month started missing)"
          21 = "21 Use ended (month ended missing)"
          41 = "41 Use both interviews (DK whether gap)"
          61 = "61 No use either interview (DK whether use between)"
```

```
        -9 = "-9 Missing"
        -1 = "-1 Inapplicable"
      -999 = "-999 Not determined" ;

    VALUE  DS_GRP
         1 = "1 Help started"
         2 = "2 Help ended"
         3 = "3 Help both interviews with gap"
         4 = "4 Help both interviews with no gap"
         5 = "5 Help between interviews only"
         6 = "6 No help either interview or between"
        11 = "11 Help started (month started missing)"
        21 = "21 Help ended (month ended missing)"
        41 = "41 Help both interviews (DK whether gap)"
        61 = "61 No help either interview (DK whether help between)"
        -9 = "-9 Missing"
        -1 = "-1 Inapplicable"
      -999 = "-999 Not determined" ;

    VALUE  DMDSINTV
         0 = "0 Less than 1 month"
         1 = "1 Month"
         2 = "2 Months"
         3 = "3 Months"
         4 = "4 Months"
         5 = "5 Months"
         6 = "6 Months"
         7 = "7 Months"
         8 = "8 Months"
         9 = "9 Months"
        10 = "10 Months"
        11 = "11 Months"
        12 = "12 Months"
        13 = "13 Months"
        14 = "14 Months"
        15 = "15 Months"
        16 = "16 Months"
        17 = "17 Months"
        18 = "18 Months"
        19 = "19 Months"
        20 = "20 Months"
        21 = "21 Months"
        22 = "22 Months"
        23 = "23 Months"
        24 = "24 Months"
        90 = "90 Last round disputed"
        -1 = "-1 Inapplicable"
        -7 = "-7 Refused"
        -8 = "-8 Dont know"
        -9 = "-9 Missing" ;

    VALUE  DMDS_DUR
         0 = "0 Less than 1 month"
         1 = "1 Month"
         2 = "2 Months"
         3 = "3 Months"
         4 = "4 Months"
```

```
        5 = "5 Months"
        6 = "6 Months"
        7 = "7 Months"
        8 = "8 Months"
        9 = "9 Months"
       10 = "10 Months"
       11 = "11 Months"
       12 = "12 Months"
       13 = "13 Months"
       14 = "14 Months"
       15 = "15 Months"
       16 = "16 Months"
       17 = "17 Months"
       90 = "90 Last round disputed"
       -1 = "-1 Inapplicable"
       -7 = "-7 Refused"
       -8 = "-8 Dont know"
       -9 = "-9 Missing"
      -10 = "-10 Not ascertained"
      -12 = "-12 Outside of range"
      -13 = "-13 None"
     -999 = "-999 Not determined" ;

     VALUE   DMDSFLG
        -1 = "-1 Inapplicable"
         1 = "1 No SP interview last round"
         2 = "2 Died and month death missing"
         3 = "3 Died <=1 month after last interview"
         4 = "4 Died 12-13 months after last interview"
         5 = "5 Died and not mobile (fl2notmobile=1)"
         6 = "6 Died and not alert (fl2notalert =1)"
         7 = "7 Skipped 1 or more help questions" ;

     VALUE   DMDS3FLG
        -1 = "-1 Inapplicable"
         1 = "1 No SP interview last round"
         2 = "2 Died and month death missing"
         3 = "3 Died <=1 month after last interview"
         4 = "4 Died 12-13 months after last interview"
         5 = "5 Died and not mobile (fl3notmobile=1)"
         6 = "6 Died and not alert (fl3notalert =1)"
         7 = "7 Skipped 1 or more help questions" ;

     VALUE   DMDS4FLG
        -1 = "-1 Inapplicable"
         1 = "1 No SP interview last round"
         2 = "2 Died and month death missing"
         3 = "3 Died <=1 month after last interview"
         4 = "4 Died 12-13 months after last interview"
         5 = "5 Died and not mobile (fl4notmobile=1)"
         6 = "6 Died and not alert (fl4notalert =1)"
         7 = "7 Skipped 1 or more help questions" ;
run;

/*=================================================================*/

/* NHATS_Round_5_Combined_PROC_FORMAT_Statement.sas */
```

# SAS ALGORITHM FOR DEMENTIA

```sas
PROC FORMAT ;


    VALUE release
         -1 = '-1 Inapplicable'
          1 = '1 Main Sample'
          2 = '2 Reserve Sample'
          9 = '9 New Release Sample';

    VALUE STAT_DTa
          4 = " 4 April"
          5 = " 5 May"
          6 = " 6 June"
          7 = " 7 July"
          8 = " 8 August"
          9 = " 9 September"
         10 = "10 October"
         11 = "11 November"
         99 = "99 Prior to start of field work"
         -1 = '-1 Inapplicable';

    VALUE $DISP
         '10' = "10 Not Available "
         '11' = "11 Ready"
         '12' = "12 Started "
         '20' = "20 Final "
         '24' = "24 Not Required "
         '60' = "60 Complete "
         '61' = "61 Complete, NH facility"
         '62' = "62 Complete SP Deceased, Proxy Intv"
         '63' = "63 Complete SP, FQ not complete"
         '64' = "64 Complete FQ, SP not complete"
         '75' = "75 Physically/mentally unable to participate, no proxy"
         '76' = "76 Too ill to participate, no proxy"
         '77' = "77 Refusal, SP"
         '78' = "78 Language barrier"
         '79' = "79 Unable to locate"
         '80' = "80 Unavailable during field period"
         '82' = "82 Outside of PSU"
         '83' = "83 Ineligible"
         '85' = "85 Refusal, facility"
         '86' = "86 Deceased"
         '87' = "87 Refusal, proxy"
         '88' = "88 Work stopped"    ;

VALUE DISP_a
         10 = "10 Not Available"
         11 = "11 Ready"
         12 = "12 Started"
         20 = "20 Final"
         24 = "24 Not Required"
         60 = "60 Complete"
         61 = "61 Complete, NH facility"
         62 = "62 Complete SP Deceased, Proxy Intv"
         63 = "63 Complete SP, FQ not complete"
         64 = "64 Complete FQ, SP not complete "
```

```
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"      ;

    VALUE DISP_
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required";

    VALUE DISP_F
     -1 = '-1 Inapplicable'
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required"
        60 = "60 Complete"
        61 = "61 Complete, NH facility"
        62 = "62 Complete SP Deceased, Proxy Intv"
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
            81 = "81 Final deceased, new sample only"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"
        89 = "89 Final, Other Specify";

    VALUE RFDK
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE $RFDK_F
    '-7' = '-7 RF'
    '-8' = '-8 DK'
    '-1' = '-1 Inapplicable'
```

```
        '-9' = '-9 Missing';

        VALUE RFDK_F
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

   VALUE RFDK_I
        0 = ' 0 No'
        1 = ' 1 Yes'
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

   VALUE RFDK_B
       -1 = '-1 Inapplicable'
        1 = '1 Yes-Breakoff';

   VALUE $RFDK_C
       '-1' = '-1 Inapplicable'
       'CL' ='CL - Closing'
       'EW' ='EW - Economic Well-Being'
       'FQ' ='FQ - Facility Questionnaire'
       'HL' ='HL - Helper'
       'HW' ='HW - Height and Weight'
       'IP' ='IP - Insurance Plans'
       'LF' ='LF - Labor Force'
       'PA' ='PA - Participation'
       'PE' ='PE - Performance'
       'WB' ='WB - Well-being' ;

   VALUE $RFDK_2C
       '-1' = '-1 Inapplicable'
       '-7' = '-7 RF'
       '-8' = '-8 DK'
       '-9' = '-9 Missing';

        VALUE RFDK_Y
        1 = ' 1 Yes'
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

        VALUE RFDK_YN
        1 = ' 1 Yes'
        2 = ' 2 No'
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

        VALUE DSTRP_G
       -7 = '-7 RF'
       -8 = '-8 DK'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 =  '1 X condition and word color condition accuracy below threshold
(less than .42)'
     2 =  '2 word condition only below threshold (less than .42)'
     3 =  '3 X condition and word color condition meet criteria for accuracy'
     4 =  '4 fewer than 50% of X and word color condition trials answered'
    999 = '999 X condition only below threshold (less than .42)';

    VALUE DSTRP_R
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -999 = '-999 Inapplicable'
    other = 'Values ranging between -.353 and 1.115';

    VALUE DSTRP_M
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -999 = '-999 Inapplicable'
    other = 'Values ranging between -544.732 and 924.863';

VALUE FQ_4F
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
          1='1 YES'
          2='2 NO';

  VALUE CHILDDEC
    1 =  '1 CHILD DECEASED'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE W200001W
    12 = "12 STARTED"
    20 = "20 COMPLETE"
    21 = "21 INELIGIBLE - NOT 65+"   ;

  VALUE W200008x
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1 = "1 UNDER 20"
    2 = "2 20-24"
    3 = "3 25-29"
    4 = "4 30-34"
    5 = "5 35-39"
    6 = "6 40-44"
    7 = "7 45-49"
    8 = "8 50-54"
    9 = "9 55-59"
```

```
    10 = "10 60-64"
    11 = "11 65-69"
    12 = "12 70-74"
    13 = "13 75-79"
    14 = "14 80-84"
    15 = "15 85-89"
    16 = "16 90 +";

  VALUE W200009W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SAMPLE PERSON"
    2 = "2 SPOUSE/ PARTNER"
    3 = "3 DAUGHTER"
    4 = "4 SON"
    5 = "5 DAUGHTER-IN-LAW"
    6 = "6 SON-IN-LAW"
    7 = "7 STEPDAUGHTER"
    8 = "8 STEPSON"
    9 = "9 SISTER"
   10 = "10 BROTHER"
   11 = "11 SISTER-IN-LAW"
   12 = "12 BROTHER-IN-LAW"
   13 = "13 MOTHER"
   14 = "14 STEPMOTHER"
   15 = "15 MOTHER-IN-LAW"
   16 = "16 FATHER"
   17 = "17 STEPFATHER"
   18 = "18 FATHER-IN-LAW"
   19 = "19 GRANDDAUGHTER"
   20 = "20 GRANDSON"
   21 = "21 NIECE"
   22 = "22 NEPHEW"
   23 = "23 AUNT"
   24 = "24 UNCLE"
   25 = "25 COUSIN"
   26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
   27 = "27 STEPSON'S SON/ DAUGHTER"
   28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
   29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
   30 = "30 BOARDER/RENTER"
   31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
   32 = "32 ROOMMATE"
   33 = "33 EX-WIFE/ EX-HUSBAND"
   34 = "34 BOYFRIEND/ GIRLFRIEND"
   35 = "35 NEIGHBOR"
   36 = "36 FRIEND"
   37 = "37 SOMEONE/SERVICE AT THE PLACE SP LIVES/LIVED"
   38 = "38 CO-WORKER"
   39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
   40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
   41 = "41 DECEASED SPOUSE/PARTNER"
   91 = "91 OTHER RELATIVE"
   92 = "92 OTHER NONRELATIVE"   ;
```

SAS ALGORITHM FOR DEMENTIA

```
    VALUE W200002W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MALE"
     2 = "2 FEMALE";

    VALUE W200005W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 NO SCHOOLING COMPLETED"
     2 = "2 1ST-8TH GRADE"
     3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
     4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
     5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
     6 = "6 SOME COLLEGE BUT NO DEGREE"
     7 = "7 ASSOCIATE'S DEGREE"
     8 = "8 BACHELOR'S DEGREE"
     9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"  ;

   VALUE W200010W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MARRIED"
     2 = "2 LIVING WITH A PARTNER"
     3 = "3 SEPARATED"
     4 = "4 DIVORCED"
     5 = "5 WIDOWED"
     6 = "6 NEVER MARRIED";

   VALUE W200011W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 PREVIOUSLY REPORTED"  ;
VALUE W200012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 REGULAR"
     2 = "2 VARIED"  ;

   VALUE W200013W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
```

```
      1 = "1 SP AND/OR FAMILY"
      2 = "2 GOVERNMENT PROGRAM"
      3 = "3 INSURANCE"
      91 = "91 OTHER (SPECIFY)"    ;

   VALUE W200015W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1='1 HOURLY'
     2='2 WEEKLY'
     3='3 MONTHLY'
     4='4 DID NOT PAY IN LAST MONTH'
        91 = "91 OTHER (SPECIFY)"    ;

   VALUE W200016W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MEDICAID"
     2 = "2 MEDICARE"
     3 = "3 STATE PROGRAM"
     91 = "91 OTHER (SPECIFY)"    ;

   VALUE W200018W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
     2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
     3 = "3 MOBILE HOME OR TRAILER"
     4 = "4 MULTI-UNIT (2+) BUILDING"
     91 = "91 OTHER (SPECIFY)"  ;

   VALUE W200020W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 HOME"
     2 = "2 MULTI-UNIT"
     3 = "3 OTHER"  ;

   VALUE W200021W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 BUILDING HAS ONE FLOOR"
     2 = "2 BUILDING HAS MULTIPLE FLOORS"    ;

   VALUE W200022W
    -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOME"
  2 = "2 APARTMENT"
  3 = "3 ROOM"
  4 = "4 UNIT"
  5 = "5 SUITE"
  6 = "6 SOMETHING ELSE (SPECIFY)"  ;

VALUE W200030W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SAMPLE PERSON (SP)"
  2 = "2 PROXY"  ;

VALUE W200032W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOSPITAL"
  2 = "2 NURSING HOME/REHAB CENTER"
 91 = "91 OTHER (SPECIFY)"  ;

VALUE W200035W
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SELF"
  2 = "2 SPOUSE/ PARTNER"
  3 = "3 DAUGHTER"
  4 = "4 SON"
  5 = "5 DAUGHTER-IN-LAW"
  6 = "6 SON-IN-LAW"
  7 = "7 STEPDAUGHTER"
  8 = "8 STEPSON"
  9 = "9 SISTER"
 10 = "10 BROTHER"
 11 = "11 SISTER-IN-LAW"
 12 = "12 BROTHER-IN-LAW"
 13 = "13 MOTHER"
 14 = "14 STEPMOTHER"
 15 = "15 MOTHER-IN-LAW"
 16 = "16 FATHER"
 17 = "17 STEPFATHER"
 18 = "18 FATHER-IN-LAW"
 19 = "19 GRANDDAUGHTER"
 20 = "20 GRANDSON"
 21 = "21 NIECE"
 22 = "22 NEPHEW"
 23 = "23 AUNT"
 24 = "24 UNCLE"
 25 = "25 COUSIN"
 26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
 27 = "27 STEPSON'S SON/ DAUGHTER"
```

```
     28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
     29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
     30 = "30 BOARDER/RENTER"
     31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
     32 = "32 ROOMMATE"
     33 = "33 EX-WIFE/ EX-HUSBAND"
     34 = "34 BOYFRIEND/ GIRLFRIEND"
     35 = "35 NEIGHBOR"
     36 = "36 FRIEND"
     37 = "37 SOMEONE/SERVICE FROM THE PLACE SP LIVES/DIED"
     38 = "38 CO-WORKER"
     39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
     40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
     91 = "91 OTHER RELATIVE"
     92 = "92 OTHER NONRELATIVE"  ;

  VALUE W200036W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 VERY FAMILIAR"
    2 = "2 SOMEWHAT FAMILIAR"
    3 = "3 A LITTLE FAMILIAR"
    4 = "4 NOT AT ALL FAMILIAR"  ;

  VALUE W200037W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES, SAME ADDRESS"
    2 = "2 NO, DIFFERENT ADDRESS"
    3 = "3 YES, SAME ADDRESS WITH MINOR CORRECTIONS"  ;

  VALUE W200038W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 JANUARY"
    2 = "2 FEBRUARY"
    3 = "3 MARCH"
    4 = "4 APRIL"
    5 = "5 MAY"
    6 = "6 JUNE"
    7 = "7 JULY"
    8 = "8 AUGUST"
    9 = "9 SEPTEMBER"
   10 = "10 OCTOBER"
   11 = "11 NOVEMBER"
   12 = "12 DECEMBER"  ;

  VALUE W200039W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
```

```
  -9 = '-9 Missing'
   1 = "1 2011"
   2 = "2 2012"
   3 = "3 YEAR2013"
   4 = "4 YEAR2014"
   5 = "5 YEAR2015"
   6 = "6 YEAR2016"
   7 = "7 YEAR2017"
   8 = "8 YEAR2018"
   9 = "9 YEAR2019"
  10 = "10 YEAR2020"  ;

VALUE W200040W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"  ;

VALUE W200041W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AT SPS OR SOMEONE ELSES HOME"
  2 = "2 IN A HOSPITAL"
  3 = "3 IN A NURSING HOME"
  4 = "4 IN A HOSPICE RESIDENCE"
  5 = "5 IN TRANSIT (AMBULANCE TO HOSPITAL)"
 91 = "91 SOMEWHERE ELSE (SPECIFY)";

VALUE W200042W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP'S HOME"
  2 = "2 SOMEONE ELSE'S HOME"  ;

VALUE W200043W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INTENSIVE CARE UNIT"
  2 = "2 PALLIATIVE CARE UNIT"
  3 = "3 INPATIENT HOSPICE UNIT"
  4 = "4 EMERGENCY ROOM"
  5 = "5 ANOTHER KIND OF UNIT"  ;

VALUE W200044W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOSPICE AT A HOSPITAL"
```

```
      2 = "2 HOSPICE AT A NURSING HOME"
      3 = "3 RESIDENTIAL HOSPICE"
      4 = "4 OTHER HOSPICE"   ;

   VALUE W200045W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 DAYS"
     2 = "2 WEEKS"
     3 = "3 MONTHS"
     4 = "4 YEARS"   ;

   VALUE W200046W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 AT SP'S HOME"
     2 = "2 IN A HOSPITAL"
     3 = "3 IN A NURSING HOME"
     4 = "4 IN A HOSPICE RESIDENCE"
    91 = "91 SOMEWHERE ELSE (SPECIFY)"   ;

   VALUE W200047W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EVERY DAY"
     2 = "2 MOST DAYS"
     3 = "3 SOME DAYS"
     4 = "4 RARELY"
     5 = "5 NOT AT ALL"   ;

   VALUE W200048W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN WAS NEEDED"
     2 = "2 MORE THAN WAS NEEDED"
     3 = "3 ABOUT RIGHT AMOUNT"   ;

   VALUE W200049W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     3 = "3 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"   ;

   VALUE W200050W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 ALWAYS"
   2 = "2 USUALLY"
   3 = "3 SOMETIMES"
   4 = "4 NEVER"
   5 = "5 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

 VALUE W200051W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EXCELLENT"
   2 = "2 VERY GOOD"
   3 = "3 GOOD"
   4 = "4 FAIR"
   5 = "5 POOR"  ;

 VALUE W200052W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 NOT AT ALL"
   2 = "2 SEVERAL DAYS"
   3 = "3 MORE THAN HALF THE DAYS"
   4 = "4 NEARLY EVERY DAY"  ;

 VALUE W200053W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
   2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
   3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
   4 = "4 RARELY (ONCE A WEEK OR LESS)"
   5 = "5 NEVER"  ;

 VALUE W200054W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
   2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
   3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
   4 = "4 RARELY (ONCE A WEEK OR LESS)"
   5 = "5 NEVER"
   7 = "7 DON'T WAKE UP/NOT A PROBLEM"  ;

 VALUE W200055W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
```

```
     1 = "1 PRIVATE RESIDENCE"
     2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
     3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
     4 = "4 RELIGIOUS GROUP QUARTERS"
     91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200056W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 PLACE DOES NOT HAVE A NAME"  ;

  VALUE W200057W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 APARTMENT"
    2 = "2 ROOM"
    3 = "3 UNIT"
    4 = "4 SUITE"
    91 = "91 SOMETHING ELSE (SPECIFY)"  ;

  VALUE W200058W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO, DIFFERENT PERSON"
    3 = "3 NO, NAME MISSPELLED"  ;

  VALUE W200060W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PRIVATE RESIDENCE"
    2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
    3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
    5 = "5 NURSING HOME"
    91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
```

```
    8 = "8 OTHER REASON"    ;

 VALUE W200067W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 COMMON OR SHARED ENTRANCE"
   2 = "2 ENTRANCE DIRECTLY INTO HOME"  ;

 VALUE W200068W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1"
   2 = "2"
   3 = "3"
   4 = "4+"   ;

 VALUE W200069W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 ALL ITEMS HERE"
   2 = "2 ADDED ONE OR MORE ITEMS"  ;

 VALUE W200070W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE THAN $500"
   2 = "2 LESS THAN $500"
   3 = "3 JUST ABOUT $500"  ;

 VALUE W200071W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE THAN $1,000"
   2 = "2 LESS THAN $1,000"
   3 = "3 JUST ABOUT $1,000"  ;

 VALUE W200072W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE THAN $100"
   2 = "2 LESS THAN $100"
   3 = "3 JUST ABOUT $100"  ;

 VALUE W200073W
  -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 YES, DOESNT KNOW HOW TO USE A COMPUTER"  ;

 VALUE W200074W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST DAYS"
  2 = "2 SOME DAYS"
  3 = "3 RARELY"  ;

 VALUE W200076W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 DEAF"  ;

 VALUE W200077W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 BLIND"  ;

 VALUE W200078W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY DAY (7 DAYS A WEEK)"
  2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
  3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"  ;

 VALUE W200080W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, A CHANGE"
  2 = "2 NO, NO CHANGE"
  3 = "3 DEMENTIA/ALZHEIMER'S REPORTED BY PROXY"  ;

 VALUE W200081W
 -7 = '-7 RF'
 -8 = '-8 DK'
```

# SAS ALGORITHM FOR DEMENTIA

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE"
  2 = "2 SP IS UNABLE TO SPEAK"
  3 = "3 SP IS UNABLE TO HEAR"
  4 = "4 SP REFUSED"
  5 = "5 PROXY REFUSED"
  6 = "6 SP NOT PRESENT"
  7 = "7 SP TOO ILL"
  8 = "8 SP LANGUAGE BARRIER"
 91 = "91 OTHER (SPECIFY)"  ;

VALUE W200082W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MUCH BETTER"
  2 = "2 BETTER"
  3 = "3 SAME"
  4 = "4 WORSE"
  5 = "5 MUCH WORSE"  ;

VALUE W200083W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO/DON'T KNOW"  ;

VALUE W200084W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 CONTINUE WITH ACTIVITY"
  2 = "2 SP REFUSES ACTIVITY"  ;

VALUE W200085W
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "Word[1]"
  2 = "Word[2]"
  3 = "Word[3]"
  4 = "Word[4]"
  5 = "Word[5]"
  6 = "Word[6]"
  7 = "Word[7]"
  8 = "Word[8]"
  9 = "Word[9]"
 10 = "Word[10]"
 91 = "91 NO WORDS REMEMBERED"
 92 = "92 REFUSED"  ;

VALUE W200086W
 -7 = '-7 RF'
```

```
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 DIFFICULTY HEARING ANY OF THE WORDS"
   2 = "2 INTERRUPTION OCCURRED WHILE LIST WAS BEING READ"
  91 = "91 OTHER PROBLEM (SPECIFY)"
  92 = "92 NO PROBLEMS OCCURRED"
  97 = "97 SP REFUSED WORD RECALL TASK"  ;

VALUE W200087W
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP ATTEMPTED CLOCK DRAWING"
   2 = "2 SP DID NOT ATTEMPT CLOCK DRAWING"
  97 = "3 SP REFUSED CLOCK DRAWING"  ;

VALUE W200089W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY DAY (7 DAYS A WEEK)"
   2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
   3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
   4 = "4 RARELY (ONCE A WEEK OR LESS)"
   5 = "5 NEVER"  ;

VALUE W200090W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY TIME"
   2 = "2 MOST TIMES"
   3 = "3 SOMETIMES"
   4 = "4 RARELY"
   5 = "5 NEVER"  ;

VALUE W200092W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MOST TIMES"
   2 = "2 SOMETIMES"
   3 = "3 RARELY"
   4 = "4 NEVER"  ;

VALUE W200093W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 NONE"
   2 = "2 A LITTLE"
   3 = "3 SOME"
   4 = "4 A LOT"  ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W200094W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE OFTEN"
  2 = "2 LESS OFTEN"
  3 = "3 ABOUT THE SAME"  ;

VALUE W200095W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
 10 = "10 OCTOBER"
 11 = "11 NOVEMBER"
 12 = "12 DECEMBER"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

VALUE W200096W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

VALUE W200097W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO / NO LONGER DRIVE"  ;

VALUE W200098W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 NO, NO RAIN OR BAD WEATHER"  ;

VALUE W200099W
 -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ALWAYS DID IT BY SELF"
     2 = "2 ALWAYS DID IT TOGETHER WITH SOMEONE ELSE"
     3 = "3 SOMEONE ELSE ALWAYS DID IT"
     4 = "4 IT VARIED (MORE THAN ONE WAY)"
     5 = "5 NOT DONE IN LAST MONTH"  ;

  VALUE W200102W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MORE OFTEN"
     2 = "2 LESS OFTEN"
     3 = "3 SAME"  ;

  VALUE W200106W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 ALWAYS FED THROUGH IV OR TUBE"  ;

  VALUE W200107W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EVERY TIME"
     2 = "2 MOST TIMES"
     3 = "3 SOMETIMES"
     4 = "4 RARELY"  ;

  VALUE W200109W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 SHOWERING"
     2 = "2 TAKING BATHS"
     3 = "3 WASHING UP SOME OTHER WAY"  ;

  VALUE W200114W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 VERY IMPORTANT"
     2 = "2 SOMEWHAT IMPORTANT"
     3 = "3 NOT SO IMPORTANT"  ;

  VALUE W200115W
    -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
    95 = "95 NO ACTIVITY LISTED"  ;

  VALUE W200116W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LEFT"
    2 = "2 RIGHT"
    3 = "3 BOTH"  ;

  VALUE W200117W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LEFT SIDE"
    2 = "2 RIGHT SIDE"
    3 = "3 BOTH SIDES"  ;

  VALUE W200118W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 ONE SIDE"
    2 = "2 BOTH SIDES"  ;

  VALUE W200119W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 RECEIVE ALL TREATMENTS"
    2 = "2 STOP/REJECT ALL TREATMENTS"  ;

  VALUE W200120W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
    2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
    3 = "3 LIVING WITH AN ADULT CHILD"
    4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
    5 = "5 LIVING IN A NURSING HOME"  ;

  VALUE W200121W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
```

```
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
  4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

VALUE W200122W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MAKE DECISIONS WITHOUT MUCH ADVICE FROM THEM"
  2 = "2 GET THEIR ADVICE AND THEN MAKE DECISIONS"
  3 = "3 MAKE DECISIONS TOGETHER"
  4 = "4 LEAVE DECISIONS UP TO THEM"  ;

VALUE W200123W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HANDLE MOSTLY BY SELF"
  2 = "2 HANDLE TOGETHER WITH FAMILY OR CLOSE FRIENDS"
  3 = "3 FAMILY OR CLOSE FRIENDS MOSTLY HANDLE THESE THINGS"
  4 = "4 IT VARIES"  ;

VALUE W200124W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NEVER"
  2 = "2 RARELY"
  3 = "3 SOMETIMES"
  4 = "4 OFTEN"  ;

VALUE W200126W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AGREE A LOT"
  2 = "2 AGREE A LITTLE"
  3 = "3 DO NOT AGREE"  ;

VALUE W200127W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AGREE A LOT"
  2 = "2 AGREE A LITTLE"
  3 = "3 AGREE NOT AT ALL"  ;

VALUE W200129W
 -7 = '-7 RF'
 -8 = '-8 DK'
```

```
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 less than $1,000,"
   2 = "2 $1,000 to less than $2,000,"
   3 = "3 $2,000 to less than $3,000,"
   4 = "4 $3,000 to less than $5,000, or"
   5 = "5 $5,000 or more?"  ;

VALUE W200131W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   3 = "3 RETIRED/DON'T WORK ANYMORE"  ;

VALUE W200132W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY WEEK"
   2 = "2 EVERY TWO WEEKS"
   3 = "3 TWO TIMES A MONTH"
   4 = "4 ONCE A MONTH"
   5 = "5 DAILY"
  91 = "91 OTHER SCHEDULE (SPECIFY)"  ;

VALUE W200133W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 OWN"
   2 = "2 RENT"
   3 = "3 SOME OTHER ARRANGEMENT"  ;

VALUE W200134W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 PAID OFF"
   2 = "2 STILL MAKE PAYMENTS"
   3 = "3 REVERSE MORTGAGE"  ;

VALUE W200135W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 less than $250,"
   2 = "2 $250-$499,"
   3 = "3 $500-$999, or"
   4 = "4 $1,000 or more?"  ;
VALUE W500135W
```

```
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $250"
    2 = "2 $250 to less than $500"
    3 = "3 $500 to less than $1,000"
    4 = "4 $1,000 to less than $3,000"
      5 = "5 $3,000 to less than $5,000"
      6 = "6 $5,000 or more?"  ;
VALUE W200136W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 5 YEARS"
    2 = "2 10 YEARS"
    3 = "3 LONGER THAN 10 YEARS"  ;

VALUE W200137W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $50,000,"
    2 = "2 between $50,000 and $100,000, or"
    3 = "3 over $100,000?"  ;

VALUE W200138W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $50,000,"
    2 = "2 $50,000-$74,999,"
    3 = "3 $75,000-$99,999,"
    4 = "4 $100,000-$199,999,"
    5 = "5 $200,000-$299,999,"
    6 = "6 $300,000-$499,999,"
    7 = "7 $500,000-$749,999, or"
    8 = "8 $750,000 or more?"  ;

VALUE W200139W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PAY OFF BALANCE"
    2 = "2 PAY MINIMUM"
    3 = "3 PAY MORE THAN MINIMUM, BUT NOT ENTIRE BALANCE"
    4 = "4 DON'T HAVE ANY CREDIT CARDS"  ;

VALUE W200140W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
```

```
     1 = "1 less than $1,000,"
     2 = "2 $1,000 - $1,999,"
     3 = "3 $2,000 - $3,999,"
     4 = "4 $4,000 - $5,999,"
     5 = "5 $6,000 - $9,999,"
     6 = "6 $10,000 - $19,999, or"
     7 = "7 $20,000 or more?"  ;

   VALUE W200141W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MOST"
     2 = "2 SOME"
     3 = "3 A LITTLE"  ;

   VALUE W200142W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 less than $500,"
     2 = "2 $500 - $999,"
     3 = "3 $1,000 - $1,999,"
     4 = "4 $2,000 - $3,999,"
     5 = "5 $4,000 - $5,999,"
     6 = "6 $6,000 - $9,999,"
     7 = "7 $10,000 - $19,999, or"
     8 = "8 $20,000 or more?"  ;

   VALUE W200146W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 NEARLY EVERY DAY"
     2 = "2 MORE THAN HALF THE DAYS"
     3 = "3 SEVERAL DAYS (LESS THAN HALF)"
     4 = "4 A FEW DAYS"  ;

   VALUE W200147W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 INCLUDED"
     2 = "2 EXTRA CHARGE"  ;

   VALUE W200148W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"  ;

VALUE F200006W
```

```
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 FREE STANDING NURSING HOME"
   2 = "2 FREE STANDING ASSISTED LIVING FACILITY"
   3 = "3 NURSING HOME AND ASSISTED LIVING FACILITY"
   4 = "4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
   5 = "5 ADULT FAMILY CARE HOME"
   6 = "6 GROUP HOME"
   7 = "7 BOARD AND CARE HOME"
   8 = "8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
  91 = "91 OTHER (SPECIFY)"  ;

VALUE F200007W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"  ;

VALUE F200008W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 INDEPENDENT LIVING"
   2 = "2 ASSISTED LIVING"
   3 = "3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
   4 = "4 NURSING HOME"
  91 = "91 OTHER (SPECIFY)"  ;

VALUE F200009W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 ASSISTED LIVING"
   2 = "2 NURSING HOME"  ;

VALUE F200011W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES, SERVICE PROVIDED AS PART OF PACKAGE"
   2 = "2 YES, SERVICE PROVIDED AT AN EXTRA CHARGE"
   3 = "3 NO, SERVICE NOT PROVIDED"  ;

VALUE F200012W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP/FAMILY"
   2 = "2 SOCIAL SECURITY/SSI"
```

```
    3 = "3 MEDICAID"
    4 = "4 MEDICARE"
    5 = "5 OTHER SOURCE"  ;

 VALUE I200002W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
   2 = "2 No"  ;

 VALUE I200003W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 English"
   2 = "2 Spanish"
   3 = "3 Other (specify)"  ;

 VALUE I200005W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Friendly and interested"
   2 = "2 Cooperative but not particularly interested"
   3 = "3 Impatient and restless"
   4 = "4 Hostile"  ;

 VALUE I200006W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Good"
   2 = "2 Fair"
   3 = "3 Poor"  ;

 VALUE I200008W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 All of the time"
   2 = "2 Most of the time"
   3 = "3 Some of the time"
   4 = "4 Only for the cognition and/or performance parts"
   5 = "5 None of the time"  ;

 VALUE I200010W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
```

```
        2 = "2 No"
        3 = "3 Interview was conducted by telephone"  ;

    VALUE I200012W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 Yes"
      2 = "2 No"
      3 = "3 Not Administered"  ;

    VALUE I200013W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 Yes"
      2 = "2 No"  ;

    VALUE I200016W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 Yes"
      2 = "2 No"
      3 = "3 Entire interview conducted by telephone"  ;

    VALUE I200017W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 Not at all cluttered"
      2 = "2 Somewhat cluttered"
      3 = "3 Very cluttered"
      4 = "4 Could not see other rooms"  ;

    VALUE I200018W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 None"
      2 = "2 A little"
      3 = "3 Some"
      4 = "4 A lot"
      5 = "5 Could not observe"  ;

    VALUE I200019W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 Yes"
      2 = "2 No"
```

```
        7 = "7 Could not observe"  ;

/* DERIVED VARIABLE FORMATS */
    VALUE LVGARRG
        1 = '1 Alone'
        2 = '2 With spouse/partner only (spouse/partner in household)'
        3 = '3 With spouse/partner and with others'
        4 = '4 With others only'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

    VALUE DOUTSFDF
        8 = '8 Not done in last month'
        1 = '1 Did not do by self in last month'
        2 = '2 Did by self in last month/No Difficulty'
        3 = '3 Did by self in last month/Difficulty'
        4 = '4 DKRF Did by self in last month/No Difficulty'
        5 = '5 DKRF Did by self in last month/Difficulty'
        6 = '6 Did by self in last month/DKRF Difficulty'
        7 = '7 DKRF Did by self in last month/DKRF Difficulty'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

VALUE DOUTDEVI
        8 = '8 Not done in last month'
        1 = '1 No use of devices to go outside in last month'
        2 = '2 Use of devices to go outside in last month'
        3 = '3 DKRF If used devices to go outside in last month'
        4 = '4 DKRF If used devices in last month'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

    VALUE DOUTHELP
        8 = '8 Not done in last month'
        1 = '1 No help to go outside in last month'
        2 = '2 Had help to go outside in last month'
        3 = '3 DKRF If had help to go outside in last month'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

    VALUE DINSDSFD
        8 = '8 Not done in last month'
        1 = '1 Did not do by self in last month'
        2 = '2 Did by self in last month/No Difficulty'
        3 = '3 Did by self in last month/Difficulty'
        4 = '4 DKRF Did by self in last month/No Difficulty'
        5 = '5 DKRF Did by self in last month/Difficulty'
        6 = '6 Did by self in last month/DKRF Difficulty'
        7 = '7 DKRF Did by self in last month/DKRF Difficulty'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

    VALUE DINSDDEV
        8 = '8 Not done in last month'
        1 = '1 No use of devices inside in last month'
        2 = '2 Use of devices inside in last month'
        3 = '3 DKRF If used devices inside in last month'
```

```
    4 = '4 DKRF On use of devices'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dinsdhlp
    8 = '8 Not done in last month'
    1 = '1 No help to go around inside in last month'
    2 = '2 Had help to go around inside in last month'
    3 = '3 DKRF If had help to go around inside in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbedsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbeddevi
    1 = '1 No use of cane or walker to get out of bed in last month'
    2 = '2 Use of cane or walker to get out of bed in last month'
    3 = '3 DKRF If Used cane or walker to get out of bed in last month'
    4 = '4 DKRF If used cane or walker in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbedhelp
    1 = '1 No help to get out of bed in last month'
    2 = '2 Had help to get out of bed in last month'
    3 = '3 DKRF If had help to get out of bed in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dlaunsfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dlaunrea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
```

```
        4= '4 Service/someone from the place SP lives'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

     VALUE dshopsfd
        1 = '1 Did not do by self in last month'
        2 = '2 Did by self in last month/No Difficulty'
        3 = '3 Did by self in last month/Difficulty'
        4 = '4 DKRF Did by self in last month/No Difficulty'
        5 = '5 DKRF Did by self in last month/Difficulty'
        6 = '6 Did by self in last month/DKRF Difficulty'
        7 = '7 DKRF Did by self in last month/DKRF Difficulty'
        8 = '8 Not done in last month'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

     VALUE dshoprea
        1= '1 Health/functioning reason only'
        2= '2 Other reason only'
        3= '3 Both health/functioning and other'
        4= '4 Service/someone from the place SP lives'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

     VALUE dmealsfd
        1 = '1 Did not do by self in last month'
        2 = '2 Did by self in last month/No Difficulty'
        3 = '3 Did by self in last month/Difficulty'
        4 = '4 DKRF Did by self in last month/No Difficulty'
        5 = '5 DKRF Did by self in last month/Difficulty'
        6 = '6 Did by self in last month/DKRF Difficulty'
        7 = '7 DKRF Did by self in last month/DKRF Difficulty'
        8 = '8 Not done in last month'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

     VALUE dmealrea
        1= '1 Health/functioning reason only'
        2= '2 Other reason only'
        3= '3 Both health/functioning and other'
        4= '4 Service/someone from the place SP lives'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

     VALUE dbanksfd
        1 = '1 Did not do by self in last month'
        2 = '2 Did by self in last month/No Difficulty'
        3 = '3 Did by self in last month/Difficulty'
        4 = '4 DKRF Did by self in last month/No Difficulty'
        5 = '5 DKRF Did by self in last month/Difficulty'
        6 = '6 Did by self in last month/DKRF Difficulty'
```

```
      7 = '7 DKRF Did by self in last month/DKRF Difficulty'
      8 = '8 Not done in last month'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE dbankrea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
    4= '4 Service/someone from the place SP lives'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE deatdevi
    1 = '1 No use of adapted utensils in last month'
    2 = '2 Use of adapted utensils in last month'
    8 = '8 Not done in last month'
    3 = '3 DKRF If used adapted utensils in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE deathelp
    1 = '1 No help eating in last month'
    2 = '2 Had help eating in last month'
    3 = '3 DKRF If had help eating in last month'
    8 = '8 Not done in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE deatsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using utensils)'
    3 = '3 Difficulty by self (and when using utensils)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE dbathdev
    1 = '1 No use of grab bars or bath seats in last month'
    2 = '2 Use of grab bars or bath seats in last month'
    3 = '3 DKRF If use of grab bars or bath seats in last month'
    4 = '4 DKRF If had grab bars or bath seats in last month'
    9 = '9 No bars/seats/shower/tub or washes up other way'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE dbathhel
    1 = '1 No help bathing in last month'
    2 = '2 Had help bathing in last month'
    3 = '3 DKRF If had help bathing in last month'
     -1 = '-1 Inapplicable'
```

```
    -9 = '-9 Missing';

  VALUE dbathsfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using grab bars or tub seat)'
    3 = '3 Difficulty by self (and when using grab bars or tub seat)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dtoildev
    1 = '1 No use of toileting devices in last month'
    2 = '2 Use of toileting devices in last month'
    3 = '3 DKRF of some and no use of other toileting devices in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dtoilhel
    1 = '1 No help toileting in last month'
    2 = '2 Had help toileting in last month'
    3 = '3 DKRF If had help toileting in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dtoilsfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using toileting devices)'
    3 = '3 Difficulty by self (and when using toileting devices)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE ddresdev
    8 = '8 Not done in last month'
    9 = '9 DKRF If dressed in last month'
    2 = '2 Use of dressing devices in last month'
    1 = '1 No use of dressing devices in last month'
    3 = '3 DKRF If use of dressing devices in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE ddreshel
    8 = '8 Not done in last month'
    9 = '9 DKRF If dressed in last month'
    1 = '1 No help dressing in last month'
    2 = '2 Had help dressing in last month'
    3 = '3 DKRF If had help dressing in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE ddressfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using dressing devices)'
    3 = '3 Difficulty by self (and when using dressing devices)'
    6 = '6 Did by self in last month/DKRF Difficulty'
```

```
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
 VALUE dmedssfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
    9 = '9 No or DKRF if medications taken in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dmedsrea
    1 = '1 Health/functioning reason only'
    2 = '2 Other reason only'
    3 = '3 Both heath/functioning and other'
    4 = '4 Service/someone from the place SP lives'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dmarstat
    1 = '1 Married'
    2 = '2 Living with a partner'
    3 = '3 Separated'
    4 = '4 Divorced'
    5 = '5 Widowed'
    6 = '6 Never married'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
 VALUE DSPSAGEC
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = " 1 UNDER 50"
    2 = " 2 50-54"
    3 = " 3 55-59"
    4 = " 4 60-64"
    5 = " 5 65-69"
    6 = " 6 70-74"
    7 = " 7 75-79"
    8 = " 8 80-84"
    9 = " 9 85-89"
   10 = "10 90 +"    ;

  VALUE dresid
         -1 = '-1 Inapplicable'
      1 = '1 Community '
```

```
        2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
        3 = '3 Residential Care Resident not nursing home (FQ only)'
        4 = '4 Nursing Home Resident';
    VALUE f_dresid
         -1 = '-1 Inapplicable'
        1 = '1 Community '
        2 = '2 Residential care not nursing home (SP interview)'
        3 = '3 Residential care not nursing home (FQ only)'
        4 = '4 Nursing home (SP interview)'
        5 = '5 Nursing home (FQ only)'
        6 = '6 Deceased'
        7 = '7 Residential care not nursing home in R1 and R5 (FQ only)'
        8 = '8 Nursing home in R1 and R5 (FQ only)' ;
    VALUE f2dresid
         -1='-1 Inapplicable'
         1 = '1 Community '
        2 = '2 Residential care not nursing home (SP interview)'
        3 = '3 Residential care not nursing home (FQ only)'
        4 = '4 Nursing home (SP interview)'
        5 = '5 Nursing home (FQ only)'
        6 = '6 Deceased'
        7 = '7 Residential care not nursing home in R1 and R2 (FQ only)'
        8 = '8 Nursing home in R1 and R2 (FQ only)' ;
    VALUE f3dresid
         -1='-1 Inapplicable'
         1 = '1 Community '
        2 = '2 Residential care not nursing home (SP interview)'
        3 = '3 Residential care not nursing home (FQ only)'
        4 = '4 Nursing home (SP interview)'
        5 = '5 Nursing home (FQ only)'
        6 = '6 Deceased'
        7 = '7 Residential care not nursing home in R1 and R3 (FQ only)'
        8 = '8 Nursing home in R1 and R3 (FQ only)' ;
    VALUE f4dresid
         -1='-1 Inapplicable'
         1 = '1 Community '
        2 = '2 Residential care not nursing home (SP interview)'
        3 = '3 Residential care not nursing home (FQ only)'
        4 = '4 Nursing home (SP interview)'
        5 = '5 Nursing home (FQ only)'
        6 = '6 Deceased'
        7 = '7 Residential care not nursing home in R1 and R4 (FQ only)'
        8 = '8 Nursing home in R1 and R4 (FQ only)' ;


VALUE QUARTILE
-9="-9 Missing"
-1="-1 Inapplicable";

VALUE SPPB
-9="-9 Missing"
-1="-1 Inapplicable";

    VALUE DCLCKSC
      0 = "0 Not recognizable as a clock"
      1 = "1 Severely distorted depiction of a clock"
```

```
      2 = "2 Moderately distorted depiction of a clock"
      3 = "3 Mildly distorted depiction of a clock"
      4 = "4 Reasonably accurate depiction of a clock"
      5 = "5 Accurate depiction of a clock (circular or square)"
     -7 = "-7 SP refused to draw clock"
     -8 = "-8 DK"
     -1 = "-1 Inapplicable"
     -2 = "-2 Proxy says cannot ask SP"
     -3 = "-3 Proxy says can ask SP but SP unable to answer"
     -4 = "-4 SP did not attempt to draw clock"
     -9 = "-9 Missing";

     VALUE DCLCKCL
      1 = '1 Very clear'
      2 = '2 Somewhat clear'
      3 = '3 Somewhat unclear'
      4 = '4 Very unclear'
      5 = '5 Blank'
     -7 = '-7 SP refused to draw clock'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -2 = '-2 Proxy says cannot ask SP'
     -3 = '-3 Proxy says can ask SP but SP unable to answer'
     -4 = '-4 SP did not attempt to draw clock'
     -9 = '-9 Missing';

VALUE RESULT
     -9='-9: MISSING'
     1='1: COMPLETED W RESULTS'
     2='2: COMPLETED MISSING RESULTS'
     3='3: ATTEMPTED W RESULTS'
     4='4: ATTEMPTED MISSING RESULTS'
     5='5: NOT ATTEMPTED SAFETY'
     6='6: NOT ATTEMPTED NOT SAFETY REASON'
     7='7: NO CHAIR/NO SPACE'
     9='9: NOT ATTEMPTED/MISSING';

     VALUE RESULT_SCH
     -9='-9: MISSING'
     1='1: COMPLETED W/OUT ARMS'
     2='2: COMPLETED W ARMS'
     3='3: ATTEMPTED W RESULTS'
     4='4: ATTEMPTED MISSING RESULTS'
     5='5: NOT ATTEMPTED SAFETY'
     6='6: NOT ATTEMPTED NOT SAFETY REASON'
     7='7: NO CHAIR/SAFETY REASON'
     8='8: NO CHAIR/NOT SAFETY REAS'
     9='9: NOT ATTEMPTED/MISSING'
     10='10: CH4=1 SINGLE CHAIR NOT COMPL';

     VALUE RESULT_RCH
     -9='-9: MISSING'
     1='1: COMPLETED W/OUT ARMS'
     2='2: COMPLETED MISSING RESULTS'
     3='3: ATTEMPTED W RESULTS'
     4='4: ATTEMPTED MISSING RESULTS'
     5='5: NOT ATTEMPTED SAFETY'
```

```
  6='6: NOT ATTEMPTED NOT SAFETY REASON'
  9='9: NO CHAIR OR NOT ATTEMPTED/MISSING';

  VALUE ZEROSCORE
  1="1: NOT ELIGIBLE DUE TO EXCLUSION CRITERIA"
  2="2: NOT ATTEMPTED FOR SAFETY REASON"
  3="3: ATTEMPTED CHAIR STANDS/NOT ATTEMPTED FOR SAFETY"
  4="4: ATTEMPTED"
  5="5: NEW WALKING EXCLUSION"
  9="9: NOT ASSIGNED A ZERO SCORE";

VALUE D_LMLLOC
  1 = '1 Community'
  2 = '2 Residential Care'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

  VALUE D_LOCSP
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 Independent Living/Housing/Retirement"
    2 = "2 Assisted Living/Personal Care"
    3 = "3 Special Care, Memory or Alzheimer's Unit"
    4 = "4 Nursing Home"
    8 = "8 Not Reported" ;

  VALUE PA25FMT
 -1 = '-1 Inapplicable'
   -8 = '-8 DK'
 -9 = '-9 Missing'
 111= '111 Sleeping Napping'
 131= '131 Eating'
 132= '132 Going out to eat'
 199= '199 Other self care activities'
 211= '211 Work and work-related activities'
 221'= '221 Other income generating activities'
 241= '241 Volunteering'
 299= '299 Other productive activities'
 321= '321 Shopping for non-durable goods'
 399= '399 Other shopping'
 411= '411 Food and drink preparation'
 434= '434 Outdoor Maintenance'
 439= '439 Household chores (cannot tell if indoor/outdoor)'
 441= '441 Animal and pet care'
 442= '442 Walking and exercising pets'
 449= '449 Other animal and pet care'
 451= '451 Vehicle maintenance and repair'
 471= '471 Financial management'
 499= '499 Other household activities'
 511= '511 Physical care and assistance to others'
 599= '599 Other physical care'
 611= '611 Socializing with others in person'
 612= '612 Socializing with others on the phone'
 616= '616 Socializing and communicating on the computer'
 621= '621 Watching TV and movies'
```

```
631= '631 Doing puzzles or games not on computer or online'
632= '632 Gambling not online or at a casino'
636= '636 Doing puzzles or games on a computer or online'
641= '641 Arts and crafts or hobbies'
642= '642 Reading'
643= '643 Writing'
644= '644 Listening to music'
646= '646 Computer or online leisure activities'
651= '651 Smoking or other tobacco use'
652= '652 Drinking alcohol'
661= '661 Doing nothing/relaxing'
669= '669 No activity'
699= '699 Other non active leisure'
711= '711 Playing sports'
712= '712 Walking or jogging'
713= '713 Other outdoor recreating activities'
714= '714 Attending sporting events'
715= '715 Other physical activity, exercise, yoga, swimming, working out,
dancing'
718= '718 Watching sporting events'
721= '721 Attending arts  including plays and concerts'
723= '723 Attending movies'
724= '724 Attending casinos'
737= '737 Travel for leisure'
799= '799 Other active leisure'
811= '811 Attending religious activities'
812= '812 Other religious and spirtual activities'
821= '821 Attending meetings or events'
899= '899 Other organizational activity'
991= '991 Other miscellaneous'
992= '992 No favorite activity'
997= '997 Refused'
998= '998 Dont Know'
999= '999 Not Codeable';


        VALUE OCC_CODE
1   ='1 Management Occupations: 0010-0430'
2   ='2 Business and Financial Operations Occupations:  0500-0950'
3   ='3 Computer and mathematical occupations:  1000-1240'
4   ='4 Architecture and Engineering Occupations:   1300-1560'
5   ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6   ='6 Community and Social Service Occupations:   2000-2060'
7   ='7 Legal Occupations:  2100-2160'
8   ='8 Education, Training, and Library Occupations:   2200-2550'
9   ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10  ='10 Healthcare Practitioners and Technical Occupations:    3000-3540'
11  ='11 Healthcare Support Occupations:    3600-3655'
12  ='12 Protective Service Occupations:    3700-3955'
13  ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14  ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15  ='15 Personal Care and Service Occupations: 4300-4650'
16  ='16 Sales and Related Occupations: 4700-4965'
17  ='17 Office and Administrative Support Occupations: 5000-5940'
18  ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19  ='19 Construction and Extraction Occupations:   6200-6940'
```

```
20  ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21  ='21 Production Occupations:    7700-8965'
22  ='22 Transportation and Material Moving Occupations:    9000-9750'
23  ='23 Military Specific Occupations: 9800-9830'
24  ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';

     Value fl_Dfac
1 = '1 Should have routed as facility but did not'
2 = '2 Routed as facility but determined not facility resident'
-1 = '-1 Inapplicable';
VALUE PE_RSLT
    -9='-9 Missing'
    -1 = '-1 Inapplicable'
    1='1 Completed'
    2='2 Attempted'
    3='3 Not attempted' ;
VALUE dosfacd /* FOR FQ2dosfacd  */
       -9= "-9 Missing"
      -8 = "-8 DK"
      -1 = "-1 INAPPLICABLE"
       1 = " 1 FREE STANDING NURSING HOME"
       2 = " 2 FREE STANDING ASSISTED LIVING FACILITY / RESIDENTIAL CARE
FACILITY"
       3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
       4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
       5 = " 5 ADULT FAMILY CARE HOME"
       6 = " 6 GROUP HOME"
       7 = " 7 BOARD AND CARE HOME / PERSONAL CARE HOME"
       8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
       9 = " 9 INDEPENDENT LIVING"
      10 = " 10 ASSISTED AND INDEPENDENT/RETIREMENT (NO NURSING HOME)"
      11 = " 11 HOUSING (APT, CONDO, ETC.)";
        ;
    VALUE dosfaca /* FOR FQ2dosfaca */
       -9= "-9 Missing"
      -8 = "-8 DK"
      -1 = "-1 INAPPLICABLE"
       1 = " 1 INDEPENDENT LIVING / HOUSING / RETIREMENT "
       2 = " 2 ASSISTED LIVING / PERSONAL CARE"
       3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
       4 = " 4 NURSING HOME"    ;

VALUE INAP_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -1 = '-1 Inapplicable' ;
VALUE CENDIV /* RE1DCENSDIV - Updated for R2 - Re-Release */
```

```
    1 =  '1 Northeast Region: New England Division (ME, NH, VT, MA, RI, CT)'
    2 =  '2 Northeast Region: Middle Atlantic Division (NY, NJ, PA)'
    3 =  '3 Midwest Region: East North Central Division (OH, IN, IL, MI, WI)'
    4 =  '4 Midwest Region: West North Central Division (MN, IA, MO, ND, SD,
NE, KS)'
    5 =  '5 South Region: South Atlantic Division (DE, MD, DC, VA, WV, NC,
SC, GA, FL)'
    6 =  '6 South Region: East South Central Division (KY, TN, AL, MS)'
    7 =  '7 South Region: West South Central Division (AR, LA, OK, TX)'
    8 =  '8 West Region: Mountain Division (MT, ID, WY, CO, NM, AZ, UT, NV)'
    9 =  '9 West Region: Pacific Division (WA, OR, CA, AK, HI)'
   -9 = '-9 Missing';

    VALUE W000002W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MALE"
      2 = "2 FEMALE"  ;

    VALUE W000005W
     1 = ' 1 Yes'
     2 = ' 2 No'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE R1DRESID
     -1 = '-1 Inapplicable'
     1 = '1 Community '
     2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
     3 = '3 Residential Care Resident not nursing home (FQ only)'
     4 = '4 Nursing Home Resident';

  VALUE W200016W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 MEDICAID"
   2 = "2 MEDICARE"
   3 = "3 STATE PROGRAM"
   91 = "91 OTHER (SPECIFY)"   ;

    VALUE W200012W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 REGULAR"
   2 = "2 VARIED"  ;

  VALUE W200061W
   -7 = '-7 RF'
```

```
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
    8 = "8 OTHER REASON"    ;

  VALUE d2hrsmth
   -13= '-13 Deceased '
   -12= '-12 Zero days/wk'
   -11= '-11 Hours missing'
   -10= '-10 Days missing'
   -9 = ' -9 Days and hrs missing'
   -1 = ' -1 Inapplicable'
   -7 = ' -7 RF'
   -8 = ' -8 DK'
    0-<1  ='<1'
    1-<10 =' 1-<10'
   10-<20 ='10-<20'
   20-<30 ='20-<30'
   30-<40 ='30-<40'
   40-<60 ='40-<60'
   60-<120 ='60-<120'
   120-<180='120-<180'
   180-744='180-744 (24/7)'
    9999='9999 Not codeable, <1 hour/day' ;

  VALUE dhrsmth
   -11= '-11:hours missing'
   -10= '-10:days missing'
   -9 = '-9:days and hrs missing'
   -1 = '-1 Inapplicable'
   -7 = '-7 RF'
   -8 = '-8 DK'
    0-<1  ='<1'
    1-<10 =' 1-<10'
   10-<20 ='10-<20'
   20-<30 ='20-<30'
   30-<40 ='30-<40'
   40-<60 ='40-<60'
   60-<120 ='60-<120'
   120-<180='120-<180'
   180-744='180-744 (24/7)'
    9999='9999 Not codeable, <1 hour/day' ;

 Value dmissadd
-1='-1 Inapplicable'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
```

```
  9='9 no flags and added at PE section'
 10='10 no flags and added at SC section'
 11='11 no flags and added at SN section';

Value d2mssadd
 -1='-1 Inapplicable'
  0='0 no flags and added at undetermined section'
  1='1 no flags and added at CL section'
  2='2 no flags and added at DT section'
  3='3 no flags and added at EW section'
  4='4 no flags and added at HA section'
  5='5 no flags and added at HO section'
  6='6 no flags and added at MC section'
  7='7 no flags and added at MO section'
  8='8 no flags and added at PA section'
  9='9 no flags and added at PE section'
 10='10 no flags and added at SC section'
 11='11 no flags and added at SN section'
 12='12 no flags and added at CS section'
 13='13 no flags and added at HH section'
 14='14 no flags and added at IS section';

Value dopage3c
 -9='-9 Missing'
 -8='-8 RF'
 -7='-7 DK'
 -1='-1 Inapplicable'
  1='1 UNDER 30'
  2='2 30-39'
  3='3 40-49'
  4='4 50-59'
  5='5 60-69'
  6='6 70-79'
  7='7 80-89'
  8='8 90 +';

 Value dopagect
 -9='-9 Missing'
 -8='-8 DK'
 -7='-7 RF'
 -1='-1 Inapplicable'
  1='1 UNDER 20'
  2='2 20-24'
  3='3 25-29'
  4='4 30-34'
  5='5 35-39'
  6='6 40-44'
  7='7 45-49'
  8='8 50-54'
  9='9 55-59'
 10='10 60-64'
 11='11 65-69'
 12='12 70-74'
 13='13 75-79'
 14='14 80-84'
 15='15 85-89'
 16='16 90 +';
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 UNDER 20"
  2 = "2 20-24"
  3 = "3 25-29"
  4 = "4 30-34"
  5 = "5 35-39"
  6 = "6 40-44"
  7 = "7 45-49"
  8 = "8 50-54"
  9 = "9 55-59"
 10 = "10 60-65"
 11 = "11 66-69"
 12 = "12 70-74"
 13 = "13 75-79"
 14 = "14 80-85"
 15 = "15 86-89"
 16 = "16 90-94"
 17 = "17 95-99"
 18 = "18 100 +"
;
  VALUE NumCigs
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
  999 = '999 SP smokes less than 1 cigarette / day';


  VALUE dlmlint
   1 = '1 Last month of life interview'
  -1 = '-1 Inapplicable'       ;

VALUE d2intvra
   1 = '1 65 to 69'
   2 = '2 70 to 74'
   3 = '3 75 to 79'
   4 = '4 80 to 84'
   5 = '5 85 to 89'
   6 = '6 90+'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'        ;

VALUE dad8dem
   1 = '1 DEMENTIA RESPONSE TO ANY AD8 ITEMS IN PRIOR ROUNDS'
  -1 = '-1 Inapplicable'     ;

VALUE dwrdinon
 1 = '1 No words remembered'
  -1 = '-1 Inapplicable'
```

```
      -9 = '-9 Missing'      ;

   VALUE dwrdirre
     1 = '1 Refused word recall task'
    -1 = '-1 Inapplicable'
       -9 = '-9 Missing'      ;

 VALUE A0001AB
      1 = "1 AM"
      2 = "2 PM"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0002WA
      1 = "1 Yes, there is space to set up the walking course"
      2 = "2 No, there is not space to set up the walking course"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0004WA
      1 = "1 None"
      2 = "2 Cane"
      3 = "3 Walker or rollator"
      9 = "9 Other, specify"
     -1 = '-1 Inapplicable'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -9 = '-9 Missing';

 VALUE A0004CH
      1 = "1 No, chair stand not completed"
      2 = "2 Yes, chair stand completed"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0008CH
      1 = "1 With arms"
      2 = "2 Without arms"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0014CH
      1 = "1 1 Chair stand completed"
      2 = "2 2 Chair stands completed"
      3 = "3 3 Chair stands completed"
      4 = "4 4 Chair stands completed"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE BA1SS
     1 = '1 Eligible and recorded result for SxS Balance'
     2 = '2 Eligible and no recorded result for SxS Balance'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1STAN
```

```
    1 = '1 Eligible and recorded result for Semi Tandem Balance'
    2 = '2 Eligible and no recorded result for Semi Tandem Balance'
    3 = '3 Not administered because did not complete prior balance test'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1TAN
    1 = '1 Eligible and recorded result for full tandem balance'
    2 = '2 Eligible and no recorded result for full tandem balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1OP
    1 = '1 Eligible and recorded result for one leg eyes open balance'
    2 = '2 Eligible and no recorded result for one leg eyes open balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1CL
    1 = '1 Eligible and recorded result for one leg eyes closed balance'
    2 = '2 Eligible and no recorded result for one leg eyes closed balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WA1WLK
    1 = '1 Eligible and recorded result for walking course'
    2 = '2 Eligible and no recorded result for walking course'
    4 = '4 Not Eligible due to exclusion criteria'
    5 = '5 Not Eligible on exclusion criteria but recorded result (SP changed
mind)'
   -1 = '-1 Inapplicable '
   -9 = '-9 Missing';

VALUE CH1SCH
    1 = '1 Eligible and recorded result for single chair stand'
    2 = '2 Eligible and no recorded result for single chair stand'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE CH1RSH
    1 = '1 Eligible and recorded result for repeated chair stand'
    2 = '2 Eligible and no recorded result for repeated chair stand'
    3 = '3 Not administered because did not complete single chair stand w/o
arms'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE GR1GRIP
```

```
    1 = '1 Eligible and recorded result for grip strength'
    2 = '2 Eligible and no recorded result for grip strength'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WC1WAIST
    1 = '1 Eligible and recorded result for waist circumference'
    2 = '2 Eligible and no recorded result for waist circumference'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE PK1PEAK
    1 = '1 Eligible and recorded result for peak air flow'
    2 = '2 Eligible and no recorded result for peak air flow'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE RGT_LFT
   1 = '1 Right'
   2 = '2 Left'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

 VALUE PERSON
    1 = '1 Interviewer'
    2 = '2 Sample person'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE STAND
    1 = '1 Standing'
    2 = '2 Sitting'
    3 = '3 Lying down'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE EFFORT
     1 = '1 Full effort'
     2 = '2 Less effort for health reason'
     3 = '3 Less effort for other reason'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
    VALUE WORDREC
        1 = ' 1 LIST 1'
        2 = ' 2 LIST 2'
        3 = ' 3 LIST 3'
       -1 = '-1 Inapplicable '
       -9 = '-9 Missing';
    VALUE WORDRE_N
       -1 = '-1 Inapplicable'
       -2 = '-2 Proxy says cannot ask SP'
       -3 = '-3 Proxy says can ask SP but SP unable to answer'
       -7 = '-7 SP refused activity'
       -9 = '-9 Missing';
```

```
            VALUE SP30051W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EXCELLENT"
  2 = "2 VERY GOOD"
  3 = "3 GOOD"
  4 = "4 FAIR"
  5 = "5 POOR"
  6 = "6 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"
;
   VALUE SP3019aW
    -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
 10 = "10 OCTOBER"
 11 = "11 NOVEMBER"
 12 = "12 DECEMBER"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"
 ;
 VALUE RACEHISP
        1 = ' 1 White, non-hispanic'
        2 = ' 2 Black, non-hispanic'
        3 = ' 3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic'
        4 = ' 4 Hispanic'
        5 = ' 5 More than one DKRF primary'
        6 = ' 6 DKRF'
       -9 = '-9 Missing';

   VALUE SPPB_MIS
    -7 = '-7 RF'
 -8 = '-8 DK'
 -9 = '-9 Missing'
 -1="-1 Inapplicable"
 1="1 Proxy interview"
 2="2 Missing walk and repeat chair and balance"
 3="3 Missing walk and repeat chair"
 4="4 Missing walk and balance"
 5="5 Missing repeat chair and balance"
 6="6 Missing walk"
 7="7 Missing repeat chair"
 8="8 Missing balance"
 9="9 No space"
 10="10 No chair"
 11="11 No space walk and no chair"
```

```
    12="12 No space walk and non-safety missing"
    13="13 No chair and non-safety missing"
    14="14 Non-safety walk"
    15="15 Non-safety chair"
    16="16 Non-safety balance"
    17="17 Non-safety walk and chair"
    18="18 Non-safety walk and balance"
    19="19 Non-safety chair and balance"
    20="20 Non-safety walk and chair and balance";

    VALUE QUARTILES
-9="-9 Missing"
-1="-1 Inapplicable"
;
  VALUE SP30025W
      -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
    2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
    3 = "3 MOBILE HOME OR TRAILER"
    4 = "4 MULTI-UNIT (2+) BUILDING"
    91 = "91 OTHER (SPECIFY)"
  ;
  VALUE SP30046W
      -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 AT SP'S HOME"
     2 = "2 IN A HOSPITAL"
     3 = "3 IN A NURSING HOME"
     4 = "4 IN A HOSPICE RESIDENCE"
     5 = "5 AT SOMEONE ELSE'S HOME"
     91 = "91 SOMEWHERE ELSE (SPECIFY)"
  ;
  VALUE SP30076W
      -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 YES, DOESNT KNOW HOW TO USE"
  ;
  VALUE W300151W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1 = "1 VERY GOOD"
    2 = "2 GOOD"
    3 = "3 FAIR"
    4 = "4 POOR"
   5 = "5 VERY POOR"  ;
```

```
       VALUE SP30076H
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
      95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM DAY TO DAY"  ;
       VALUE SP30076G
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
      95 = "95 NO USUAL TIME OR DIFFERENT FROM DAY TO DAY"  ;
          VALUE SP30076I
           -7 = '-7 RF'
           -8 = '-8 DK'
           -1 = '-1 Inapplicable'
           -9 = '-9 Missing'
         95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM NIGHT TO NIGHT"
;
          VALUE SP30076J
           -7 = '-7 RF'
           -8 = '-8 DK'
           -1 = '-1 Inapplicable'
           -9 = '-9 Missing'
         95 = "95 NO USUAL TIME OR DIFFERENT FROM NIGHT TO NIGHT"  ;
          VALUE SP30076K
           -7 = '-7 RF'
           -8 = '-8 DK'
           -1 = '-1 Inapplicable'
           -9 = '-9 Missing'
            0 = "0 LESS THAN AN HOUR"
         90 = "90 FELL ASLEEP RIGHT AWAY"
         95 = "95 NO USUAL AMOUNT OF TIME TO FALL ASLEEP OR DIFFERENT FROM
NIGHT TO NIGHT"  ;
          VALUE SP30155W
           -7 = '-7 RF'
           -8 = '-8 DK'
           -1 = '-1 Inapplicable'
           -9 = '-9 Missing'
            1 = "1 NAPS PLANNED"
            2 = "2 FELL ASLEEP WITHOUT MEANING TO"
            3 = "3 BOTH (SOME PLANNED/SOME NOT)"  ;
     VALUE SP30120W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 OFTEN"
       2 = "2 SOMETIMES"
       3 = "3 RARELY"
       4 = "4 NEVER"  ;
Value HOURSF
 -13='-13 SP deceased/section not administered'
 -12='-12 Valid skip/staff'
 -11='-11 Hours missing'
 -10='-10 Days missing'
```

```
  -9='-9 Days and hrs missing'
  -1='-1 Inapplicable'
 0-  1='0-<1'
 1.01- 10='1-<10'
10.01- 20='10-<20'
20.01- 30='20-<30'
30.01-40='30-<40'
40.01-60='40-<60'
60.01-120='60-<120'
120.01-180='120-<180'
180.01-744='180-744 (24/7)'
9999='9999 Not codeable, <1 hour/day';
  VALUE SP30120W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 OFTEN"
    2 = "2 SOMETIMES"
    3 = "3 RARELY"
    4 = "4 NEVER"
  ;
  VALUE SP30118W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 A LOT"
    2 = "2 SOME"
    3 = "3 A LITTLE"
    4 = "4 NOT AT ALL"  ;
  VALUE SP30141W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "less than $27,600,"
    2 = "$27,600-$41,999,"
    3 = "$42,000-$63,999,"
    4 = "$64,000-$107,999, or"
    5 = "$108,000 or more?"  ;
  VALUE SP30142W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "less than $14,000,"
    2 = "$14,000-$21,999,"
    3 = "$22,000-$35,999,"
    4 = "$36,000-$48,999, or"
    5 = "$49,000 or more?"  ;
  VALUE INVENT
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
          104="104-Arthritis"
```

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           107="107-Lung Disease"
           109="109-Dementia or Alzheimer's disease"
           110="110-Cancer"
           113="113-Other serious disease, illness, health problem"
           114="114-Knee surgery/problem"
           115="115-Hip repair or replacement/problem"
           117="117-Back or Spine Surgery/problem"
           121="121-Sleep Problems"
           201="201-Hearing problems"
           202="202-Sight problems"
           205="205-Pain"
           301="301-Breathing problems"
           302="302-Upper body strength movement"
           303="303-Lower body strength movement"
           304="304-Low energy"
           305="305-Balance or coordination problems"
           306="306-Walking distances"
           307="307-Climbing stairs"
           308="308-Lifting and carrying items"
           309="309-Kneeling"
           310="310-Bending"
           311="311-Reaching"
           312="312-Opening Jars"
           313="313-Grasping"
           401="401-Memory"
           501="501-Getting out of bed"
           502="502-Getting around inside"
           503="503-Getting outside"
           504="504-Travel/transportation"
           601="601-Eating"
           602="602-Washing"
           603="603-Toileting"
           604="604-Dressing"
           605="605-Grooming"
           701="701-Laundry"
           702="702-Shopping"
           703="703-Cooking"
           705="705-Money matters"
           706="706-Indoor cleaning and maintenance"
           707="707-Outdoor cleaning and maintenance"
           801="801-Medications"
           802="802-Doctor visits"
           804="804-Other medical self-care"
           1211="1211-Working"
           1442="1442-Walking/exercising pets"
           1451="1451-Vehicle repair and maintenance"
           1461="1461-Appliance tool, and toy use, set-up, repair, &
maintenance"
           1462="1462-Computer use, set-up, repair, maintenance, and
education"
           1473="1473-Household organization"
           1512="1512-Looking after someone else"
           1611="1611-Socializing and communicating with others-in person"
           1612="1612-Socializing and communication with others by talking
on telephone"
           1613="1613-Attending or hosting party, wedding or social
occasions"
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                  1614="1614-Reading and sorting through the mail"
                  1621="1621-Watch television and movies"
                  1631="1631-Games & puzzles"
                  1641="1641-Arts and crafts, collecting, and hobbies, making
music"
                  1642="1642-Reading"
                  1643="1642-Writing (personal, not on computer)"
                  1644="1644-Listening to recorded music or radio"
                  1711="1711-Playing/practicing sports or taking physical activity
class/lessons"
                  1712="1712-Walking/jogging for exercise or pleasure or working
out"
                  1713="1713-Other outdoor recreation activities"
                  1813="1813-Religious & spiritual volunteer activities"
                  1901="1901-Other, no existing code"
                  1998="1998-Don't know"
                  1999="1999-Refused/blank";
VALUE W500058W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MONTHS"
    2 = "2 YEARS"  ;
VALUE W500103W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES, A YEAR OR MORE"
    2 = "2 NO, LESS THAN A YEAR"  ;
  VALUE W500105W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MONTH AND YEAR"
    2 = "2 NUMBER OF MONTHS AGO"
    3 = "3 NUMBER OF YEARS AGO"
    4 = "4 AGE WHEN LAST DROVE"
    7 = "7 NEVER DROVE"  ;
VALUE W500123W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 STILL FAVORITE ACTIVITY"
    2 = "2 HAS A NEW FAVORITE ACTIVITY"
   95 = "95 NO FAVORITE ACTIVITY"   ;
VALUE W500124W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN 1 MONTH"
    2 = "2 1 TO 3 MONTHS"
    3 = "3 4 TO 5 MONTHS"
```

```
     4 = "4 6 OR MORE MONTHS" ;
   VALUE W500125W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN 1 WEEK"
     2 = "2 1 TO 2 WEEKS"
     3 = "3 3 TO 4 WEEKS"  ;
   VALUE W500126W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
       1 = "1 A FRACTURE, SPRAIN, OR INJURY"
     2 = "2 A HIP, KNEE, OR OTHER JOINT REPLACEMENT"
     3 = "3 ANOTHER MUSCULOSKELETAL CONDITION"
     4 = "4 A STROKE OR TIA"
     5 = "5 A HEART ATTACK"
     6 = "6 ANOTHER HEART CONDITION OR VASCULAR DISEASE"
     7 = "7 A BREATHING CONDITION"
     8 = "8 A NEUROLOGICAL CONDITION LIKE MS OR PARKINSONS"
     9 = "9 CANCER"
     94 = "94 ANOTHER CONDITION (SPECIFY)"
     95 = "95 NO MEDICAL CONDITION (IF VOLUNTEERED)" ;
   VALUE W500128W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
       1 = "1 DIFFICULTY CHEWING OR SWALLOWING"
     2 = "2 DIFFICULTY SPEAKING OR BEING UNDERSTOOD"
     3 = "3 PAIN LEVEL"
     4 = "4 PROBLEM WITH BREATHING"
     5 = "5 PROBLEM WITH STRENGTH (MUSCLE WEAKNESS)"
     6 = "6 PROBLEM WITH MOVEMENT (RANGE OF MOTION)"
     7 = "7 LOW ENERGY LEVEL"
     8 = "8 PROBLEM WITH BALANCE OR COORDINATION"
     9 = "9 PROBLEM WITH FALLS"
     10 = "10 PROBLEM WITH MEMORY"
     95 = "95 NONE OF THESE PROBLEMS"  ;
   VALUE W500131W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
       1 = "1 AS AN OVERNIGHT PATIENT IN A HOSPITAL, NURSING HOME OR REHAD
FACILITY"
     2 = "2 AT AN OUTPATIENT CENTER, CLINIC, DRs OR THERAPISTs OFFICE"
     3 = "3 HOME"
     4 = "4 SOMEWHERE ELSE"  ;
   VALUE W500132W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
       1 = "1 IMPROVED"
```

```
      2 = "2 GOT WORSE"
      3 = "3 STAYED ABOUT THE SAME"
      4 = "4 VARIED/UP AND DOWN (IF VOLUNTEERED)"  ;
  VALUE W500133W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 A LOT"
     2 = "2 SOMEWHAT"
     3 = "3 A LITTLE"  ;

  VALUE W500137W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
      1 = "1 WELL OFF"
     2 = "2 ABOVE AVERAGE"
     3 = "3 AVERAGE"
     4 = "4 BELOW AVERAGE"
     5 = "5 POOR"  ;
VALUE W500010W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
      1 = "1 MOTHER ONLY"
     2 = "2 FATHER ONLY"
     3 = "3 ANOTHER RELATIVE"
     4 = "4 NON-RELATIVES"
     5 = "5 VARIED/MOVED AROUND"  ;
  VALUE W500142W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 VERY WELL"
     2 = "2 WELL"
     3 = "3 NOT WELL"
     4 = "4 NOT AT ALL"  ;
  VALUE W500147W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
      1 = "1 NUMBER OF YEARS"
     2 = "2 AGE"  ;
  VALUE W500150W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
      1 = "1 ENTER PAYCHECK AMOUNT"
     2 = "2 ENTER PAY PER HOUR"
     3 = "3 ENTER PAY PER DAY"  ;
  VALUE W500151W
```

```
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 ENTER OCCUPATION"
   2 = "2 NEVER WORKED ENTIRE LIFE"
   3 = "3 HOMEMAKER/RAISED CHILDREN/WORKED IN THE HOME"  ;
VALUE W500152W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SAME KIND OF WORK"
   2 = "2 SOMETHING DIFFERENT"  ;
VALUE W500160W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MAIL"
   2 = "2 DIRECT DEPOSIT"
   3 = "3 PREPAID CARD"  ;
VALUE W500165W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 ENTER COMBINED AMOUNT"
   2 = "2 ENTER SP AND SPOUSE/PARTNER AMOUNTS SEPARATELY"  ;
VALUE W500166W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $1,300"
   2 = "2 $1,300 TO LESS THAN $1,700"
   3 = "3 $1,700 TO LESS THAN $2,200"
   4 = "4 $2,200 TO LESS THAN $2,600"
   5 = "5 $2,600 OR MORE"  ;
VALUE W500167W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $700"
   2 = "2 $700 TO LESS THAN $1,000"
   3 = "3 $1,000 TO LESS THAN $1,300"
   4 = "4 $1,300 TO LESS THAN $1,600"
   5 = "5 $1,600 OR MORE"  ;
VALUE W500168W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $300"
   2 = "2 $300 TO LESS THAN $700"
   3 = "3 $700 TO LESS THAN $1,000"
```

```
    4 = "4 $1,000 OR MORE"    ;
  VALUE W500169W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
      1 = "1 LESS THAN $100"
    2 = "2 $100 TO LESS THAN $200"
    3 = "3 $200 TO LESS THAN $400"
    4 = "4 $400 TO LESS THAN $700"
    5 = "5 $700 OR MORE"  ;
  VALUE W500170W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $1,000"
    2 = "2 $1,000 TO LESS THAN $1,400"
    3 = "3 $1,400 TO LESS THAN $1,800"
    4 = "4 $1,800 TO LESS THAN $2,200"
    5 = "5 $2,200 OR MORE"  ;
  VALUE W500171W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $500"
    2 = "2 $500 TO LESS THAN $700"
    3 = "3 $700 TO LESS THAN $900"
    4 = "4 $900 TO LESS THAN $1,100"
    5 = "5 $1,100 OR MORE"  ;
  VALUE W500172W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $600"
    2 = "2 $600 TO LESS THAN $1,300"
    3 = "3 $1,300 TO LESS THAN $2,100"
    4 = "4 $2,100 TO LESS THAN $5,900"
    5 = "5 $5,900 OR MORE"  ;
  VALUE W500173W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $400"
    2 = "2 $400 TO LESS THAN $900"
    3 = "3 $900 TO LESS THAN $1,600"
    4 = "4 $1,600 TO LESS THAN $3,800"
    5 = "5 $3,800 OR MORE"  ;
  VALUE W500174W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $34,000"
```

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     2 = "2 $34,000 TO LESS THAN $82,000"
     3 = "3 $82,000 TO LESS THAN $175,000"
     4 = "4 $175,000 TO LESS THAN $413,000"
     5 = "5 $413,000 OR MORE"    ;
   VALUE W500175W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $20,000"
     2 = "2 $20,000 TO LESS THAN $47,000"
     3 = "3 $47,000 TO LESS THAN $92,000"
     4 = "4 $92,000 TO LESS THAN $218,000"
     5 = "5 $218,000 OR MORE"    ;
   VALUE W500176W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $200"
     2 = "2 $200 TO LESS THAN $500"
     3 = "3 $500 TO LESS THAN $1,000"
     4 = "4 $1,000 TO LESS THAN $2,500"
     5 = "5 $2,500 OR MORE"  ;
   VALUE W500177W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $100"
     2 = "2 $100 TO LESS THAN $300"
     3 = "3 $300 TO LESS THAN $700"
     4 = "4 $700 TO LESS THAN $1,700"
     5 = "5 $1,700 OR MORE"  ;
   VALUE W500178W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $2,400"
     2 = "2 $2,400 TO LESS THAN $6,000"
     3 = "3 $6,000 TO LESS THAN $12,000"
     4 = "4 $12,000 TO LESS THAN $30,000"
     5 = "5 $30,000 OR MORE"  ;
   VALUE W500179W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $1,200"
     2 = "2 $1,200 TO LESS THAN $3,600"
     3 = "3 $3,600 TO LESS THAN $8,400"
     4 = "4 $8,400 TO LESS THAN $20,400"
     5 = "5 $20,400 OR MORE"  ;
   VALUE W500180W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $9,000"
  2 = "2 $9,000 TO LESS THAN $18,000"
  3 = "3 $18,000 TO LESS THAN $93,000"
  4 = "4 $93,000 TO LESS THAN $350,000"
  5 = "5 $350,000 OR MORE"   ;
VALUE W500181W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $600"
  2 = "2 $600 TO LESS THAN $5,000"
  3 = "3 $5,000 TO LESS THAN $16,000"
  4 = "4 $16,000 TO LESS THAN $62,000"
  5 = "5 $62,000 OR MORE"  ;
VALUE W500182W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $8,000"
  2 = "2 $8,000 TO LESS THAN $62,000"
  3 = "3 $62,000 TO LESS THAN $192,000"
  4 = "4 $192,000 TO LESS THAN $213,000"
  5 = "5 $213,000 OR MORE"   ;
VALUE W500183W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $300"
  2 = "2 $300 TO LESS THAN $2,500"
  3 = "3 $2,500 TO LESS THAN $8,000"
  4 = "4 $8,000 TO LESS THAN $37,000"
  5 = "5 $37,000 OR MORE"   ;
VALUE W500184W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $11,000"
  2 = "2 $11,000 TO LESS THAN $25,000"
  3 = "3 $25,000 TO LESS THAN $50,000"
  4 = "4 $50,000 TO LESS THAN $108,000"
  5 = "5 $108,000 OR MORE"   ;
VALUE W500185W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $2,000"
  2 = "2 $2,000 TO LESS THAN $7,000"
  3 = "3 $7,000 TO LESS THAN $17,000"
  4 = "4 $17,000 TO LESS THAN $57,000"
  5 = "5 $57,000 OR MORE"   ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W500186W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $8,000"
  2 = "2 $8,000 TO LESS THAN $13,000"
  3 = "3 $13,000 TO LESS THAN $28,000"
  4 = "4 $28,000 TO LESS THAN $54,000"
  5 = "5 $54,000 OR MORE"  ;
VALUE W500187W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $500"
  2 = "2 $500 TO LESS THAN $1,900"
  3 = "3 $1,900 TO LESS THAN $5,000"
  4 = "4 $5,000 TO LESS THAN $20,000"
  5 = "5 $20,000 OR MORE"  ;
VALUE W500188W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $200"
  2 = "2 $200 TO LESS THAN $1,000"
  3 = "3 $1,000 TO LESS THAN $4,000"
  4 = "4 $4,000 TO LESS THAN $16,000"
  5 = "5 $16,000 OR MORE"  ;
VALUE W500189W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $400"
  2 = "2 $400 TO LESS THAN $1,000"
  3 = "3 $1,000 TO LESS THAN $2,000"
  4 = "4 $2,000 TO LESS THAN $11,000"
  5 = "5 $11,000 OR MORE"  ;
VALUE W500190W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $30,000"
  2 = "2 $30,000 TO LESS THAN $101,000"
  3 = "3 $101,000 TO LESS THAN $247,000"
  4 = "4 $247,000 TO LESS THAN $703,000"
  5 = "5 $703,000 OR MORE"  ;
VALUE W500191W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $18,000"
  2 = "2 $18,000 TO LESS THAN $68,000"
```

```
    3 = "3 $68,000 TO LESS THAN $122,000"
    4 = "4 $122,000 TO LESS THAN $293,000"
    5 = "5 $293,000 OR MORE"  ;
  VALUE W500192W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $3,600"
    2 = "2 $3,600 TO LESS THAN $12,000"
    3 = "3 $12,000 TO LESS THAN $25,000"
    4 = "4 $25,000 TO LESS THAN $64,000"
    5 = "5 $64,000 OR MORE"  ;
  VALUE W500193W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $3,600"
    2 = "2 $3,600 TO LESS THAN $7,200"
    3 = "3 $7,200 TO LESS THAN $14,000"
    4 = "4 $14,000 TO LESS THAN $38,000"
    5 = "5 $38,000 OR MORE"  ;
  VALUE W500194W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $30,000"
    2 = "2 $30,000 TO LESS THAN $43,000"
    3 = "3 $43,000 TO LESS THAN $66,000"
    4 = "4 $66,000 TO LESS THAN $109,000"
    5 = "5 $109,000 OR MORE"  ;
  VALUE W500195W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $18,000"
    2 = "2 $18,000 TO LESS THAN $22,000"
    3 = "3 $22,000 TO LESS THAN $36,000"
    4 = "4 $36,000 TO LESS THAN $56,000"
    5 = "5 $56,000 OR MORE" ;
  VALUE W500209W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    3 = "3 CANT DO - DONT DO"  ;
  VALUE W500196W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $2,500"
```

```
     2 = "2 $2,500 TO LESS THAN $5,000"
     3 = "3 $5,000 TO LESS THAN $10,000"
     4 = "4 $10,000 TO LESS THAN $20,000"
     5 = "5 $20,000 TO LESS THAN $50,000"
     6 = "6 $50,000 OR MORE"  ;
  VALUE dage2us
     0 = "0 Less than age 1"
     997 = "997 Born in US"
    -9 ="-9 Missing"
     -8 = "-8 DK"
    -7 = "-7 RF"
    -1 = "-1 Inapplicable";
  VALUE locsp
    -9 ="-9 Missing"
    -8 ="-8 DK"
    -7 ="-7 RF"
    -1 ="-1 Inapplicable"
    1 = "1 Independent Living"
    2 = "2 Assisted Living"
    3 = "3 Special Care Unit"
    4 = "4 Nursing Home"
    8 = "8 Not Reported" ;

   VALUE resid
  -9 = '-9 Missing'
       -8 = "-8 DK"
       -7 = "-7 RF"
       -1 = "-1 Inapplicable"
       1 = "Community"
       2 = "Residential care not nursing home (SP interview)"
       3 = "Residential care not nursing home (FQ only)"
       4 = "Nursing home (SP interview)"
       5 = "Nursing home (FQ only)"
       6 = "Deceased"
       7 = "Residential care not nursing home in R1 and R2 (FQ only)"
       8 = "Nursing home in R1 and R2 (FQ only)";

   VALUE  residlml
       1 = "1 Community"
       2 = "2 Residential care"
       -1 = "-1 Inapplicable"
    -9 = '-9 Missing';

  VALUE SP50139W
    1 = "1 White/Caucasian"
    2 = "2 Black/African American"
    3 = "3 Other"
     -7 = '-7 RF'
     -8 = '-8 DK'
   -9 = '-9 Missing';

  VALUE Locat15w
       1= "1 Lives in same City and State as at age 15"
       2= "2 Lives in same state but different City (or DKRF city) as age
15"
       3= "3 Does not live in same State as age 15"
     -1= "-1 Inapplicable"
```

```
       -7 = '-7 RF'
       -8 = '-8 DK'
        -9 = '-9 Missing';
  Value  dresnew
       1 = "1 same residence as last int"
       2 = "2 new residence since last int"
      -1= "-1 Inapplicable"
   -7 = '-7 RF'
   -8 = '-8 DK'
   -9 = '-9 Missing';

 Value dcontnew
       1 = "1 Continuing sample from R1"
       2 = "2 New sample in R5"
      -1= "-1 Inapplicable"
   -7 = '-7 RF'
   -8 = '-8 DK'
   -9 = '-9 Missing';

   VALUE DMDDEVYR
    1 = ' 1 No Mobility device use in last year/since last interview'
    2 = ' 2 Mobility device use in last year/since last interview'
   -1 = '-1 Inapplicable '
   -7  = '-7 RF'
   -8  = '-8 DK'
   -9 = '-9 Missing';

   VALUE DMDEVST
    0 = '0 less than 1 month of mobility device use'
    1 = '1 month of mobility device use'
    2 = '2 months of mobility device use'
    3 = '3 months of mobility device use'
    4 = '4 months of mobility device use'
    5 = '5 months of mobility device use'
    6 = '6 months of mobility device use'
    7 = '7 months of mobility device use'
    8 = '8 months of mobility device use'
    9 = '9 months of mobility device use'
   10 = '10 months of mobility device use'
   11 = '11 months of mobility device use'
   -7 = '-7 used last month but RF number of months of use in year'
   -8 = '-8 used last month but DK number of months of use in year'
   -1 = '-1 Inapplicable '
    -2 = '-2 Not asked of continuing sample';

   VALUE DMDEVEND
     0 = '0 Between 11 and 12 months since device use ended'
   1 = '1 month since mobility device use ended'
   2 = '2 months since mobility device use ended'
   3 = '3 months since mobility device use ended'
   4 = '4 months since mobility device use ended'
   5 = '5 months since mobility device use ended'
   6 = '6 months since mobility device use ended'
   7 = '7 months since mobility device use ended'
   8 = '8 months since mobility device use ended'
   9 = '9 months since mobility device use ended'
   10 = '10 months since mobility device use ended'
```

```
    11 = '11 months since mobility device use ended'
    -7 = '-7 no use last month and RF number of months since device use
ended'
    -8 = '-8 no use last month and DK number of months since device use
ended'
    -1 = '-1 Inapplicable '
      -2 = '-2 Not asked of continuing sample' ;
    VALUE DMDHLPYR
    1 = " 1 No mobility help in last year/since last interview"
    2 = " 2 Mobility help in last year/since last interview"
   -7 = " -7 RF"
   -8 = " -8 DK"
   -1 = " -1 Inapplicable "
            -2 = '-2 Not asked of continuing sample' ;

    VALUE DMDHLPST
     0 = '0 less than 1 month of help'
     1 = '1 month of help'
     2 = '2 months of help'
     3 = '3 months of help'
     4 = '4 months of help'
     5 = '5 months of help'
     6 = '6 months of help'
     7 = '7 months of help'
     8 = '8 months of help'
     9 = '9 months of help'
    10 = '10 months of help'
    11 = '11 months of help'
    -7 = '-7 help last month but RF number of months of help in year'
    -8 = '-8 help last month but DK number of months of help in year'
   -1 = " -1 Inapplicable "
   -2 = " -2 Not asked of continuing sample ";
    VALUE DMDHLPEN
     0 = '0 less than 1 month since help ended'
     1 = '1 month since help ended'
     2 = '2 months since help ended'
     3 = '3 months since help ended'
     4 = '4 months since help ended'
     5 = '5 months since help ended'
     6 = '6 months since help ended'
     7 = '7 months since help ended'
     8 = '8 months since help ended'
     9 = '9 months since help ended'
    10 = '10 months since help ended'
    11 = '11 months since help ended'
    -7 = '-7 no help last month and RF number of months since help ended'
    -8 = '-8 no help last month and DK number of months since help ended'
    -1 = '-1 Inapplicable '
   -2 = '-2 Not asked of continuing sample';
    VALUE DMHLPYRS
     0   = '0 none or less than 1 year'
     997 = '997 since birth'
     -7  = '-7 RF'
     -8  = '-8 DK'
     -1  = '-1 Inapplicable '
     -2 = '-2 Not asked of continuing sample'
    -9  = '-9 Missing';
```

# SAS ALGORITHM FOR DEMENTIA

```
VALUE DSDHLPYR
 1 = ' 1 No self care help in last year/since last interview'
 2 = ' 2 Self care help in last year/since last interview'
-1 = '-1 Inapplicable'
-7 = '-7 DK'
-8 = '-8 RF'
-9 = '-9 Missing';
VALUE DSHLPND
        0 = ' 0 Between 11 and 12 months since self care help ended'
        1 = '1 Month since self care help ended'
        2 = '2 Months since self care help ended'
        3 = '3 Months since self care help ended'
        4 = '4 Months since self care help ended'
        5 = '5 Months since self care help ended'
        6 = '6 Months since self care help ended'
        7 = '7 Months since self care help ended'
        8 = '8 Months since self care help ended'
        9 = '9 Months since self care help ended'
        10 = '10 Months since self care help ended'
        11 = '11 Months since self care help ended'
       -7 = '-7 No help last month and RF number of months since help ended'
       -8 = '-8 No help last month and DK number of months since help ended'
       -1 = '-1 Inapplicable'
        -2 = '-2 Not asked of continuing sample'
       -9 = '-9 Missing'    ;

VALUE DSHLPYRS
       0 = ' 0 None or less than 1 year of self care help'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
        -2 = '-2 Not asked of continuing sample'
      -9 = '-9 Missing'
       997 = '997 since birth';
VALUE SP5RH7W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 As an overnight patient in a hospital, nursing home, or
rehab facility"
       2 = "2 At an outpatient center, clinic, or doctors office or
therapists office"
      3 = "3 At home"
      4 = "4 Somewhere else"  ;
VALUE SP5LF5W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
     997 = "997 Number of hours vary each week"  ;

VALUE  DMH_GRP
        1 = "1 Help started"
        2 = "2 Help ended"
        3 = "3 Help both interviews with gap"
        4 = "4 Help both interviews with no gap"
```

```
        5 = "5 Help between interviews only (month ended missing)"
        6 = "6 No help either interview or between"
       11 = "11 Help started (month started missing)"
       21 = "21 Help ended (month ended missing)"
       41 = "41 Help both interviews (DK whether gap)"
       61 = "61 No help either interview (DK whether help between)"
       -9 = "-9 Missing"
       -1 = "-1 Inapplicable"
         -3 ="-3 Not asked of new sample"
     -999 = "-999 Not determined" ;

     VALUE   DMU_GRP
         1 = "1 Use started"
         2 = "2 Use ended"
         3 = "3 Use both interviews with gap"
         4 = "4 Use both interviews with no gap"
         5 = "5 Use between interviews only (month ended missing)"
         6 = "6 No use either interview or between"
        11 = "11 Use started (month started missing)"
        21 = "21 Use ended (month ended missing)"
        41 = "41 Use both interviews (DK whether gap)"
        61 = "61 No use either interview (DK whether use between)"
        -9 = "-9 Missing"
        -1 = "-1 Inapplicable"
          -3 = "-3 Not asked of new sample"
      -999 = "-999 Not determined" ;

       VALUE   DMDS5FLG
        -1 = "-1 Inapplicable"
             -3 = "-3 Not asked of new sample"
         0 = "0 No current SP interview"
         1 = "1 No SP interview last round"
         2 = "2 Died and month death missing"
         3 = "3 Died <=1 month after last interview"
         4 = "4 Died 12-13 months after last interview"
         7 = "7 Skipped 1 or more help questions" ;
       VALUE   DS_GRP
       1 = "1 Help started"
       2 = "2 Help ended"
       3 = "3 Help both interviews with gap"
       4 = "4 Help both interviews with no gap"
       5 = "5 Help between interviews only"
       6 = "6 No help either interview or between"
      11 = "11 Help started (month started missing)"
      21 = "21 Help ended (month ended missing)"
      41 = "41 Help both interviews (DK whether gap)"
      61 = "61 No help either interview (DK whether help between)"
      -9 = "-9 Missing"
      -1 = "-1 Inapplicable"
        -3 = "-3 Not asked of new sample"
    -999 = "-999 Not determined" ;
    value groupmo 1 = "1 Started"
                  2 = "2 Ended"
                    3 = "3 Both times with gap"
                    4 = "4 Both times no gap"
                        5 = "5 Between only (end missing)"
                    6 = "6 Neither time AND not between"
```

```
                11 = "11 Started (start missing)"
                21 = "21 Ended (end missing)"
                41 = "41 Both times (gap missing)"
                61 = "61 Neither time (between missing)"
                      -1= "-1 Inapplicable"
                        -3="-3 Not asked of new sample"
                  -7= "-7 RF"
                  -8= "-8 DK"
                  -9= "-9 Missing"
              -999 = "-999 Not determined"
               -99 = "-99 Partial" ;

        VALUE nw_mths  0 = "0 Less than 1 month"
         1 ="1 month"
         2 ="2 months"
         3 ="3 months"
         4 ="4 months"
         5 ="5 months"
         6 ="6 months"
         7 ="7 months"
         8 ="8 months"
         9 ="9 months"
        10= "10 months"
        11= "11 months"
        12= "12 months"
        13= "13 months"
        14= "14 months"
        15= "15 months"
        16= "16 months"
        17= "17 months"
        18= "18 months"
        19= "19 months"
        20= "20 months"
        90= "90 Last round disputed"
        999= "999 No months"
        -1= "-1 Inapplicable"
             -3="-3 Not asked of new sample"
        -7= "-7 RF"
        -8= "-8 DK"
        -9= "-9 Missing"
        -10= "-10 Not ascertained"
        -12= "-12 Outside of range (greater than months between
interviews)"
        -13= "-13 None"
        -999= "-999 Not determined"
        -99= "-99 Partial";
             VALUE chntinhh
         1 ="1 Yes, not in household"
         -1= "-1 Inapplicable"
         -7= "-7 RF"
         -8= "-8 DK"
         -9= "-9 Missing";
        Value d4mssadd
             -1='-1 Inapplicable'
         0='0 no flags and added at undetermined section'
         1='1 no flags and added at CL section'
         2='2 no flags and added at DT section'
```

```
            3='3 no flags and added at EW section'
            4='4 no flags and added at HA section'
            5='5 no flags and added at HO section'
            6='6 no flags and added at MC section'
            7='7 no flags and added at MO section'
            8='8 no flags and added at PA section'
            9='9 no flags and added at PE section'
           10='10 no flags and added at SC section'
           11='11 no flags and added at SN section'
           12='12 no flags and added at CS section'
           13='13 no flags and added at HH section'
                14='14 no flags and added at IS section'
                15='15 no flags and added at HL section'
                16='16 no flags and added at SL section';
        VALUE HA5DWHL
            1 = "1 Meals on wheels last month"
            -1 = "-1 Inapplicable";
        VALUE HA5DTKO
            1 = "1 Restaurant or take out last month"
            -1 = "-1 Inapplicable";
        VALUE RE5BLDG
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
          1 = "1 Building has one floor"
          2 = "2 Building has multiple floors"   ;
run;

/*===================================================================*/

/* NHATS_Round_6_Combined_PROC_FORMAT_Statement.sas */

PROC FORMAT ;

    VALUE release
        -1 = '-1 Inapplicable'
        1 = '1 Main Sample'
        2 = '2 Reserve Sample'
        9 = '9 New Release Sample';

    VALUE STAT_DTa
         4 = " 4 April"
         5 = " 5 May"
         6 = " 6 June"
         7 = " 7 July"
         8 = " 8 August"
         9 = " 9 September"
        10 = "10 October"
        11 = "11 November"
        99 = "99 Prior to start of field work"
        -1 = '-1 Inapplicable';

    VALUE $DISP
        '10' = "10 Not Available "
        '11' = "11 Ready"
        '12' = "12 Started "
```

```
                '20' = "20 Final "
                '24' = "24 Not Required "
                '60' = "60 Complete "
                '61' = "61 Complete, NH facility"
                '62' = "62 Complete SP Deceased, Proxy Intv"
                '63' = "63 Complete SP, FQ not complete"
                '64' = "64 Complete FQ, SP not complete"
                '75' = "75 Physically/mentally unable to participate, no proxy"
                '76' = "76 Too ill to participate, no proxy"
                '77' = "77 Refusal, SP"
                '78' = "78 Language barrier"
                '79' = "79 Unable to locate"
                '80' = "80 Unavailable during field period"
                '82' = "82 Outside of PSU"
                '83' = "83 Ineligible"
                '85' = "85 Refusal, facility"
                '86' = "86 Deceased"
                '87' = "87 Refusal, proxy"
                '88' = "88 Work stopped"     ;

        VALUE DISP_a
                10 = "10 Not Available"
                11 = "11 Ready"
                12 = "12 Started"
                20 = "20 Final"
                24 = "24 Not Required"
                60 = "60 Complete"
                61 = "61 Complete, NH facility"
                62 = "62 Complete SP Deceased, Proxy Intv"
                63 = "63 Complete SP, FQ not complete"
                64 = "64 Complete FQ, SP not complete "
                75 = "75 Physically/mentally unable to participate, no proxy"
                76 = "76 Too ill to participate, no proxy"
                77 = "77 Refusal, SP"
                78 = "78 Language barrier"
                79 = "79 Unable to locate"
                80 = "80 Unavailable during field period"
                82 = "82 Outside of PSU"
                83 = "83 Ineligible"
                85 = "85 Refusal, facility"
                86 = "86 Deceased"
                87 = "87 Refusal, proxy"
                88 = "88 Work stopped"     ;

        VALUE DISP_
                10 = "10 Not Available"
                11 = "11 Ready"
                12 = "12 Started"
                20 = "20 Final"
                24 = "24 Not Required";

        VALUE DISP_F
         -1 = '-1 Inapplicable'
                10 = "10 Not Available"
                11 = "11 Ready"
                12 = "12 Started"
                20 = "20 Final"
```

```
          24 = "24 Not Required"
          60 = "60 Complete"
          61 = "61 Complete, NH facility"
          62 = "62 Complete SP Deceased, Proxy Intv"
          63 = "63 Complete SP, FQ not complete"
          64 = "64 Complete FQ, SP not complete "
          75 = "75 Physically/mentally unable to participate, no proxy"
          76 = "76 Too ill to participate, no proxy"
          77 = "77 Refusal, SP"
          78 = "78 Language barrier"
          79 = "79 Unable to locate"
          80 = "80 Unavailable during field period"
            81 = "81 Final deceased, new sample only"
          82 = "82 Outside of PSU"
          83 = "83 Ineligible"
          85 = "85 Refusal, facility"
          86 = "86 Deceased"
          87 = "87 Refusal, proxy"
          88 = "88 Work stopped"
          89 = "89 Final, Other Specify";

     VALUE RFDK
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

     VALUE $RFDK_F
     '-7' = '-7 RF'
     '-8' = '-8 DK'
     '-1' = '-1 Inapplicable'
     '-9' = '-9 Missing';

     VALUE RFDK_F
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE RFDK_B
     -1 = '-1 Inapplicable'
     1 = '1 Yes-Breakoff';

VALUE $RFDK_C
     '-1' = '-1 Inapplicable'
     'CL' ='CL - Closing'
     'EW' ='EW - Economic Well-Being'
     'FQ' ='FQ - Facility Questionnaire'
     'HL' ='HL - Helper'
     'HW' ='HW - Height and Weight'
     'IP' ='IP - Insurance Plans'
     'LF' ='LF - Labor Force'
     'PA' ='PA - Participation'
     'PE' ='PE - Performance'
     'WB' ='WB - Well-being' ;

VALUE $RFDK_2C
```

```
          '-1' = '-1 Inapplicable'
          '-7' = '-7 RF'
          '-8' = '-8 DK'
          '-9' = '-9 Missing';

          VALUE RFDK_Y
           1 = ' 1 Yes'
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing';

VALUE RFDK_I
           0 = ' 0 No'
           1 = ' 1 Yes'
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing';

          VALUE RFDK_YN
           1 = ' 1 Yes'
           2 = ' 2 No'
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing';

          VALUE DSTRP_G
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
           1 =  '1 X condition and word color condition accuracy below threshold
(less than .42)'
           2 =  '2 word condition only below threshold (less than .42)'
           3 =  '3 X condition and word color condition meet criteria for accuracy'
           4 =  '4 fewer than 50% of X and word color condition trials answered'
          999 = '999 X condition only below threshold (less than .42)';

          VALUE DSTRP_R
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -999 = '-999 Inapplicable'
          other = 'Values ranging between -.353 and 1.115';

          VALUE DSTRP_M
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -999 = '-999 Inapplicable'
          other = 'Values ranging between -544.732 and 924.863';

VALUE FQ_4F
          -7 = '-7 RF'
          -8 = '-8 DK'
```

# SAS ALGORITHM FOR DEMENTIA

```
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
        1='1 YES'
        2='2 NO';

VALUE CHILDDEC
   1 =  '1 CHILD DECEASED'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE W200001W
  12 = "12 STARTED"
  20 = "20 COMPLETE"
  21 = "21 INELIGIBLE - NOT 65+"   ;

VALUE W200008x
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 UNDER 20"
   2 = "2 20-24"
   3 = "3 25-29"
   4 = "4 30-34"
   5 = "5 35-39"
   6 = "6 40-44"
   7 = "7 45-49"
   8 = "8 50-54"
   9 = "9 55-59"
  10 = "10 60-64"
  11 = "11 65-69"
  12 = "12 70-74"
  13 = "13 75-79"
  14 = "14 80-84"
  15 = "15 85-89"
  16 = "16 90 +";

VALUE W200009W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SAMPLE PERSON"
   2 = "2 SPOUSE/ PARTNER"
   3 = "3 DAUGHTER"
   4 = "4 SON"
   5 = "5 DAUGHTER-IN-LAW"
   6 = "6 SON-IN-LAW"
   7 = "7 STEPDAUGHTER"
   8 = "8 STEPSON"
   9 = "9 SISTER"
  10 = "10 BROTHER"
  11 = "11 SISTER-IN-LAW"
  12 = "12 BROTHER-IN-LAW"
  13 = "13 MOTHER"
```

```
    14 = "14 STEPMOTHER"
    15 = "15 MOTHER-IN-LAW"
    16 = "16 FATHER"
    17 = "17 STEPFATHER"
    18 = "18 FATHER-IN-LAW"
    19 = "19 GRANDDAUGHTER"
    20 = "20 GRANDSON"
    21 = "21 NIECE"
    22 = "22 NEPHEW"
    23 = "23 AUNT"
    24 = "24 UNCLE"
    25 = "25 COUSIN"
    26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
    27 = "27 STEPSON'S SON/ DAUGHTER"
    28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
    29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
    30 = "30 BOARDER/RENTER"
    31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
    32 = "32 ROOMMATE"
    33 = "33 EX-WIFE/ EX-HUSBAND"
    34 = "34 BOYFRIEND/ GIRLFRIEND"
    35 = "35 NEIGHBOR"
    36 = "36 FRIEND"
    37 = "37 SOMEONE/SERVICE AT THE PLACE SP LIVES/LIVED"
    38 = "38 CO-WORKER"
    39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
    40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
    41 = "41 DECEASED SPOUSE/PARTNER"
    91 = "91 OTHER RELATIVE"
    92 = "92 OTHER NONRELATIVE"   ;

  VALUE W200002W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MALE"
   2 = "2 FEMALE";

  VALUE W200005W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 NO SCHOOLING COMPLETED"
   2 = "2 1ST-8TH GRADE"
   3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
   4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
   5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
   6 = "6 SOME COLLEGE BUT NO DEGREE"
   7 = "7 ASSOCIATE'S DEGREE"
   8 = "8 BACHELOR'S DEGREE"
   9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"  ;

  VALUE W200010W
  -7 = '-7 RF'
```

```
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MARRIED"
   2 = "2 LIVING WITH A PARTNER"
   3 = "3 SEPARATED"
   4 = "4 DIVORCED"
   5 = "5 WIDOWED"
   6 = "6 NEVER MARRIED";

  VALUE W200011W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 PREVIOUSLY REPORTED"  ;
VALUE W200012W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 REGULAR"
   2 = "2 VARIED"  ;

  VALUE W200013W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP AND/OR FAMILY"
   2 = "2 GOVERNMENT PROGRAM"
   3 = "3 INSURANCE"
  91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200015W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1='1 HOURLY'
   2='2 WEEKLY'
   3='3 MONTHLY'
   4='4 DID NOT PAY IN LAST MONTH'
     91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200016W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MEDICAID"
   2 = "2 MEDICARE"
   3 = "3 STATE PROGRAM"
  91 = "91 OTHER (SPECIFY)"   ;
```

```
VALUE W200018W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
  2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
  3 = "3 MOBILE HOME OR TRAILER"
  4 = "4 MULTI-UNIT (2+) BUILDING"
 91 = "91 OTHER (SPECIFY)"  ;

VALUE W200020W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOME"
  2 = "2 MULTI-UNIT"
  3 = "3 OTHER"  ;

VALUE W200021W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 BUILDING HAS ONE FLOOR"
  2 = "2 BUILDING HAS MULTIPLE FLOORS"   ;

VALUE W200022W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOME"
  2 = "2 APARTMENT"
  3 = "3 ROOM"
  4 = "4 UNIT"
  5 = "5 SUITE"
  6 = "6 SOMETHING ELSE (SPECIFY)"  ;

VALUE W200030W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SAMPLE PERSON (SP)"
  2 = "2 PROXY"  ;

VALUE W200032W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOSPITAL"
  2 = "2 NURSING HOME/REHAB CENTER"
 91 = "91 OTHER (SPECIFY)"  ;
```

```
VALUE W200035W
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SELF"
  2 = "2 SPOUSE/ PARTNER"
  3 = "3 DAUGHTER"
  4 = "4 SON"
  5 = "5 DAUGHTER-IN-LAW"
  6 = "6 SON-IN-LAW"
  7 = "7 STEPDAUGHTER"
  8 = "8 STEPSON"
  9 = "9 SISTER"
 10 = "10 BROTHER"
 11 = "11 SISTER-IN-LAW"
 12 = "12 BROTHER-IN-LAW"
 13 = "13 MOTHER"
 14 = "14 STEPMOTHER"
 15 = "15 MOTHER-IN-LAW"
 16 = "16 FATHER"
 17 = "17 STEPFATHER"
 18 = "18 FATHER-IN-LAW"
 19 = "19 GRANDDAUGHTER"
 20 = "20 GRANDSON"
 21 = "21 NIECE"
 22 = "22 NEPHEW"
 23 = "23 AUNT"
 24 = "24 UNCLE"
 25 = "25 COUSIN"
 26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
 27 = "27 STEPSON'S SON/ DAUGHTER"
 28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
 29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
 30 = "30 BOARDER/RENTER"
 31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
 32 = "32 ROOMMATE"
 33 = "33 EX-WIFE/ EX-HUSBAND"
 34 = "34 BOYFRIEND/ GIRLFRIEND"
 35 = "35 NEIGHBOR"
 36 = "36 FRIEND"
 37 = "37 SOMEONE/SERVICE FROM THE PLACE SP LIVES/DIED"
 38 = "38 CO-WORKER"
 39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
 40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
 91 = "91 OTHER RELATIVE"
 92 = "92 OTHER NONRELATIVE"  ;

VALUE W200036W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 VERY FAMILIAR"
  2 = "2 SOMEWHAT FAMILIAR"
  3 = "3 A LITTLE FAMILIAR"
  4 = "4 NOT AT ALL FAMILIAR"  ;
```

# SAS ALGORITHM FOR DEMENTIA

```
VALUE W200037W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, SAME ADDRESS"
  2 = "2 NO, DIFFERENT ADDRESS"
  3 = "3 YES, SAME ADDRESS WITH MINOR CORRECTIONS"  ;

VALUE W200038W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
 10 = "10 OCTOBER"
 11 = "11 NOVEMBER"
 12 = "12 DECEMBER"  ;

VALUE W200039W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"
  3 = "3 YEAR2013"
  4 = "4 YEAR2014"
  5 = "5 YEAR2015"
  6 = "6 YEAR2016"
  7 = "7 YEAR2017"
  8 = "8 YEAR2018"
  9 = "9 YEAR2019"
 10 = "10 YEAR2020"  ;

VALUE W200040W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"  ;

VALUE W200041W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AT SPS OR SOMEONE ELSES HOME"
```

```
   2 = "2 IN A HOSPITAL"
   3 = "3 IN A NURSING HOME"
   4 = "4 IN A HOSPICE RESIDENCE"
   5 = "5 IN TRANSIT (AMBULANCE TO HOSPITAL)"
  91 = "91 SOMEWHERE ELSE (SPECIFY)";

 VALUE W200042W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP'S HOME"
  2 = "2 SOMEONE ELSE'S HOME"  ;

 VALUE W200043W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INTENSIVE CARE UNIT"
  2 = "2 PALLIATIVE CARE UNIT"
  3 = "3 INPATIENT HOSPICE UNIT"
  4 = "4 EMERGENCY ROOM"
  5 = "5 ANOTHER KIND OF UNIT"  ;

 VALUE W200044W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOSPICE AT A HOSPITAL"
  2 = "2 HOSPICE AT A NURSING HOME"
  3 = "3 RESIDENTIAL HOSPICE"
  4 = "4 OTHER HOSPICE"  ;

 VALUE W200045W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 DAYS"
  2 = "2 WEEKS"
  3 = "3 MONTHS"
  4 = "4 YEARS"  ;

 VALUE W200046W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AT SP'S HOME"
  2 = "2 IN A HOSPITAL"
  3 = "3 IN A NURSING HOME"
  4 = "4 IN A HOSPICE RESIDENCE"
  91 = "91 SOMEWHERE ELSE (SPECIFY)"  ;

 VALUE W200047W
```

```
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY DAY"
  2 = "2 MOST DAYS"
  3 = "3 SOME DAYS"
  4 = "4 RARELY"
  5 = "5 NOT AT ALL"  ;

VALUE W200048W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN WAS NEEDED"
  2 = "2 MORE THAN WAS NEEDED"
  3 = "3 ABOUT RIGHT AMOUNT"  ;

VALUE W200049W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

VALUE W200050W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ALWAYS"
  2 = "2 USUALLY"
  3 = "3 SOMETIMES"
  4 = "4 NEVER"
  5 = "5 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

VALUE W200051W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EXCELLENT"
  2 = "2 VERY GOOD"
  3 = "3 GOOD"
  4 = "4 FAIR"
  5 = "5 POOR"  ;

VALUE W200052W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NOT AT ALL"
  2 = "2 SEVERAL DAYS"
```

```
     3 = "3 MORE THAN HALF THE DAYS"
     4 = "4 NEARLY EVERY DAY"  ;

  VALUE W200053W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
   2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
   3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
   4 = "4 RARELY (ONCE A WEEK OR LESS)"
   5 = "5 NEVER"  ;

  VALUE W200054W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
   2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
   3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
   4 = "4 RARELY (ONCE A WEEK OR LESS)"
   5 = "5 NEVER"
   7 = "7 DON'T WAKE UP/NOT A PROBLEM"  ;

  VALUE W200055W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 PRIVATE RESIDENCE"
   2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
   3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
   4 = "4 RELIGIOUS GROUP QUARTERS"
  91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200056W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 PLACE DOES NOT HAVE A NAME"  ;

  VALUE W200057W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 APARTMENT"
   2 = "2 ROOM"
   3 = "3 UNIT"
   4 = "4 SUITE"
  91 = "91 SOMETHING ELSE (SPECIFY)"  ;
```

```
    VALUE W200058W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 YES"
      2 = "2 NO, DIFFERENT PERSON"
      3 = "3 NO, NAME MISSPELLED"  ;

    VALUE W200060W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 PRIVATE RESIDENCE"
      2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
      3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
      5 = "5 NURSING HOME"
     91 = "91 OTHER (SPECIFY)"  ;

    VALUE W200061W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 SEPARATION OR DIVORCE"
      2 = "2 DECEASED"
      3 = "3 MOVED ELSEWHERE"
      5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
      8 = "8 OTHER REASON"    ;

    VALUE W200067W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 COMMON OR SHARED ENTRANCE"
      2 = "2 ENTRANCE DIRECTLY INTO HOME"  ;

    VALUE W200068W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1"
      2 = "2"
      3 = "3"
      4 = "4+"  ;

    VALUE W200069W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 ALL ITEMS HERE"
```

```
        2 = "2 ADDED ONE OR MORE ITEMS"  ;

   VALUE W200070W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MORE THAN $500"
     2 = "2 LESS THAN $500"
     3 = "3 JUST ABOUT $500"  ;

   VALUE W200071W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MORE THAN $1,000"
     2 = "2 LESS THAN $1,000"
     3 = "3 JUST ABOUT $1,000"  ;

   VALUE W200072W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MORE THAN $100"
     2 = "2 LESS THAN $100"
     3 = "3 JUST ABOUT $100"  ;

   VALUE W200073W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 YES, DOESNT KNOW HOW TO USE A COMPUTER"  ;

   VALUE W200074W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MOST DAYS"
     2 = "2 SOME DAYS"
     3 = "3 RARELY"  ;

   VALUE W200076W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 DEAF"  ;

   VALUE W200077W
```

```
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 BLIND"   ;

 VALUE W200078W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY DAY (7 DAYS A WEEK)"
    2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
    3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
    4 = "4 RARELY (ONCE A WEEK OR LESS)"
    5 = "5 NEVER"   ;

 VALUE W200080W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES, A CHANGE"
    2 = "2 NO, NO CHANGE"
    3 = "3 DEMENTIA/ALZHEIMER'S REPORTED BY PROXY"   ;

 VALUE W200081W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE"
    2 = "2 SP IS UNABLE TO SPEAK"
    3 = "3 SP IS UNABLE TO HEAR"
    4 = "4 SP REFUSED"
    5 = "5 PROXY REFUSED"
    6 = "6 SP NOT PRESENT"
    7 = "7 SP TOO ILL"
    8 = "8 SP LANGUAGE BARRIER"
    91 = "91 OTHER (SPECIFY)"   ;

 VALUE W200082W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MUCH BETTER"
    2 = "2 BETTER"
    3 = "3 SAME"
    4 = "4 WORSE"
    5 = "5 MUCH WORSE"   ;

 VALUE W200083W
   -7 = '-7 RF'
   -8 = '-8 DK'
```

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO/DON'T KNOW"  ;

VALUE W200084W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 CONTINUE WITH ACTIVITY"
  2 = "2 SP REFUSES ACTIVITY"  ;

VALUE W200085W
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "Word[1]"
  2 = "Word[2]"
  3 = "Word[3]"
  4 = "Word[4]"
  5 = "Word[5]"
  6 = "Word[6]"
  7 = "Word[7]"
  8 = "Word[8]"
  9 = "Word[9]"
 10 = "Word[10]"
 91 = "91 NO WORDS REMEMBERED"
 92 = "92 REFUSED"  ;

VALUE W200086W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 DIFFICULTY HEARING ANY OF THE WORDS"
  2 = "2 INTERRUPTION OCCURRED WHILE LIST WAS BEING READ"
 91 = "91 OTHER PROBLEM (SPECIFY)"
 92 = "92 NO PROBLEMS OCCURRED"
 97 = "97 SP REFUSED WORD RECALL TASK"  ;

VALUE W200087W
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP ATTEMPTED CLOCK DRAWING"
  2 = "2 SP DID NOT ATTEMPT CLOCK DRAWING"
 97 = "3 SP REFUSED CLOCK DRAWING"  ;

VALUE W200089W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY DAY (7 DAYS A WEEK)"
  2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
  3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"  ;
```

```
VALUE W200090W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY TIME"
  2 = "2 MOST TIMES"
  3 = "3 SOMETIMES"
  4 = "4 RARELY"
  5 = "5 NEVER"  ;

VALUE W200092W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST TIMES"
  2 = "2 SOMETIMES"
  3 = "3 RARELY"
  4 = "4 NEVER"  ;

VALUE W200093W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NONE"
  2 = "2 A LITTLE"
  3 = "3 SOME"
  4 = "4 A LOT"  ;

VALUE W200094W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE OFTEN"
  2 = "2 LESS OFTEN"
  3 = "3 ABOUT THE SAME"  ;

VALUE W200095W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
 10 = "10 OCTOBER"
 11 = "11 NOVEMBER"
```

```
      12 = "12 DECEMBER"
      90 = "90 LAST INTERVIEW INFORMATION INCORRECT"   ;

   VALUE W200096W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
      90 = "90 LAST INTERVIEW INFORMATION INCORRECT"   ;

   VALUE W200097W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO / NO LONGER DRIVE"   ;

   VALUE W200098W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 NO, NO RAIN OR BAD WEATHER"   ;

   VALUE W200099W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ALWAYS DID IT BY SELF"
     2 = "2 ALWAYS DID IT TOGETHER WITH SOMEONE ELSE"
     3 = "3 SOMEONE ELSE ALWAYS DID IT"
     4 = "4 IT VARIED (MORE THAN ONE WAY)"
     5 = "5 NOT DONE IN LAST MONTH"   ;

   VALUE W200102W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MORE OFTEN"
     2 = "2 LESS OFTEN"
     3 = "3 SAME"   ;

   VALUE W200106W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 ALWAYS FED THROUGH IV OR TUBE"   ;
```

```
VALUE W200107W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY TIME"
  2 = "2 MOST TIMES"
  3 = "3 SOMETIMES"
  4 = "4 RARELY"  ;

VALUE W200109W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SHOWERING"
  2 = "2 TAKING BATHS"
  3 = "3 WASHING UP SOME OTHER WAY"  ;


VALUE W200114W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 VERY IMPORTANT"
  2 = "2 SOMEWHAT IMPORTANT"
  3 = "3 NOT SO IMPORTANT"  ;

VALUE W200115W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
 95 = "95 NO ACTIVITY LISTED"  ;

VALUE W200116W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LEFT"
  2 = "2 RIGHT"
  3 = "3 BOTH"  ;

VALUE W200117W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LEFT SIDE"
  2 = "2 RIGHT SIDE"
  3 = "3 BOTH SIDES"  ;
```

```
   VALUE W200118W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ONE SIDE"
     2 = "2 BOTH SIDES"  ;

   VALUE W200119W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 RECEIVE ALL TREATMENTS"
     2 = "2 STOP/REJECT ALL TREATMENTS"  ;

   VALUE W200120W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
     2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
     3 = "3 LIVING WITH AN ADULT CHILD"
     4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
     5 = "5 LIVING IN A NURSING HOME"  ;

   VALUE W200121W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
     4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

   VALUE W200122W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MAKE DECISIONS WITHOUT MUCH ADVICE FROM THEM"
     2 = "2 GET THEIR ADVICE AND THEN MAKE DECISIONS"
     3 = "3 MAKE DECISIONS TOGETHER"
     4 = "4 LEAVE DECISIONS UP TO THEM"  ;

   VALUE W200123W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 HANDLE MOSTLY BY SELF"
     2 = "2 HANDLE TOGETHER WITH FAMILY OR CLOSE FRIENDS"
     3 = "3 FAMILY OR CLOSE FRIENDS MOSTLY HANDLE THESE THINGS"
     4 = "4 IT VARIES"  ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W200124W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NEVER"
  2 = "2 RARELY"
  3 = "3 SOMETIMES"
  4 = "4 OFTEN"  ;

VALUE W200126W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AGREE A LOT"
  2 = "2 AGREE A LITTLE"
  3 = "3 DO NOT AGREE"  ;

VALUE W200127W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AGREE A LOT"
  2 = "2 AGREE A LITTLE"
  3 = "3 AGREE NOT AT ALL"  ;

VALUE W200129W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $1,000,"
  2 = "2 $1,000 to less than $2,000,"
  3 = "3 $2,000 to less than $3,000,"
  4 = "4 $3,000 to less than $5,000, or"
  5 = "5 $5,000 or more?"  ;

VALUE W200131W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 RETIRED/DON'T WORK ANYMORE"  ;

VALUE W200132W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY WEEK"
  2 = "2 EVERY TWO WEEKS"
  3 = "3 TWO TIMES A MONTH"
```

```
    4 = "4 ONCE A MONTH"
    5 = "5 DAILY"
   91 = "91 OTHER SCHEDULE (SPECIFY)"  ;

  VALUE W200133W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 OWN"
    2 = "2 RENT"
    3 = "3 SOME OTHER ARRANGEMENT"  ;

  VALUE W200134W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PAID OFF"
    2 = "2 STILL MAKE PAYMENTS"
    3 = "3 REVERSE MORTGAGE"  ;

  VALUE W200135W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $250,"
    2 = "2 $250-$499,"
    3 = "3 $500-$999, or"
    4 = "4 $1,000 or more?"  ;
  VALUE W500135W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $250"
    2 = "2 $250 to less than $500"
    3 = "3 $500 to less than $1,000"
    4 = "4 $1,000 to less than $3,000"
      5 = "5 $3,000 to less than $5,000"
      6 = "6 $5,000 or more?"  ;
  VALUE W200136W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 5 YEARS"
    2 = "2 10 YEARS"
    3 = "3 LONGER THAN 10 YEARS"  ;

  VALUE W200137W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $50,000,"
```

```
    2 = "2 between $50,000 and $100,000, or"
    3 = "3 over $100,000?"   ;

  VALUE W200138W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $50,000,"
    2 = "2 $50,000-$74,999,"
    3 = "3 $75,000-$99,999,"
    4 = "4 $100,000-$199,999,"
    5 = "5 $200,000-$299,999,"
    6 = "6 $300,000-$499,999,"
    7 = "7 $500,000-$749,999, or"
    8 = "8 $750,000 or more?"   ;

  VALUE W200139W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PAY OFF BALANCE"
    2 = "2 PAY MINIMUM"
    3 = "3 PAY MORE THAN MINIMUM, BUT NOT ENTIRE BALANCE"
    4 = "4 DON'T HAVE ANY CREDIT CARDS"   ;

  VALUE W200140W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $1,000,"
    2 = "2 $1,000 - $1,999,"
    3 = "3 $2,000 - $3,999,"
    4 = "4 $4,000 - $5,999,"
    5 = "5 $6,000 - $9,999,"
    6 = "6 $10,000 - $19,999, or"
    7 = "7 $20,000 or more?"   ;

  VALUE W200141W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MOST"
    2 = "2 SOME"
    3 = "3 A LITTLE"   ;

  VALUE W200142W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 less than $500,"
    2 = "2 $500 - $999,"
    3 = "3 $1,000 - $1,999,"
```

```
      4 = "4 $2,000 - $3,999,"
      5 = "5 $4,000 - $5,999,"
      6 = "6 $6,000 - $9,999,"
      7 = "7 $10,000 - $19,999, or"
      8 = "8 $20,000 or more?"  ;

   VALUE W200146W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 NEARLY EVERY DAY"
     2 = "2 MORE THAN HALF THE DAYS"
     3 = "3 SEVERAL DAYS (LESS THAN HALF)"
     4 = "4 A FEW DAYS"  ;

   VALUE W200147W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 INCLUDED"
     2 = "2 EXTRA CHARGE"  ;

   VALUE W200148W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"  ;

VALUE F200006W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 FREE STANDING NURSING HOME"
     2 = "2 FREE STANDING ASSISTED LIVING FACILITY"
     3 = "3 NURSING HOME AND ASSISTED LIVING FACILITY"
     4 = "4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
     5 = "5 ADULT FAMILY CARE HOME"
     6 = "6 GROUP HOME"
     7 = "7 BOARD AND CARE HOME"
     8 = "8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
    91 = "91 OTHER (SPECIFY)"  ;

   VALUE F200007W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"  ;

   VALUE F200008W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

# SAS ALGORITHM FOR DEMENTIA

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INDEPENDENT LIVING"
  2 = "2 ASSISTED LIVING"
  3 = "3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
  4 = "4 NURSING HOME"
 91 = "91 OTHER (SPECIFY)"  ;

VALUE F200009W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ASSISTED LIVING"
  2 = "2 NURSING HOME"  ;

VALUE F200011W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, SERVICE PROVIDED AS PART OF PACKAGE"
  2 = "2 YES, SERVICE PROVIDED AT AN EXTRA CHARGE"
  3 = "3 NO, SERVICE NOT PROVIDED"  ;

VALUE F200012W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP/FAMILY"
  2 = "2 SOCIAL SECURITY/SSI"
  3 = "3 MEDICAID"
  4 = "4 MEDICARE"
  5 = "5 OTHER SOURCE"  ;

VALUE I200002W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"  ;

VALUE I200003W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 English"
  2 = "2 Spanish"
  3 = "3 Other (specify)"  ;

VALUE I200005W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
```

```
  -9 = '-9 Missing'
   1 = "1 Friendly and interested"
   2 = "2 Cooperative but not particularly interested"
   3 = "3 Impatient and restless"
   4 = "4 Hostile"  ;

 VALUE I200006W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Good"
   2 = "2 Fair"
   3 = "3 Poor"  ;

 VALUE I200008W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 All of the time"
   2 = "2 Most of the time"
   3 = "3 Some of the time"
   4 = "4 Only for the cognition and/or performance parts"
   5 = "5 None of the time"  ;

 VALUE I200010W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
   2 = "2 No"
   3 = "3 Interview was conducted by telephone"  ;

 VALUE I200012W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
   2 = "2 No"
   3 = "3 Not Administered"  ;

 VALUE I200013W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
   2 = "2 No"  ;

 VALUE I200016W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
```

```
      1 = "1 Yes"
      2 = "2 No"
      3 = "3 Entire interview conducted by telephone"  ;

   VALUE I200017W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Not at all cluttered"
     2 = "2 Somewhat cluttered"
     3 = "3 Very cluttered"
     4 = "4 Could not see other rooms"  ;

   VALUE I200018W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 None"
     2 = "2 A little"
     3 = "3 Some"
     4 = "4 A lot"
     5 = "5 Could not observe"  ;

   VALUE I200019W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
     2 = "2 No"
     7 = "7 Could not observe"  ;


/* DERIVED VARIABLE FORMATS */
   VALUE LVGARRG
     1 = '1 Alone'
     2 = '2 With spouse/partner only (spouse/partner in household)'
     3 = '3 With spouse/partner and with others'
     4 = '4 With others only'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

   VALUE DOUTSFDF
     8 = '8 Not done in last month'
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE DOUTDEVI
```

```
    8 = '8 Not done in last month'
    1 = '1 No use of devices to go outside in last month'
    2 = '2 Use of devices to go outside in last month'
    3 = '3 DKRF If used devices to go outside in last month'
    4 = '4 DKRF If used devices in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE DOUTHELP
    8 = '8 Not done in last month'
    1 = '1 No help to go outside in last month'
    2 = '2 Had help to go outside in last month'
    3 = '3 DKRF If had help to go outside in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE DINSDSFD
    8 = '8 Not done in last month'
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE DINSDDEV
    8 = '8 Not done in last month'
    1 = '1 No use of devices inside in last month'
    2 = '2 Use of devices inside in last month'
    3 = '3 DKRF If used devices inside in last month'
    4 = '4 DKRF On use of devices'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dinsdhlp
    8 = '8 Not done in last month'
    1 = '1 No help to go around inside in last month'
    2 = '2 Had help to go around inside in last month'
    3 = '3 DKRF If had help to go around inside in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dbedsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

   VALUE dbeddevi
```

```
   1 = '1 No use of cane or walker to get out of bed in last month'
   2 = '2 Use of cane or walker to get out of bed in last month'
   3 = '3 DKRF If Used cane or walker to get out of bed in last month'
   4 = '4 DKRF If used cane or walker in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbedhelp
   1 = '1 No help to get out of bed in last month'
   2 = '2 Had help to get out of bed in last month'
   3 = '3 DKRF If had help to get out of bed in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';


VALUE dlaunsfd
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';




VALUE dlaunrea
   1= '1 Health/functioning reason only'
   2= '2 Other reason only'
   3= '3 Both health/functioning and other'
   4= '4 Service/someone from the place SP lives'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dshopsfd
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dshoprea
   1= '1 Health/functioning reason only'
   2= '2 Other reason only'
   3= '3 Both health/functioning and other'
   4= '4 Service/someone from the place SP lives'
  -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dmealsfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE dmealrea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
    4= '4 Service/someone from the place SP lives'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dbanksfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dbankrea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
    4= '4 Service/someone from the place SP lives'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE deatdevi
    1 = '1 No use of adapted utensils in last month'
    2 = '2 Use of adapted utensils in last month'
    8 = '8 Not done in last month'
    3 = '3 DKRF If used adapted utensils in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
```

```
VALUE deathelp
  1 = '1 No help eating in last month'
  2 = '2 Had help eating in last month'
  3 = '3 DKRF If had help eating in last month'
  8 = '8 Not done in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE deatsfdf
  1 = '1 Did not do by self in last month'
  2 = '2 No Difficulty by self (and when using utensils)'
  3 = '3 Difficulty by self (and when using utensils)'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbathdev
  1 = '1 No use of grab bars or bath seats in last month'
  2 = '2 Use of grab bars or bath seats in last month'
  3 = '3 DKRF If use of grab bars or bath seats in last month'
  4 = '4 DKRF If had grab bars or bath seats in last month'
  9 = '9 No bars/seats/shower/tub or washes up other way'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbathhel
  1 = '1 No help bathing in last month'
  2 = '2 Had help bathing in last month'
  3 = '3 DKRF If had help bathing in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbathsfd
  1 = '1 Did not do by self in last month'
  2 = '2 No Difficulty by self (and when using grab bars or tub seat)'
  3 = '3 Difficulty by self (and when using grab bars or tub seat)'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dtoildev
  1 = '1 No use of toileting devices in last month'
  2 = '2 Use of toileting devices in last month'
  3 = '3 DKRF of some and no use of other toileting devices in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dtoilhel
  1 = '1 No help toileting in last month'
  2 = '2 Had help toileting in last month'
  3 = '3 DKRF If had help toileting in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
```

```
VALUE dtoilsfd
  1 = '1 Did not do by self in last month'
  2 = '2 No Difficulty by self (and when using toileting devices)'
  3 = '3 Difficulty by self (and when using toileting devices)'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE ddresdev
  8 = '8 Not done in last month'
  9 = '9 DKRF If dressed in last month'
  2 = '2 Use of dressing devices in last month'
  1 = '1 No use of dressing devices in last month'
  3 = '3 DKRF If use of dressing devices in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE ddreshel
  8 = '8 Not done in last month'
  9 = '9 DKRF If dressed in last month'
  1 = '1 No help dressing in last month'
  2 = '2 Had help dressing in last month'
  3 = '3 DKRF If had help dressing in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE ddressfd
  1 = '1 Did not do by self in last month'
  2 = '2 No Difficulty by self (and when using dressing devices)'
  3 = '3 Difficulty by self (and when using dressing devices)'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';
VALUE dmedssfd
  1 = '1 Did not do by self in last month'
  2 = '2 Did by self in last month/No Difficulty'
  3 = '3 Did by self in last month/Difficulty'
  4 = '4 DKRF Did by self in last month/No Difficulty'
  5 = '5 DKRF Did by self in last month/Difficulty'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
  9 = '9 No or DKRF if medications taken in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dmedsrea
  1 = '1 Health/functioning reason only'
  2 = '2 Other reason only'
  3 = '3 Both heath/functioning and other'
  4 = '4 Service/someone from the place SP lives'
 -7 = '-7 RF'
 -8 = '-8 DK'
```

```
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

   VALUE dmarstat
     1 = '1 Married'
     2 = '2 Living with a partner'
     3 = '3 Separated'
     4 = '4 Divorced'
     5 = '5 Widowed'
     6 = '6 Never married'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE DSPSAGEC
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 UNDER 50"
       2 = " 2 50-54"
       3 = " 3 55-59"
       4 = " 4 60-64"
       5 = " 5 65-69"
       6 = " 6 70-74"
       7 = " 7 75-79"
       8 = " 8 80-84"
       9 = " 9 85-89"
      10 = "10 90 +"      ;

   VALUE dresid
          -1 = '-1 Inapplicable'
        1 = '1 Community '
        2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
        3 = '3 Residential Care Resident not nursing home (FQ only)'
        4 = '4 Nursing Home Resident';
   VALUE f_dresid
          -1 = '-1 Inapplicable'
        1 = '1 Community '
        2 = '2 Residential care not nursing home (SP interview)'
        3 = '3 Residential care not nursing home (FQ only)'
        4 = '4 Nursing home (SP interview)'
        5 = '5 Nursing home (FQ only)'
        6 = '6 Deceased'
        7 = '7 Residential care not nursing home in R1 and R5 (FQ only)'
        8 = '8 Nursing home in R1 and R5 (FQ only)' ;
   VALUE f2dresid
          -1='-1 Inapplicable'
          1 = '1 Community '
        2 = '2 Residential care not nursing home (SP interview)'
        3 = '3 Residential care not nursing home (FQ only)'
        4 = '4 Nursing home (SP interview)'
        5 = '5 Nursing home (FQ only)'
        6 = '6 Deceased'
        7 = '7 Residential care not nursing home in R1 and R2 (FQ only)'
        8 = '8 Nursing home in R1 and R2 (FQ only)' ;
```

```
        VALUE f3dresid
             -1='-1 Inapplicable'
              1 = '1 Community '
          2 = '2 Residential care not nursing home (SP interview)'
          3 = '3 Residential care not nursing home (FQ only)'
          4 = '4 Nursing home (SP interview)'
          5 = '5 Nursing home (FQ only)'
          6 = '6 Deceased'
          7 = '7 Residential care not nursing home in R1 and R3 (FQ only)'
          8 = '8 Nursing home in R1 and R3 (FQ only)' ;
        VALUE f4dresid
             -1='-1 Inapplicable'
              1 = '1 Community '
          2 = '2 Residential care not nursing home (SP interview)'
          3 = '3 Residential care not nursing home (FQ only)'
          4 = '4 Nursing home (SP interview)'
          5 = '5 Nursing home (FQ only)'
          6 = '6 Deceased'
          7 = '7 Residential care not nursing home in R1 and R4 (FQ only)'
          8 = '8 Nursing home in R1 and R4 (FQ only)' ;


VALUE QUARTILE
-9="-9 Missing"
-1="-1 Inapplicable";

VALUE SPPB
-9="-9 Missing"
-1="-1 Inapplicable";

        VALUE DCLCKSC
          0 = "0 Not recognizable as a clock"
          1 = "1 Severely distorted depiction of a clock"
          2 = "2 Moderately distorted depiction of a clock"
          3 = "3 Mildly distorted depiction of a clock"
          4 = "4 Reasonably accurate depiction of a clock"
          5 = "5 Accurate depiction of a clock (circular or square)"
         -7 = "-7 SP refused to draw clock"
         -8 = "-8 DK"
         -1 = "-1 Inapplicable"
         -2 = "-2 Proxy says cannot ask SP"
         -3 = "-3 Proxy says can ask SP but SP unable to answer"
         -4 = "-4 SP did not attempt to draw clock"
         -9 = "-9 Missing";

        VALUE DCLCKCL
          1 = '1 Very clear'
          2 = '2 Somewhat clear'
          3 = '3 Somewhat unclear'
          4 = '4 Very unclear'
          5 = '5 Blank'
         -7 = '-7 SP refused to draw clock'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -2 = '-2 Proxy says cannot ask SP'
         -3 = '-3 Proxy says can ask SP but SP unable to answer'
         -4 = '-4 SP did not attempt to draw clock'
```

```
    -9 = '-9 Missing';

VALUE RESULT
    -9='-9: MISSING'
    1='1: COMPLETED W RESULTS'
    2='2: COMPLETED MISSING RESULTS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    7='7: NO CHAIR/NO SPACE'
    9='9: NOT ATTEMPTED/MISSING';

    VALUE RESULT_SCH
    -9='-9: MISSING'
    1='1: COMPLETED W/OUT ARMS'
    2='2: COMPLETED W ARMS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    7='7: NO CHAIR/SAFETY REASON'
    8='8: NO CHAIR/NOT SAFETY REAS'
    9='9: NOT ATTEMPTED/MISSING'
    10='10: CH4=1 SINGLE CHAIR NOT COMPL';

    VALUE RESULT_RCH
    -9='-9: MISSING'
    1='1: COMPLETED W/OUT ARMS'
    2='2: COMPLETED MISSING RESULTS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    9='9: NO CHAIR OR NOT ATTEMPTED/MISSING';

    VALUE ZEROSCORE
    1="1: NOT ELIGIBLE DUE TO EXCLUSION CRITERIA"
    2="2: NOT ATTEMPTED FOR SAFETY REASON"
    3="3: ATTEMPTED CHAIR STANDS/NOT ATTEMPTED FOR SAFETY"
    4="4: ATTEMPTED"
    5="5: NEW WALKING EXCLUSION"
    9="9: NOT ASSIGNED A ZERO SCORE";

   VALUE D_LMLLOC
    1 = '1 Community'
    2 = '2 Residential Care'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

      VALUE D_LOCSP
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = "1 Independent Living/Housing/Retirement"
        2 = "2 Assisted Living/Personal Care"
```

```
        3 = "3 Special Care, Memory or Alzheimer's Unit"
        4 = "4 Nursing Home"
        8 = "8 Not Reported" ;


     VALUE PA25FMT
 -1 = '-1 Inapplicable'
   -8 = '-8 DK'
 -9 = '-9 Missing'
 111= '111 Sleeping Napping'
 131= '131 Eating'
 132= '132 Going out to eat'
 199= '199 Other self care activities'
 211= '211 Work and work-related activities'
 221= '221 Other income generating activities'
 241= '241 Volunteering'
 299= '299 Other productive activities'
 321= '321 Shopping for non-durable goods'
 399= '399 Other shopping'
 411= '411 Food and drink preparation'
 434= '434 Outdoor Maintenance'
 439= '439 Household chores (cannot tell if indoor/outdoor)'
 441= '441 Animal and pet care'
 442= '442 Walking and exercising pets'
 449= '449 Other animal and pet care'
 451= '451 Vehicle maintenance and repair'
 471= '471 Financial management'
 499= '499 Other household activities'
 511= '511 Physical care and assistance to others'
 599= '599 Other physical care'
 611= '611 Socializing with others in person'
 612= '612 Socializing with others on the phone'
 616= '616 Socializing and communicating on the computer'
 621= '621 Watching TV and movies'
 631= '631 Doing puzzles or games not on computer or online'
 632= '632 Gambling not online or at a casino'
 636= '636 Doing puzzles or games on a computer or online'
 641= '641 Arts and crafts or hobbies'
 642= '642 Reading'
 643= '643 Writing'
 644= '644 Listening to music'
 646= '646 Computer or online leisure activities'
 651= '651 Smoking or other tobacco use'
 652= '652 Drinking alcohol'
 661= '661 Doing nothing/relaxing'
 669= '669 No activity'
 699= '699 Other non active leisure'
 711= '711 Playing sports'
 712= '712 Walking or jogging'
 713= '713 Other outdoor recreating activities'
 714= '714 Attending sporting events'
 715= '715 Other physical activity, exercise, yoga, swimming, working out,
dancing'
 718= '718 Watching sporting events'
 721= '721 Attending arts  including plays and concerts'
 723= '723 Attending movies'
 724= '724 Attending casinos'
 737= '737 Travel for leisure'
```

```
        799= '799 Other active leisure'
        811= '811 Attending religious activities'
        812= '812 Other religious and spirtual activities'
        821= '821 Attending meetings or events'
        899= '899 Other organizational activity'
        991= '991 Other miscellaneous'
        992= '992 No favorite activity'
        997= '997 Refused'
        998= '998 Dont Know'
        999= '999 Not Codeable';


            VALUE OCC_CODE
1    ='1 Management Occupations: 0010-0430'
2    ='2 Business and Financial Operations Occupations:  0500-0950'
3    ='3 Computer and mathematical occupations:  1000-1240'
4    ='4 Architecture and Engineering Occupations:   1300-1560'
5    ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6    ='6 Community and Social Service Occupations:   2000-2060'
7    ='7 Legal Occupations:  2100-2160'
8    ='8 Education, Training, and Library Occupations:   2200-2550'
9    ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10   ='10 Healthcare Practitioners and Technical Occupations:    3000-3540'
11   ='11 Healthcare Support Occupations:    3600-3655'
12   ='12 Protective Service Occupations:    3700-3955'
13   ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14   ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15   ='15 Personal Care and Service Occupations: 4300-4650'
16   ='16 Sales and Related Occupations: 4700-4965'
17   ='17 Office and Administrative Support Occupations: 5000-5940'
18   ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19   ='19 Construction and Extraction Occupations:   6200-6940'
20   ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21   ='21 Production Occupations:    7700-8965'
22   ='22 Transportation and Material Moving Occupations:    9000-9750'
23   ='23 Military Specific Occupations: 9800-9830'
24   ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';


    Value fl_Dfac
1 = '1 Should have routed as facility but did not'
2 = '2 Routed as facility but determined not facility resident'
-1 = '-1 Inapplicable';
VALUE PE_RSLT
    -9='-9 Missing'
    -1 = '-1 Inapplicable'
    1='1 Completed'
```

```
    2='2 Attempted'
    3='3 Not attempted' ;
VALUE dosfacd /* FOR FQ2dosfacd  */
      -9= "-9 Missing"
      -8 = "-8 DK"
      -1 = "-1 INAPPLICABLE"
       1 = " 1 FREE STANDING NURSING HOME"
       2 = " 2 FREE STANDING ASSISTED LIVING FACILITY / RESIDENTIAL CARE
FACILITY"
       3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
       4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
       5 = " 5 ADULT FAMILY CARE HOME"
       6 = " 6 GROUP HOME"
       7 = " 7 BOARD AND CARE HOME / PERSONAL CARE HOME"
       8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
       9 = " 9 INDEPENDENT LIVING"
      10 = " 10 ASSISTED AND INDEPENDENT/RETIREMENT (NO NURSING HOME)"
      11 = " 11 HOUSING (APT, CONDO, ETC.)";
        ;
    VALUE dosfaca /* FOR FQ2dosfaca */
      -9= "-9 Missing"
      -8 = "-8 DK"
      -1 = "-1 INAPPLICABLE"
       1 = " 1 INDEPENDENT LIVING / HOUSING / RETIREMENT "
       2 = " 2 ASSISTED LIVING / PERSONAL CARE"
       3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
       4 = " 4 NURSING HOME"   ;

VALUE INAP_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -1 = '-1 Inapplicable' ;
VALUE CENDIV /* RE1DCENSDIV - Updated for R2 - Re-Release */
    1 =  '1 Northeast Region: New England Division (ME, NH, VT, MA, RI, CT)'
    2 =  '2 Northeast Region: Middle Atlantic Division (NY, NJ, PA)'
    3 =  '3 Midwest Region: East North Central Division (OH, IN, IL, MI, WI)'
    4 =  '4 Midwest Region: West North Central Division (MN, IA, MO, ND, SD,
NE, KS)'
    5 =  '5 South Region: South Atlantic Division (DE, MD, DC, VA, WV, NC,
SC, GA, FL)'
    6 =  '6 South Region: East South Central Division (KY, TN, AL, MS)'
    7 =  '7 South Region: West South Central Division (AR, LA, OK, TX)'
    8 =  '8 West Region: Mountain Division (MT, ID, WY, CO, NM, AZ, UT, NV)'
    9 =  '9 West Region: Pacific Division (WA, OR, CA, AK, HI)'
    -9 = '-9 Missing';

    VALUE W000002W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 MALE"
       2 = "2 FEMALE"  ;

    VALUE W000005W
     1 = ' 1 Yes'
     2 = ' 2 No'
```

```
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

      VALUE R1DRESID
        -1 = '-1 Inapplicable'
         1 = '1 Community '
         2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
         3 = '3 Residential Care Resident not nursing home (FQ only)'
         4 = '4 Nursing Home Resident';

    VALUE W200016W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MEDICAID"
      2 = "2 MEDICARE"
      3 = "3 STATE PROGRAM"
     91 = "91 OTHER (SPECIFY)"   ;

      VALUE W200012W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 REGULAR"
      2 = "2 VARIED"  ;

    VALUE W200061W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 SEPARATION OR DIVORCE"
      2 = "2 DECEASED"
      3 = "3 MOVED ELSEWHERE"
      5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
      8 = "8 OTHER REASON"   ;

    VALUE d2hrsmth
      -13= '-13 Deceased '
      -12= '-12 Zero days/wk'
      -11= '-11 Hours missing'
      -10= '-10 Days missing'
      -9 = ' -9 Days and hrs missing'
      -1 = ' -1 Inapplicable'
      -7 = ' -7 RF'
      -8 = ' -8 DK'
       0-<1  ='<1'
       1-<10 =' 1-<10'
      10-<20 ='10-<20'
      20-<30 ='20-<30'
      30-<40 ='30-<40'
      40-<60 ='40-<60'
```

```
       60-<120 ='60-<120'
       120-<180='120-<180'
       180-744='180-744 (24/7)'
        9999='9999 Not codeable, <1 hour/day' ;

     VALUE dhrsmth
       -11= '-11:hours missing'
       -10= '-10:days missing'
       -9 = '-9:days and hrs missing'
       -1 = '-1 Inapplicable'
       -7 = '-7 RF'
       -8 = '-8 DK'
        0-<1  ='<1'
        1-<10 =' 1-<10'
       10-<20 ='10-<20'
       20-<30 ='20-<30'
       30-<40 ='30-<40'
       40-<60 ='40-<60'
       60-<120 ='60-<120'
       120-<180='120-<180'
       180-744='180-744 (24/7)'
        9999='9999 Not codeable, <1 hour/day' ;

 Value dmissadd
-1='-1 Inapplicable'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section';

Value d2mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section';

Value dopage3c
 -9='-9 Missing'
```

# SAS ALGORITHM FOR DEMENTIA

```
-8='-8 RF'
-7='-7 DK'
-1='-1 Inapplicable'
 1='1 UNDER 30'
 2='2 30-39'
 3='3 40-49'
 4='4 50-59'
 5='5 60-69'
 6='6 70-79'
 7='7 80-89'
 8='8 90 +';

Value dopagect
-9='-9 Missing'
-8='-8 DK'
-7='-7 RF'
-1='-1 Inapplicable'
 1='1 UNDER 20'
 2='2 20-24'
 3='3 25-29'
 4='4 30-34'
 5='5 35-39'
 6='6 40-44'
 7='7 45-49'
 8='8 50-54'
 9='9 55-59'
10='10 60-64'
11='11 65-69'
12='12 70-74'
13='13 75-79'
14='14 80-84'
15='15 85-89'
16='16 90 +';


VALUE W200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 UNDER 20"
  2 = "2 20-24"
  3 = "3 25-29"
  4 = "4 30-34"
  5 = "5 35-39"
  6 = "6 40-44"
  7 = "7 45-49"
  8 = "8 50-54"
  9 = "9 55-59"
 10 = "10 60-65"
 11 = "11 66-69"
 12 = "12 70-74"
 13 = "13 75-79"
 14 = "14 80-85"
 15 = "15 86-89"
 16 = "16 90-94"
 17 = "17 95-99"
```

```
    18 = "18 100 +"
  ;
     VALUE NumCigs
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
     999 = '999 SP smokes less than 1 cigarette / day';


  VALUE dlmlint
    1 = '1 Last month of life interview'
   -1 = '-1 Inapplicable'        ;

  VALUE d2intvra
     1 = '1 65 to 69'
     2 = '2 70 to 74'
     3 = '3 75 to 79'
     4 = '4 80 to 84'
     5 = '5 85 to 89'
     6 = '6 90+'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'        ;

  VALUE dad8dem
    1 = '1 DEMENTIA RESPONSE TO ANY AD8 ITEMS IN PRIOR ROUNDS'
   -1 = '-1 Inapplicable'     ;

  VALUE dwrdinon
 1 = '1 No words remembered'
   -1 = '-1 Inapplicable'
     -9 = '-9 Missing'       ;

  VALUE dwrdirre
    1 = '1 Refused word recall task'
   -1 = '-1 Inapplicable'
       -9 = '-9 Missing'      ;

 VALUE A0001AB
      1 = "1 AM"
      2 = "2 PM"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0002WA
      1 = "1 Yes, there is space to set up the walking course"
      2 = "2 No, there is not space to set up the walking course"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0004WA
      1 = "1 None"
      2 = "2 Cane"
      3 = "3 Walker or rollator"
      9 = "9 Other, specify"
```

```
        -1 = '-1 Inapplicable'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -9 = '-9 Missing';

  VALUE A0004CH
        1 = "1 No, chair stand not completed"
        2 = "2 Yes, chair stand completed"
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

  VALUE A0008CH
        1 = "1 With arms"
        2 = "2 Without arms"
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

  VALUE A0014CH
        1 = "1 1 Chair stand completed"
        2 = "2 2 Chair stands completed"
        3 = "3 3 Chair stands completed"
        4 = "4 4 Chair stands completed"
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing';

  VALUE BA1SS
       1 = '1 Eligible and recorded result for SxS Balance'
       2 = '2 Eligible and no recorded result for SxS Balance'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

  VALUE BA1STAN
       1 = '1 Eligible and recorded result for Semi Tandem Balance'
       2 = '2 Eligible and no recorded result for Semi Tandem Balance'
       3 = '3 Not administered because did not complete prior balance test'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

  VALUE BA1TAN
       1 = '1 Eligible and recorded result for full tandem balance'
       2 = '2 Eligible and no recorded result for full tandem balance'
       3 = '3 Not administered because did not complete prior balance tests'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

  VALUE BA1OP
       1 = '1 Eligible and recorded result for one leg eyes open balance'
       2 = '2 Eligible and no recorded result for one leg eyes open balance'
       3 = '3 Not administered because did not complete prior balance tests'
       4 = '4 Not Eligible due to exclusion criteria'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

  VALUE BA1CL
```

```
    1 = '1 Eligible and recorded result for one leg eyes closed balance'
    2 = '2 Eligible and no recorded result for one leg eyes closed balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WA1WLK
    1 = '1 Eligible and recorded result for walking course'
    2 = '2 Eligible and no recorded result for walking course'
    4 = '4 Not Eligible due to exclusion criteria'
    5 = '5 Not Eligible on exclusion criteria but recorded result (SP changed
mind)'
   -1 = '-1 Inapplicable '
   -9 = '-9 Missing';

VALUE CH1SCH
    1 = '1 Eligible and recorded result for single chair stand'
    2 = '2 Eligible and no recorded result for single chair stand'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE CH1RSH
    1 = '1 Eligible and recorded result for repeated chair stand'
    2 = '2 Eligible and no recorded result for repeated chair stand'
    3 = '3 Not administered because did not complete single chair stand w/o
arms'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE GR1GRIP
    1 = '1 Eligible and recorded result for grip strength'
    2 = '2 Eligible and no recorded result for grip strength'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WC1WAIST
    1 = '1 Eligible and recorded result for waist circumference'
    2 = '2 Eligible and no recorded result for waist circumference'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE PK1PEAK
    1 = '1 Eligible and recorded result for peak air flow'
    2 = '2 Eligible and no recorded result for peak air flow'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE RGT_LFT
   1 = '1 Right'
   2 = '2 Left'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE PERSON
    1 = '1 Interviewer'
    2 = '2 Sample person'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE STAND
    1 = '1 Standing'
    2 = '2 Sitting'
    3 = '3 Lying down'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE EFFORT
    1 = '1 Full effort'
    2 = '2 Less effort for health reason'
    3 = '3 Less effort for other reason'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
   VALUE WORDREC
    1 = ' 1 LIST 1'
    2 = ' 2 LIST 2'
    3 = ' 3 LIST 3'
   -1 = '-1 Inapplicable '
   -9 = '-9 Missing';
   VALUE WORDRE_N
   -1 = '-1 Inapplicable'
   -2 = '-2 Proxy says cannot ask SP'
   -3 = '-3 Proxy says can ask SP but SP unable to answer'
   -7 = '-7 SP refused activity'
   -9 = '-9 Missing';


           VALUE SP30051W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EXCELLENT"
    2 = "2 VERY GOOD"
    3 = "3 GOOD"
    4 = "4 FAIR"
    5 = "5 POOR"
    6 = "6 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"
  ;
   VALUE SP3019aW
     -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 JANUARY"
    2 = "2 FEBRUARY"
    3 = "3 MARCH"
    4 = "4 APRIL"
    5 = "5 MAY"
    6 = "6 JUNE"
    7 = "7 JULY"
```

```
      8 = "8 AUGUST"
      9 = "9 SEPTEMBER"
     10 = "10 OCTOBER"
     11 = "11 NOVEMBER"
     12 = "12 DECEMBER"
     90 = "90 LAST INTERVIEW INFORMATION INCORRECT"
   ;
  VALUE RACEHISP
       1 = ' 1 White, non-hispanic'
       2 = ' 2 Black, non-hispanic'
       3 = ' 3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic'
       4 = ' 4 Hispanic'
       5 = ' 5 More than one DKRF primary'
       6 = ' 6 DKRF'
      -9 = '-9 Missing';

    VALUE SPPB_MIS
       -7 = '-7 RF'
   -8 = '-8 DK'
   -9 = '-9 Missing'
   -1="-1 Inapplicable"
   1="1 Proxy interview"
   2="2 Missing walk and repeat chair and balance"
   3="3 Missing walk and repeat chair"
   4="4 Missing walk and balance"
   5="5 Missing repeat chair and balance"
   6="6 Missing walk"
   7="7 Missing repeat chair"
   8="8 Missing balance"
   9="9 No space"
   10="10 No chair"
   11="11 No space walk and no chair"
   12="12 No space walk and non-safety missing"
   13="13 No chair and non-safety missing"
   14="14 Non-safety walk"
   15="15 Non-safety chair"
   16="16 Non-safety balance"
   17="17 Non-safety walk and chair"
   18="18 Non-safety walk and balance"
   19="19 Non-safety chair and balance"
   20="20 Non-safety walk and chair and balance";

    VALUE QUARTILES
-9="-9 Missing"
-1="-1 Inapplicable"
;
  VALUE SP30025W
       -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
   2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
   3 = "3 MOBILE HOME OR TRAILER"
   4 = "4 MULTI-UNIT (2+) BUILDING"
```

```
     91 = "91 OTHER (SPECIFY)"
  ;
   VALUE SP30046W
      -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
   1 = "1 AT SP'S HOME"
    2 = "2 IN A HOSPITAL"
    3 = "3 IN A NURSING HOME"
    4 = "4 IN A HOSPICE RESIDENCE"
    5 = "5 AT SOMEONE ELSE'S HOME"
    91 = "91 SOMEWHERE ELSE (SPECIFY)"
 ;
   VALUE SP30076W
      -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 YES, DOESNT KNOW HOW TO USE"
 ;
   VALUE W300151W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 VERY GOOD"
    2 = "2 GOOD"
    3 = "3 FAIR"
    4 = "4 POOR"
   5 = "5 VERY POOR"  ;

   VALUE SP30076H
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
   95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM DAY TO DAY"  ;
   VALUE SP30076G
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
   95 = "95 NO USUAL TIME OR DIFFERENT FROM DAY TO DAY"  ;
        VALUE SP30076I
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
        95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM NIGHT TO NIGHT"
;
        VALUE SP30076J
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
```

```
                -9 = '-9 Missing'
            95 = "95 NO USUAL TIME OR DIFFERENT FROM NIGHT TO NIGHT"  ;
              VALUE SP30076K
               -7 = '-7 RF'
               -8 = '-8 DK'
               -1 = '-1 Inapplicable'
               -9 = '-9 Missing'
                   0 = "0 LESS THAN AN HOUR"
            90 = "90 FELL ASLEEP RIGHT AWAY"
            95 = "95 NO USUAL AMOUNT OF TIME TO FALL ASLEEP OR DIFFERENT FROM
NIGHT TO NIGHT"  ;
              VALUE SP30155W
                -7 = '-7 RF'
                -8 = '-8 DK'
                -1 = '-1 Inapplicable'
                -9 = '-9 Missing'
                 1 = "1 NAPS PLANNED"
                 2 = "2 FELL ASLEEP WITHOUT MEANING TO"
                 3 = "3 BOTH (SOME PLANNED/SOME NOT)"  ;
    VALUE SP30120W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 OFTEN"
      2 = "2 SOMETIMES"
      3 = "3 RARELY"
      4 = "4 NEVER"  ;
Value HOURSF
 -13='-13 SP deceased/section not administered'
 -12='-12 Valid skip/staff'
 -11='-11 Hours missing'
 -10='-10 Days missing'
  -9='-9 Days and hrs missing'
  -1='-1 Inapplicable'
 0-   1='0-<1'
 1.01- 10='1-<10'
10.01- 20='10-<20'
20.01- 30='20-<30'
30.01-40='30-<40'
40.01-60='40-<60'
60.01-120='60-<120'
120.01-180='120-<180'
180.01-744='180-744 (24/7)'
9999='9999 Not codeable, <1 hour/day';
    VALUE SP30120W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 OFTEN"
      2 = "2 SOMETIMES"
      3 = "3 RARELY"
      4 = "4 NEVER"
    ;
    VALUE SP30118W
     -7 = '-7 RF'
```

```
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 A LOT"
   2 = "2 SOME"
   3 = "3 A LITTLE"
   4 = "4 NOT AT ALL"  ;
VALUE SP30141W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "less than $27,600,"
   2 = "$27,600-$41,999,"
   3 = "$42,000-$63,999,"
   4 = "$64,000-$107,999, or"
   5 = "$108,000 or more?"  ;
VALUE SP30142W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "less than $14,000,"
   2 = "$14,000-$21,999,"
   3 = "$22,000-$35,999,"
   4 = "$36,000-$48,999, or"
   5 = "$49,000 or more?"  ;
VALUE INVENT
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
          104="104-Arthritis"
          107="107-Lung Disease"
          109="109-Dementia or Alzheimer's disease"
          110="110-Cancer"
          113="113-Other serious disease, illness, health problem"
          114="114-Knee surgery/problem"
          115="115-Hip repair or replacement/problem"
          117="117-Back or Spine Surgery/problem"
          121="121-Sleep Problems"
          201="201-Hearing problems"
          202="202-Sight problems"
          205="205-Pain"
          301="301-Breathing problems"
          302="302-Upper body strength movement"
          303="303-Lower body strength movement"
          304="304-Low energy"
          305="305-Balance or coordination problems"
          306="306-Walking distances"
          307="307-Climbing stairs"
          308="308-Lifting and carrying items"
          309="309-Kneeling"
          310="310-Bending"
          311="311-Reaching"
          312="312-Opening Jars"
          313="313-Grasping"
```

```
            401="401-Memory"
            501="501-Getting out of bed"
            502="502-Getting around inside"
            503="503-Getting outside"
            504="504-Travel/transportation"
            601="601-Eating"
            602="602-Washing"
            603="603-Toileting"
            604="604-Dressing"
            605="605-Grooming"
            701="701-Laundry"
            702="702-Shopping"
            703="703-Cooking"
            705="705-Money matters"
            706="706-Indoor cleaning and maintenance"
            707="707-Outdoor cleaning and maintenance"
            801="801-Medications"
            802="802-Doctor visits"
            804="804-Other medical self-care"
            1211="1211-Working"
            1442="1442-Walking/exercising pets"
            1451="1451-Vehicle repair and maintenance"
            1461="1461-Appliance tool, and toy use, set-up, repair, &
maintenance"
            1462="1462-Computer use, set-up, repair, maintenance, and
education"
            1473="1473-Household organization"
            1512="1512-Looking after someone else"
            1611="1611-Socializing and communicating with others-in person"
            1612="1612-Socializing and communication with others by talking
on telephone"
            1613="1613-Attending or hosting party, wedding or social
occasions"
            1614="1614-Reading and sorting through the mail"
            1621="1621-Watch television and movies"
            1631="1631-Games & puzzles"
            1641="1641-Arts and crafts, collecting, and hobbies, making
music"
            1642="1642-Reading"
            1643="1642-Writing (personal, not on computer)"
            1644="1644-Listening to recorded music or radio"
            1711="1711-Playing/practicing sports or taking physical activity
class/lessons"
            1712="1712-Walking/jogging for exercise or pleasure or working
out"
            1713="1713-Other outdoor recreation activities"
            1813="1813-Religious & spiritual volunteer activities"
            1901="1901-Other, no existing code"
            1998="1998-Don't know"
            1999="1999-Refused/blank";
VALUE W500058W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MONTHS"
     2 = "2 YEARS"  ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W500103W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 YES, A YEAR OR MORE"
     2 = "2 NO, LESS THAN A YEAR"   ;
  VALUE W500105W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 MONTH AND YEAR"
     2 = "2 NUMBER OF MONTHS AGO"
     3 = "3 NUMBER OF YEARS AGO"
     4 = "4 AGE WHEN LAST DROVE"
     7 = "7 NEVER DROVE"   ;
VALUE W500123W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 STILL FAVORITE ACTIVITY"
     2 = "2 HAS A NEW FAVORITE ACTIVITY"
    95 = "95 NO FAVORITE ACTIVITY"    ;
VALUE W500124W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 LESS THAN 1 MONTH"
     2 = "2 1 TO 3 MONTHS"
     3 = "3 4 TO 5 MONTHS"
     4 = "4 6 OR MORE MONTHS" ;
  VALUE W500125W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 LESS THAN 1 WEEK"
     2 = "2 1 TO 2 WEEKS"
     3 = "3 3 TO 4 WEEKS"  ;
  VALUE W500126W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 A FRACTURE, SPRAIN, OR INJURY"
     2 = "2 A HIP, KNEE, OR OTHER JOINT REPLACEMENT"
     3 = "3 ANOTHER MUSCULOSKELETAL CONDITION"
     4 = "4 A STROKE OR TIA"
     5 = "5 A HEART ATTACK"
     6 = "6 ANOTHER HEART CONDITION OR VASCULAR DISEASE"
     7 = "7 A BREATHING CONDITION"
     8 = "8 A NEUROLOGICAL CONDITION LIKE MS OR PARKINSONS"
     9 = "9 CANCER"
    94 = "94 ANOTHER CONDITION (SPECIFY)"
```

```
        95 = "95 NO MEDICAL CONDITION (IF VOLUNTEERED)" ;
      VALUE W500128W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
         1 = "1 DIFFICULTY CHEWING OR SWALLOWING"
         2 = "2 DIFFICULTY SPEAKING OR BEING UNDERSTOOD"
         3 = "3 PAIN LEVEL"
         4 = "4 PROBLEM WITH BREATHING"
         5 = "5 PROBLEM WITH STRENGTH (MUSCLE WEAKNESS)"
         6 = "6 PROBLEM WITH MOVEMENT (RANGE OF MOTION)"
         7 = "7 LOW ENERGY LEVEL"
         8 = "8 PROBLEM WITH BALANCE OR COORDINATION"
         9 = "9 PROBLEM WITH FALLS"
        10 = "10 PROBLEM WITH MEMORY"
        95 = "95 NONE OF THESE PROBLEMS"  ;
      VALUE W500131W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
         1 = "1 AS AN OVERNIGHT PATIENT IN A HOSPITAL, NURSING HOME OR REHAD
FACILITY"
         2 = "2 AT AN OUTPATIENT CENTER, CLINIC, DRs OR THERAPISTs OFFICE"
         3 = "3 HOME"
         4 = "4 SOMEWHERE ELSE"  ;
      VALUE W500132W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
         1 = "1 IMPROVED"
         2 = "2 GOT WORSE"
         3 = "3 STAYED ABOUT THE SAME"
         4 = "4 VARIED/UP AND DOWN (IF VOLUNTEERED)"  ;
     VALUE W500133W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = "1 A LOT"
        2 = "2 SOMEWHAT"
        3 = "3 A LITTLE"  ;

      VALUE W500137W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
         1 = "1 WELL OFF"
         2 = "2 ABOVE AVERAGE"
         3 = "3 AVERAGE"
         4 = "4 BELOW AVERAGE"
         5 = "5 POOR"  ;
     VALUE W500010W
       -7 = '-7 RF'
```

```
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MOTHER ONLY"
   2 = "2 FATHER ONLY"
   3 = "3 ANOTHER RELATIVE"
   4 = "4 NON-RELATIVES"
   5 = "5 VARIED/MOVED AROUND"  ;
VALUE W500142W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 VERY WELL"
  2 = "2 WELL"
  3 = "3 NOT WELL"
  4 = "4 NOT AT ALL"  ;
VALUE W500147W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
   1 = "1 NUMBER OF YEARS"
  2 = "2 AGE"  ;
VALUE W500150W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
   1 = "1 ENTER PAYCHECK AMOUNT"
  2 = "2 ENTER PAY PER HOUR"
  3 = "3 ENTER PAY PER DAY"  ;
VALUE W500151W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
   1 = "1 ENTER OCCUPATION"
  2 = "2 NEVER WORKED ENTIRE LIFE"
  3 = "3 HOMEMAKER/RAISED CHILDREN/WORKED IN THE HOME"  ;
VALUE W500152W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
   1 = "1 SAME KIND OF WORK"
  2 = "2 SOMETHING DIFFERENT"  ;
VALUE W500160W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
   1 = "1 MAIL"
  2 = "2 DIRECT DEPOSIT"
  3 = "3 PREPAID CARD"  ;
VALUE W500165W
 -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ENTER COMBINED AMOUNT"
  2 = "2 ENTER SP AND SPOUSE/PARTNER AMOUNTS SEPARATELY"  ;
VALUE W500166W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $1,300"
  2 = "2 $1,300 TO LESS THAN $1,700"
  3 = "3 $1,700 TO LESS THAN $2,200"
  4 = "4 $2,200 TO LESS THAN $2,600"
  5 = "5 $2,600 OR MORE"  ;
VALUE W500167W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $700"
  2 = "2 $700 TO LESS THAN $1,000"
  3 = "3 $1,000 TO LESS THAN $1,300"
  4 = "4 $1,300 TO LESS THAN $1,600"
  5 = "5 $1,600 OR MORE"  ;
VALUE W500168W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $300"
  2 = "2 $300 TO LESS THAN $700"
  3 = "3 $700 TO LESS THAN $1,000"
  4 = "4 $1,000 OR MORE"   ;
VALUE W500169W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $100"
  2 = "2 $100 TO LESS THAN $200"
  3 = "3 $200 TO LESS THAN $400"
  4 = "4 $400 TO LESS THAN $700"
  5 = "5 $700 OR MORE"  ;
VALUE W500170W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $1,000"
  2 = "2 $1,000 TO LESS THAN $1,400"
  3 = "3 $1,400 TO LESS THAN $1,800"
  4 = "4 $1,800 TO LESS THAN $2,200"
  5 = "5 $2,200 OR MORE"  ;
VALUE W500171W
 -7 = '-7 RF'
 -8 = '-8 DK'
```

```
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 LESS THAN $500"
      2 = "2 $500 TO LESS THAN $700"
      3 = "3 $700 TO LESS THAN $900"
      4 = "4 $900 TO LESS THAN $1,100"
      5 = "5 $1,100 OR MORE"  ;
  VALUE W500172W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 LESS THAN $600"
      2 = "2 $600 TO LESS THAN $1,300"
      3 = "3 $1,300 TO LESS THAN $2,100"
      4 = "4 $2,100 TO LESS THAN $5,900"
      5 = "5 $5,900 OR MORE"  ;
  VALUE W500173W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 LESS THAN $400"
      2 = "2 $400 TO LESS THAN $900"
      3 = "3 $900 TO LESS THAN $1,600"
      4 = "4 $1,600 TO LESS THAN $3,800"
      5 = "5 $3,800 OR MORE"  ;
  VALUE W500174W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 LESS THAN $34,000"
      2 = "2 $34,000 TO LESS THAN $82,000"
      3 = "3 $82,000 TO LESS THAN $175,000"
      4 = "4 $175,000 TO LESS THAN $413,000"
      5 = "5 $413,000 OR MORE"   ;
  VALUE W500175W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 LESS THAN $20,000"
      2 = "2 $20,000 TO LESS THAN $47,000"
      3 = "3 $47,000 TO LESS THAN $92,000"
      4 = "4 $92,000 TO LESS THAN $218,000"
      5 = "5 $218,000 OR MORE"   ;
  VALUE W500176W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 LESS THAN $200"
      2 = "2 $200 TO LESS THAN $500"
      3 = "3 $500 TO LESS THAN $1,000"
      4 = "4 $1,000 TO LESS THAN $2,500"
      5 = "5 $2,500 OR MORE"  ;
```

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VALUE W500177W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $100"
  2 = "2 $100 TO LESS THAN $300"
  3 = "3 $300 TO LESS THAN $700"
  4 = "4 $700 TO LESS THAN $1,700"
  5 = "5 $1,700 OR MORE"  ;
VALUE W500178W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $2,400"
  2 = "2 $2,400 TO LESS THAN $6,000"
  3 = "3 $6,000 TO LESS THAN $12,000"
  4 = "4 $12,000 TO LESS THAN $30,000"
  5 = "5 $30,000 OR MORE"  ;
VALUE W500179W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $1,200"
  2 = "2 $1,200 TO LESS THAN $3,600"
  3 = "3 $3,600 TO LESS THAN $8,400"
  4 = "4 $8,400 TO LESS THAN $20,400"
  5 = "5 $20,400 OR MORE"  ;
VALUE W500180W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $9,000"
  2 = "2 $9,000 TO LESS THAN $18,000"
  3 = "3 $18,000 TO LESS THAN $93,000"
  4 = "4 $93,000 TO LESS THAN $350,000"
  5 = "5 $350,000 OR MORE"  ;
VALUE W500181W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $600"
  2 = "2 $600 TO LESS THAN $5,000"
  3 = "3 $5,000 TO LESS THAN $16,000"
  4 = "4 $16,000 TO LESS THAN $62,000"
  5 = "5 $62,000 OR MORE"  ;
VALUE W500182W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $8,000"
  2 = "2 $8,000 TO LESS THAN $62,000"
```

```
   3 = "3 $62,000 TO LESS THAN $192,000"
   4 = "4 $192,000 TO LESS THAN $213,000"
   5 = "5 $213,000 OR MORE"  ;
 VALUE W500183W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $300"
   2 = "2 $300 TO LESS THAN $2,500"
   3 = "3 $2,500 TO LESS THAN $8,000"
   4 = "4 $8,000 TO LESS THAN $37,000"
   5 = "5 $37,000 OR MORE"  ;
 VALUE W500184W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $11,000"
   2 = "2 $11,000 TO LESS THAN $25,000"
   3 = "3 $25,000 TO LESS THAN $50,000"
   4 = "4 $50,000 TO LESS THAN $108,000"
   5 = "5 $108,000 OR MORE"  ;
 VALUE W500185W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $2,000"
   2 = "2 $2,000 TO LESS THAN $7,000"
   3 = "3 $7,000 TO LESS THAN $17,000"
   4 = "4 $17,000 TO LESS THAN $57,000"
   5 = "5 $57,000 OR MORE"  ;
 VALUE W500186W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $8,000"
   2 = "2 $8,000 TO LESS THAN $13,000"
   3 = "3 $13,000 TO LESS THAN $28,000"
   4 = "4 $28,000 TO LESS THAN $54,000"
   5 = "5 $54,000 OR MORE"  ;
 VALUE W500187W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $500"
   2 = "2 $500 TO LESS THAN $1,900"
   3 = "3 $1,900 TO LESS THAN $5,000"
   4 = "4 $5,000 TO LESS THAN $20,000"
   5 = "5 $20,000 OR MORE"  ;
 VALUE W500188W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
```

```
  -9 = '-9 Missing'
   1 = "1 LESS THAN $200"
   2 = "2 $200 TO LESS THAN $1,000"
   3 = "3 $1,000 TO LESS THAN $4,000"
   4 = "4 $4,000 TO LESS THAN $16,000"
   5 = "5 $16,000 OR MORE"  ;
VALUE W500189W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $400"
   2 = "2 $400 TO LESS THAN $1,000"
   3 = "3 $1,000 TO LESS THAN $2,000"
   4 = "4 $2,000 TO LESS THAN $11,000"
   5 = "5 $11,000 OR MORE"  ;
VALUE W500190W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $30,000"
   2 = "2 $30,000 TO LESS THAN $101,000"
   3 = "3 $101,000 TO LESS THAN $247,000"
   4 = "4 $247,000 TO LESS THAN $703,000"
   5 = "5 $703,000 OR MORE"  ;
VALUE W500191W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $18,000"
   2 = "2 $18,000 TO LESS THAN $68,000"
   3 = "3 $68,000 TO LESS THAN $122,000"
   4 = "4 $122,000 TO LESS THAN $293,000"
   5 = "5 $293,000 OR MORE"  ;
VALUE W500192W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $3,600"
   2 = "2 $3,600 TO LESS THAN $12,000"
   3 = "3 $12,000 TO LESS THAN $25,000"
   4 = "4 $25,000 TO LESS THAN $64,000"
   5 = "5 $64,000 OR MORE"  ;
VALUE W500193W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $3,600"
   2 = "2 $3,600 TO LESS THAN $7,200"
   3 = "3 $7,200 TO LESS THAN $14,000"
   4 = "4 $14,000 TO LESS THAN $38,000"
   5 = "5 $38,000 OR MORE"  ;
VALUE W500194W
```

```
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $30,000"
  2 = "2 $30,000 TO LESS THAN $43,000"
  3 = "3 $43,000 TO LESS THAN $66,000"
  4 = "4 $66,000 TO LESS THAN $109,000"
  5 = "5 $109,000 OR MORE"  ;
VALUE W500195W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $18,000"
  2 = "2 $18,000 TO LESS THAN $22,000"
  3 = "3 $22,000 TO LESS THAN $36,000"
  4 = "4 $36,000 TO LESS THAN $56,000"
  5 = "5 $56,000 OR MORE" ;
VALUE W500209W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 CANT DO - DONT DO"  ;
VALUE W500196W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $2,500"
  2 = "2 $2,500 TO LESS THAN $5,000"
  3 = "3 $5,000 TO LESS THAN $10,000"
  4 = "4 $10,000 TO LESS THAN $20,000"
  5 = "5 $20,000 TO LESS THAN $50,000"
  6 = "6 $50,000 OR MORE"  ;
VALUE dage2us
    0 = "0 Less than age 1"
    997 = "997 Born in US"
 -8 = "-8 DK"
 -7 = "-7 RF"
 -1 = "-1 Inapplicable";
VALUE locsp
  -9 ="-9 MISSING"
 -8 ="-8 DK"
 -7 ="-7 RF"
 -1 ="-1 Inapplicable"
  1 = "1 Independent Living"
  2 = "2 Assisted Living"
  3 = "3 Special Care Unit"
  4 = "4 Nursing Home"
  8 = "8 Not Reported" ;

  VALUE resid
 -9 = '-9 Missing'
```

```
        -8 = "-8 DK"
        -7 = "-7 RF"
        -1 = "-1 Inapplicable"
        1 = "Community"
        2 = "Residential care not nursing home (SP interview)"
        3 = "Residential care not nursing home (FQ only)"
        4 = "Nursing home (SP interview)"
        5 = "Nursing home (FQ only)"
        6 = "Deceased"
        7 = "Residential care not nursing home in R1 and R2 (FQ only)"
        8 = "Nursing home in R1 and R2 (FQ only)";

    VALUE  residlml
        1 = "1 Community"
        2 = "2 Residential care"
        -1 = "-1 Inapplicable"
    -9 = '-9 Missing';

  VALUE SP50139W
    1 = "1 White/Caucasian"
    2 = "2 Black/African American"
    3 = "3 Other"
      -7 = '-7 RF'
      -8 = '-8 DK'
    -9 = '-9 Missing';

  VALUE Locat15w
        1= "1 Lives in same City and State as at age 15"
        2= "2 Lives in same state but different City (or DKRF city) as age
15"
        3= "3 Does not live in same State as age 15"
      -1= "-1 Inapplicable"
      -7 = '-7 RF'
      -8 = '-8 DK'
        -9 = '-9 Missing';
  Value  dresnew
        1 = "1 same residence as last int"
        2 = "2 new residence since last int"
      -1= "-1 Inapplicable"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -9 = '-9 Missing';

   Value dcontnew
        1 = "1 Continuing sample from R1"
        2 = "2 New sample in R5"
      -1= "-1 Inapplicable"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -9 = '-9 Missing';

    VALUE DMDDEVYR
     1 = ' 1 No Mobility device use in last year/since last interview'
     2 = ' 2 Mobility device use in last year/since last interview'
    -1 = '-1 Inapplicable '
    -7  = '-7 RF'
    -8  = '-8 DK'
```

```
    -9 = '-9 Missing';

  VALUE DMDEVST
   0 = '0 less than 1 month of mobility device use'
   1 = '1 month of mobility device use'
   2 = '2 months of mobility device use'
   3 = '3 months of mobility device use'
   4 = '4 months of mobility device use'
   5 = '5 months of mobility device use'
   6 = '6 months of mobility device use'
   7 = '7 months of mobility device use'
   8 = '8 months of mobility device use'
   9 = '9 months of mobility device use'
  10 = '10 months of mobility device use'
  11 = '11 months of mobility device use'
  -7 = '-7 used last month but RF number of months of use in year'
  -8 = '-8 used last month but DK number of months of use in year'
  -1 = '-1 Inapplicable '
   -2 = '-2 Not asked of continuing sample';

   VALUE DMDEVEND
     0 = '0 Between 11 and 12 months since device use ended'
   1 = '1 month since mobility device use ended'
   2 = '2 months since mobility device use ended'
   3 = '3 months since mobility device use ended'
   4 = '4 months since mobility device use ended'
   5 = '5 months since mobility device use ended'
   6 = '6 months since mobility device use ended'
   7 = '7 months since mobility device use ended'
   8 = '8 months since mobility device use ended'
   9 = '9 months since mobility device use ended'
  10 = '10 months since mobility device use ended'
  11 = '11 months since mobility device use ended'
  -7 = '-7 no use last month and RF number of months since device use
ended'
  -8 = '-8 no use last month and DK number of months since device use
ended'
  -1 = '-1 Inapplicable '
   -2 = '-2 Not asked of continuing sample' ;
   VALUE DMDHLPYR
   1 = " 1 No mobility help in last year/since last interview"
   2 = " 2 Mobility help in last year/since last interview"
  -7 = " -7 RF"
  -8 = " -8 DK"
  -1 = " -1 Inapplicable "
          -2 = '-2 Not asked of continuing sample' ;

   VALUE DMDHLPST
   0 = '0 less than 1 month of help'
   1 = '1 month of help'
   2 = '2 months of help'
   3 = '3 months of help'
   4 = '4 months of help'
   5 = '5 months of help'
   6 = '6 months of help'
   7 = '7 months of help'
   8 = '8 months of help'
```

```
   9 = '9 months of help'
  10 = '10 months of help'
  11 = '11 months of help'
  -7 = '-7 help last month but RF number of months of help in year'
  -8 = '-8 help last month but DK number of months of help in year'
 -1 = " -1 Inapplicable "
 -2 = " -2 Not asked of continuing sample ";
  VALUE DMDHLPEN
   0 = '0 less than 1 month since help ended'
   1 = '1 month since help ended'
   2 = '2 months since help ended'
   3 = '3 months since help ended'
   4 = '4 months since help ended'
   5 = '5 months since help ended'
   6 = '6 months since help ended'
   7 = '7 months since help ended'
   8 = '8 months since help ended'
   9 = '9 months since help ended'
  10 = '10 months since help ended'
  11 = '11 months since help ended'
  -7 = '-7 no help last month and RF number of months since help ended'
  -8 = '-8 no help last month and DK number of months since help ended'
  -1 = '-1 Inapplicable '
 -2 = '-2 Not asked of continuing sample';
  VALUE DMHLPYRS
   0   = '0 none or less than 1 year'
   997 = '997 since birth'
   -7  = '-7 RF'
   -8  = '-8 DK'
   -1  = '-1 Inapplicable '
   -2 = '-2 Not asked of continuing sample'
  -9  = '-9 Missing';
  VALUE DSDHLPYR
  1 = ' 1 No self care help in last year/since last interview'
  2 = ' 2 Self care help in last year/since last interview'
 -1 = '-1 Inapplicable'
 -7 = '-7 DK'
 -8 = '-8 RF'
 -9 = '-9 Missing';
  VALUE DSHLPND
          0 = ' 0 Between 11 and 12 months since self care help ended'
          1 = '1 Month since self care help ended'
          2 = '2 Months since self care help ended'
          3 = '3 Months since self care help ended'
          4 = '4 Months since self care help ended'
          5 = '5 Months since self care help ended'
          6 = '6 Months since self care help ended'
          7 = '7 Months since self care help ended'
          8 = '8 Months since self care help ended'
          9 = '9 Months since self care help ended'
          10 = '10 Months since self care help ended'
          11 = '11 Months since self care help ended'
     -7 = '-7 No help last month and RF number of months since help ended'
     -8 = '-8 No help last month and DK number of months since help ended'
     -1 = '-1 Inapplicable'
          -2 = '-2 Not asked of continuing sample'
     -9 = '-9 Missing'    ;
```

```
VALUE DSHLPYRS
      0 = ' 0 None or less than 1 year of self care help'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
       -2 = '-2 Not asked of continuing sample'
     -9 = '-9 Missing'
        997 = '997 since birth';
   VALUE SP5RH7W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
        1 = "1 As an overnight patient in a hospital, nursing home, or
rehab facility"
        2 = "2 At an outpatient center, clinic, or doctors office or
therapists office"
     3 = "3 At home"
     4 = "4 Somewhere else"  ;
   VALUE SP5LF5W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
    997 = "997 Number of hours vary each week"  ;

   VALUE  DMH_GRP
        1 = "1 Help started"
        2 = "2 Help ended"
        3 = "3 Help both interviews with gap"
        4 = "4 Help both interviews with no gap"
        5 = "5 Help between interviews only"
        6 = "6 No help either interview or between"
       11 = "11 Help started (month started missing)"
       21 = "21 Help ended (month ended missing)"
       41 = "41 Help both interviews (DK whether gap)"
       61 = "61 No help either interview (DK whether help between)"
       -9 = "-9 Missing"
       -1 = "-1 Inapplicable"
         -3 ="-3 Not asked of new sample"
     -999 = "-999 Not determined" ;

   VALUE  DMU_GRP
        1 = "1 Use started"
        2 = "2 Use ended"
        3 = "3 Use both interviews with gap"
        4 = "4 Use both interviews with no gap"
        5 = "5 Use between interviews only "
        6 = "6 No use either interview or between"
       11 = "11 Use started (month started missing)"
       21 = "21 Use ended (month ended missing)"
       41 = "41 Use both interviews (DK whether gap)"
       61 = "61 No use either interview (DK whether use between)"
       -9 = "-9 Missing"
       -1 = "-1 Inapplicable"
          -3 = "-3 Not asked of new sample"
```

```
            -999 = "-999 Not determined" ;

              VALUE   DMDS5FLG
              -1 = "-1 Inapplicable"
                   -3 = "-3 Not asked of new sample"
               0 = "0 No current SP interview"
               1 = "1 No SP interview last round"
               2 = "2 Died and month death missing"
               3 = "3 Died <=1 month after last interview"
               4 = "4 Died 12-13 months after last interview"
               7 = "7 Skipped 1 or more help questions" ;
              VALUE   DS_GRP
               1 = "1 Help started"
               2 = "2 Help ended"
               3 = "3 Help both interviews with gap"
               4 = "4 Help both interviews with no gap"
               5 = "5 Help between interviews only"
               6 = "6 No help either interview or between"
              11 = "11 Help started (month started missing)"
              21 = "21 Help ended (month ended missing)"
              41 = "41 Help both interviews (DK whether gap)"
              61 = "61 No help either interview (DK whether help between)"
              -9 = "-9 Missing"
              -1 = "-1 Inapplicable"
                   -3 = "-3 Not asked of new sample"
            -999 = "-999 Not determined" ;

    /*
        VALUE   DMDSINTV
            0 = "0 Less than 1 month"
            1 = "1 Month"
            2 = "2 Months"
            3 = "3 Months"
            4 = "4 Months"
            5 = "5 Months"
            6 = "6 Months"
            7 = "7 Months"
            8 = "8 Months"
            9 = "9 Months"
           10 = "10 Months"
           11 = "11 Months"
           12 = "12 Months"
           13 = "13 Months"
           14 = "14 Months"
           15 = "15 Months"
           16 = "16 Months"
           17 = "17 Months"
           18 = "18 Months"
           19 = "19 Months"
           20 = "20 Months"
           21 = "21 Months"
           22 = "22 Months"
           23 = "23 Months"
           24 = "24 Months"
           90 = "90 Last round disputed"
           -1 = "-1 Inapplicable"
           -7 = "-7 Refused"
```

```
              -8 = "-8 Dont know"
              -9 = "-9 Missing" ;

          VALUE   DMDS_DUR
               0 = "0 Less than 1 month"
               1 = "1 Month"
               2 = "2 Months"
               3 = "3 Months"
               4 = "4 Months"
               5 = "5 Months"
               6 = "6 Months"
               7 = "7 Months"
               8 = "8 Months"
               9 = "9 Months"
              10 = "10 Months"
              11 = "11 Months"
              12 = "12 Months"
              13 = "13 Months"
              14 = "14 Months"
              15 = "15 Months"
              16 = "16 Months"
              17 = "17 Months"
              90 = "90 Last round disputed"
              -1 = "-1 Inapplicable"
              -7 = "-7 Refused"
              -8 = "-8 Dont know"
              -9 = "-9 Missing"
             -10 = "-10 Not ascertained"
             -12 = "-12 Outside of range"
             -13 = "-13 None"
            -999 = "-999 Not determined" ;

          VALUE   DMDSFLG
              -1 = "-1 Inapplicable"
               1 = "1 No SP interview last round"
               2 = "2 Died and month death missing"
               3 = "3 Died <=1 month after last interview"
               4 = "4 Died 12-13 months after last interview"
               5 = "5 Died and not mobile (fl2notmobile=1)"
               6 = "6 Died and not alert (fl2notalert =1)"
               7 = "7 Skipped 1 or more help questions" ;

          VALUE   DMDS3FLG
              -1 = "-1 Inapplicable"
               1 = "1 No SP interview last round"
               2 = "2 Died and month death missing"
               3 = "3 Died <=1 month after last interview"
               4 = "4 Died 12-13 months after last interview"
               5 = "5 Died and not mobile (fl3notmobile=1)"
               6 = "6 Died and not alert (fl3notalert =1)"
               7 = "7 Skipped 1 or more help questions" ;
              VALUE flags
               0= "0 NO CUR SP INT"
               1= "1 No LAST SP INT"
               2= "2 Died and mo death missing"
               3= "3 Died <=1 mo after LAST INT"
               4= "4 Died 12-13 mo after LAST INT"
```

```
                5= "5 Died and not mobile"
                6= "6 Died and not alert"
                7= "7 Skipped help questions"
                    -1= "-1 Inapplicable"
                    -3="-3 Not asked of new sample";
*/
            value groupmo 1 = "1 Started"
                2 = "2 Ended"
                 3 = "3 Both times with gap"
                 4 = "4 Both times no gap"
                     5 = "5 Between only (end missing)"
                 6 = "6 Neither time AND not between"
                11 = "11 Started (start missing)"
                21 = "21 Ended (end missing)"
                41 = "41 Both times (gap missing)"
                61 = "61 Neither time (between missing)"
                        -1= "-1 Inapplicable"
                            -3="-3 Not asked of new sample"
                   -7= "-7 RF"
                   -8= "-8 DK"
                   -9= "-9 Missing"
                -999 = "-999 Not determined"
                 -99 = "-99 Partial" ;

                VALUE nw_mths  0 = "0 Less than 1 month"
            1 ="1 month"
            2 ="2 months"
            3 ="3 months"
            4 ="4 months"
            5 ="5 months"
            6 ="6 months"
            7 ="7 months"
            8 ="8 months"
            9 ="9 months"
            10= "10 months"
            11= "11 months"
            12= "12 months"
            13= "13 months"
            14= "14 months"
            15= "15 months"
            16= "16 months"
            17= "17 months"
            18= "18 months"
            19= "19 months"
            20= "20 months"
            90= "90 Last round disputed"
            999= "999 No months"
            -1= "-1 Inapplicable"
                 -3="-3 Not asked of new sample"
            -7= "-7 RF"
            -8= "-8 DK"
            -9= "-9 Missing"
            -10= "-10 Not ascertained"
            -12= "-12 Outside of range (greater than months between
interviews)"
            -13= "-13 None"
            -999= "-999 Not determined"
```

```
                -99= "-99 Partial";
                    VALUE chntinhh
              1 ="1 Yes, not in household"
              -1= "-1 Inapplicable"
              -7= "-7 RF"
              -8= "-8 DK"
              -9= "-9 Missing";
                Value d4mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section'
15='15 no flags and added at HL section'
16='16 no flags and added at SL section';
              VALUE HA5DWHL
                  1 = "1 Meals on wheels last month"        /* updated per
issue #5  6/20/16  */
                  -1 = "-1 Inapplicable";
              VALUE HA5DTKO
                  1 = "1 Restaurant or take out last month"   /* updated per
issue #6  6/20/16  */
                  -1 = "-1 Inapplicable";
              VALUE RE5BLDG                       /* updated per issue #25
6/20/16  */
                -7 = '-7 RF'
                -8 = '-8 DK'
                -1 = '-1 Inapplicable'
                -9 = '-9 Missing'
                 1 = "1 Building has one floor"
                 2 = "2 Building has multiple floors"   ;
VALUE S000163W
    1 = "1 PRIVACY MORE IMPORTANT"
    2 = "2 SOCIALIZE MORE IMPORTANT"
    3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
              -1= "-1 Inapplicable"
              -7= "-7 RF"
              -8= "-8 DK"
              -9= "-9 Missing";

  VALUE S000164W
    1 = "1 SOCIALIZE MORE IMPORTANT"
    2 = "2 PRIVACY MORE IMPORTANT"
    3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
              -1= "-1 Inapplicable"
              -7= "-7 RF"
```

```
                -8= "-8 DK"
                -9= "-9 Missing";

    VALUE S000165W
      1 = "1 BEING SAFE MORE IMPORTANT"
      2 = "2 HAVING CHOICES MORE IMPORTANT"
      3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
     -1= "-1 Inapplicable"
     -7= "-7 RF"
     -8= "-8 DK"
     -9= "-9 Missing"  ;

    VALUE S000166W
      1 = "1 HAVING CHOICES MORE IMPORTANT"
      2 = "2 BEING SAFE MORE IMPORTANT"
      3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
     -1= "-1 Inapplicable"
     -7= "-7 RF"
     -8= "-8 DK"
     -9= "-9 Missing"  ;

    VALUE S000167W
      1 = "1 PRIVACY MORE IMPORTANT"
      2 = "2 BEING SAFE MORE IMPORTANT"
      3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
     -1= "-1 Inapplicable"
     -7= "-7 RF"
     -8= "-8 DK"
     -9= "-9 Missing" ;

    VALUE S000168W
      1 = "1 BEING SAFE MORE IMPORTANT"
      2 = "2 PRIVACY MORE IMPORTANT"
      3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
     -1= "-1 Inapplicable"
     -7= "-7 RF"
     -8= "-8 DK"
     -9= "-9 Missing" ;

    VALUE S000169W
      1 = "1 SOCIALIZING MORE IMPORTANT"
      2 = "2 HAVING CHOICES MORE IMPORTANT"
      3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
     -1= "-1 Inapplicable"
     -7= "-7 RF"
     -8= "-8 DK"
     -9= "-9 Missing"  ;

    VALUE S000170W
      1 = "1 HAVING CHOICES MORE IMPORTANT"
      2 = "2 SOCIALIZING MORE IMPORTANT"
      3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
     -1= "-1 Inapplicable"
     -7= "-7 RF"
     -8= "-8 DK"
     -9= "-9 Missing"  ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE S000171W
  1 = "1 PRIVACY MORE IMPORTANT"
  2 = "2 HAVING CHOICES MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
-7= "-7 RF"
-8= "-8 DK"
-9= "-9 Missing" ;

VALUE S000172W
  1 = "1 HAVING CHOICES MORE IMPORTANT"
  2 = "2 PRIVACY MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
-7= "-7 RF"
-8= "-8 DK"
-9= "-9 Missing" ;

VALUE S000173W
  1 = "1 SOCIALIZING MORE IMPORTANT"
  2 = "2 BEING SAFE MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
-7= "-7 RF"
-8= "-8 DK"
-9= "-9 Missing"  ;

VALUE S000174W
  1 = "1 BEING SAFE MORE IMPORTANT"
  2 = "2 SOCIALIZING MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
-7= "-7 RF"
-8= "-8 DK"
-9= "-9 Missing" ;

VALUE S000175W
  1 = "1 LESS THAN 1 HOUR"
  2 = "2 MORE THAN 1 HOUR"
  3 = "3 ABOUT 1 HOUR"
 -1= "-1 Inapplicable"
-7= "-7 RF"
-8= "-8 DK"
-9= "-9 Missing"  ;

VALUE S000176W
  1 = "1 LESS THAN 15 MINUTES"
  2 = "2 15 MINUTES"
  3 = "3 BETWEEN 15 AND 30 MINUTES"
  4 = "4 30 MINUTES"
  5 = "5 BETWEEN 30 AND 45 MINUTES"
  6 = "6 45 MINUTES"
  7 = "7 BETWEEN 45 AND 60 MINUTES"
 -1= "-1 Inapplicable"
-7= "-7 RF"
-8= "-8 DK"
-9= "-9 Missing" ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE S000177W
  1 = "1 ABOUT 1  HOURS"
  2 = "2 ABOUT 2 HOURS"
  3 = "3 ABOUT 3 HOURS"
  4 = "4 ABOUT 4 HOURS"
  5 = "5 ABOUT 5 HOURS"
  6 = "6 6 OR MORE HOURS"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing" ;

  VALUE W600001W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 STRONGLY AGREE"
  2 = "2 AGREE"
  3 = "3 DISAGREE"
    4 = "4 STRONGLY DISAGREE";
  VALUE W600002W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  0 = "0 NONE"
  1 = "1 1-2"
  2 = "2 3-5"
  3 = "3 6-10"
  4 = "4 11-15"
  5 = "5 16-20"
  6 = "6 MORE THAN 20";
  VALUE W600003W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 A (picture showing 4 pills)"
  2 = "2 B (picture showing 8 pills)"
  3 = "3 C (picture showing 12 pills)"
  4 = "4 D (picture showing 16 pills)"
  5 = "5 E (picture showing 20 pills)"
  6 = "6 F (picture showing 24 pills)";

     VALUE YNF
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No";
     VALUE FQ6DLOCA
  1 = "1 Independent Living"
  2 = "2 Assisted Living"
  3 = "3 Special Care Unit"
```

```
    4 = "4 Nursing home"
     -8 = "-8 Not reported"
     -1 = "-1 Inapplicable";
          VALUE R6DRES1A
 1 = '1 Community'
 2 = '2 Residential Care'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';
                 VALUE SP30023W
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
           1 = "1 Building has one floor"
           2 = "2 Building has multiple floors"   ;
                 VALUE RE5BLDG
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
           1 = "1 Building has one floor"
           2 = "2 Building has multiple floors"   ;
      VALUE WORDRECC
       -1 = '-1 Inapplicable'
       -2 = '-2 Proxy says cannot ask SP'
       -3 = '-3 Proxy says can ask SP but SP unable to answer'
       -7 = '-7 SP refused activity'
       -9 = '-9 Missing';
          VALUE OLDMTHS
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';
          VALUE MONTHS
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';
                   VALUE  FLAGS
            -1 = "-1 Inapplicable"
                  -3 = "-3 Not asked of new sample"
            0 = "0 No current SP interview"
            1 = "1 No SP interview last round"
            2 = "2 Died and month death missing"
            3 = "3 Died <=1 month after last interview"
            4 = "4 Died 12-13 months after last interview"
            7 = "7 Skipped 1 or more help questions" ;
 VALUE DMDEVUSE
  0   = '0 none or less than 1 year'
  997 = '997 since birth'
  -7  = '-7 RF'
  -8  = '-8 DK'
  -1  = '-1 Inapplicable '
  -2 = '-2 Not asked of continuing sample'
 -9  = '-9 Missing';
 VALUE SPPB_MISSING
    -7 = '-7 RF'
```

```
        -8 = '-8 DK'
        -9 = '-9 Missing'
        -1="-1 Inapplicable"
        1="1 Proxy interview"
        2="2 Missing walk and repeat chair and balance"
        3="3 Missing walk and repeat chair"
        4="4 Missing walk and balance"
        5="5 Missing repeat chair and balance"
        6="6 Missing walk"
        7="7 Missing repeat chair"
        8="8 Missing balance"
        9="9 No space"
        10="10 No chair"
        11="11 No space walk and no chair"
        12="12 No space walk and non-safety missing"
        13="13 No chair and non-safety missing"
        14="14 Non-safety walk"
        15="15 Non-safety chair"
        16="16 Non-safety balance"
        17="17 Non-safety walk and chair"
        18="18 Non-safety walk and balance"
        19="19 Non-safety chair and balance"
        20="20 Non-safety walk and chair and balance";

run;



/*==================================================================*/

/* NHATS_Round_7_Combined_PROC_FORMAT_Statement.sas */

PROC FORMAT ;

    VALUE release
         -1 = '-1 Inapplicable'
          1 = '1 Main Sample'
          2 = '2 Reserve Sample'
          9 = '9 New Release Sample';

    VALUE STAT_DTa
          4 = " 4 April"
          5 = " 5 May"
          6 = " 6 June"
          7 = " 7 July"
          8 = " 8 August"
          9 = " 9 September"
         10 = "10 October"
         11 = "11 November"
         99 = "99 Prior to start of field work"
         -1 = '-1 Inapplicable';

    VALUE $DISP
         '10' = "10 Not Available "
         '11' = "11 Ready"
         '12' = "12 Started "
         '20' = "20 Final "
         '24' = "24 Not Required "
```

```
        '60' = "60 Complete "
        '61' = "61 Complete, NH facility"
        '62' = "62 Complete SP Deceased, Proxy Intv"
        '63' = "63 Complete SP, FQ not complete"
        '64' = "64 Complete FQ, SP not complete"
        '75' = "75 Physically/mentally unable to participate, no proxy"
        '76' = "76 Too ill to participate, no proxy"
        '77' = "77 Refusal, SP"
        '78' = "78 Language barrier"
        '79' = "79 Unable to locate"
        '80' = "80 Unavailable during field period"
        '82' = "82 Outside of PSU"
        '83' = "83 Ineligible"
        '85' = "85 Refusal, facility"
        '86' = "86 Deceased"
        '87' = "87 Refusal, proxy"
        '88' = "88 Work stopped"     ;

VALUE DISP_a
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required"
        60 = "60 Complete"
        61 = "61 Complete, NH facility"
        62 = "62 Complete SP Deceased, Proxy Intv"
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"     ;

    VALUE DISP_
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required";

    VALUE DISP_F
     -1 = '-1 Inapplicable'
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required"
        60 = "60 Complete"
```

```
        61 = "61 Complete, NH facility"
        62 = "62 Complete SP Deceased, Proxy Intv"
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
         81 = "81 Final deceased, new sample only"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"
        89 = "89 Final, Other Specify";

    VALUE RFDK
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE $RFDK_F
    '-7' = '-7 RF'
    '-8' = '-8 DK'
    '-1' = '-1 Inapplicable'
    '-9' = '-9 Missing';

    VALUE RFDK_F
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE RFDK_B
    -1 = '-1 Inapplicable'
    1 = '1 Yes-Breakoff';

VALUE $RFDK_C
    '-1' = '-1 Inapplicable'
    'CL' ='CL - Closing'
    'EW' ='EW - Economic Well-Being'
    'FQ' ='FQ - Facility Questionnaire'
    'HL' ='HL - Helper'
    'HW' ='HW - Height and Weight'
    'IP' ='IP - Insurance Plans'
    'LF' ='LF - Labor Force'
    'PA' ='PA - Participation'
    'PE' ='PE - Performance'
    'WB' ='WB - Well-being' ;

VALUE $RFDK_2C
    '-1' = '-1 Inapplicable'
    '-7' = '-7 RF'
```

```
        '-8' = '-8 DK'
        '-9' = '-9 Missing';

        VALUE RFDK_Y
         1 = ' 1 Yes'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

VALUE RFDK_I
         0 = ' 0 No'
         1 = ' 1 Yes'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

        VALUE RFDK_YN
         1 = ' 1 Yes'
         2 = ' 2 No'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

        VALUE DSTRP_G
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 =  '1 X condition and word color condition accuracy below threshold
(less than .42)'
         2 =  '2 word condition only below threshold (less than .42)'
         3 =  '3 X condition and word color condition meet criteria for accuracy'
         4 =  '4 fewer than 50% of X and word color condition trials answered'
        999 = '999 X condition only below threshold (less than .42)';

        VALUE DSTRP_R
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -999 = '-999 Inapplicable'
        other = 'Values ranging between -.353 and 1.115';

        VALUE DSTRP_M
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -999 = '-999 Inapplicable'
        other = 'Values ranging between -544.732 and 924.863';

VALUE FQ_4F
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
```

```
            1='1 YES'
            2='2 NO';

    VALUE CHILDDEC
      1 =  '1 CHILD DECEASED'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

    VALUE W200001W
     12 = "12 STARTED"
     20 = "20 COMPLETE"
     21 = "21 INELIGIBLE - NOT 65+"   ;

    VALUE W200008x
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 UNDER 20"
      2 = "2 20-24"
      3 = "3 25-29"
      4 = "4 30-34"
      5 = "5 35-39"
      6 = "6 40-44"
      7 = "7 45-49"
      8 = "8 50-54"
      9 = "9 55-59"
     10 = "10 60-64"
     11 = "11 65-69"
     12 = "12 70-74"
     13 = "13 75-79"
     14 = "14 80-84"
     15 = "15 85-89"
     16 = "16 90 +";

    VALUE W200009W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 SAMPLE PERSON"
      2 = "2 SPOUSE/ PARTNER"
      3 = "3 DAUGHTER"
      4 = "4 SON"
      5 = "5 DAUGHTER-IN-LAW"
      6 = "6 SON-IN-LAW"
      7 = "7 STEPDAUGHTER"
      8 = "8 STEPSON"
      9 = "9 SISTER"
     10 = "10 BROTHER"
     11 = "11 SISTER-IN-LAW"
     12 = "12 BROTHER-IN-LAW"
     13 = "13 MOTHER"
     14 = "14 STEPMOTHER"
     15 = "15 MOTHER-IN-LAW"
```

```
   16 = "16 FATHER"
   17 = "17 STEPFATHER"
   18 = "18 FATHER-IN-LAW"
   19 = "19 GRANDDAUGHTER"
   20 = "20 GRANDSON"
   21 = "21 NIECE"
   22 = "22 NEPHEW"
   23 = "23 AUNT"
   24 = "24 UNCLE"
   25 = "25 COUSIN"
   26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
   27 = "27 STEPSON'S SON/ DAUGHTER"
   28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
   29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
   30 = "30 BOARDER/RENTER"
   31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
   32 = "32 ROOMMATE"
   33 = "33 EX-WIFE/ EX-HUSBAND"
   34 = "34 BOYFRIEND/ GIRLFRIEND"
   35 = "35 NEIGHBOR"
   36 = "36 FRIEND"
   37 = "37 SOMEONE/SERVICE AT THE PLACE SP LIVES/LIVED"
   38 = "38 CO-WORKER"
   39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
   40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
   41 = "41 DECEASED SPOUSE/PARTNER"
   91 = "91 OTHER RELATIVE"
   92 = "92 OTHER NONRELATIVE"   ;

 VALUE W200002W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MALE"
  2 = "2 FEMALE";

 VALUE W200005W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NO SCHOOLING COMPLETED"
  2 = "2 1ST-8TH GRADE"
  3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
  4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
  5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
  6 = "6 SOME COLLEGE BUT NO DEGREE"
  7 = "7 ASSOCIATE'S DEGREE"
  8 = "8 BACHELOR'S DEGREE"
  9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"  ;

 VALUE W200010W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
```

```
  -9 = '-9 Missing'
   1 = "1 MARRIED"
   2 = "2 LIVING WITH A PARTNER"
   3 = "3 SEPARATED"
   4 = "4 DIVORCED"
   5 = "5 WIDOWED"
   6 = "6 NEVER MARRIED";

  VALUE W200011W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 PREVIOUSLY REPORTED"  ;
VALUE W200012W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 REGULAR"
   2 = "2 VARIED"  ;

  VALUE W200013W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP AND/OR FAMILY"
   2 = "2 GOVERNMENT PROGRAM"
   3 = "3 INSURANCE"
  91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200015W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1='1 HOURLY'
   2='2 WEEKLY'
   3='3 MONTHLY'
   4='4 DID NOT PAY IN LAST MONTH'
    91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200016W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MEDICAID"
   2 = "2 MEDICARE"
   3 = "3 STATE PROGRAM"
   91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200018W
  -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
     2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
     3 = "3 MOBILE HOME OR TRAILER"
     4 = "4 MULTI-UNIT (2+) BUILDING"
    91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200020W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HOME"
    2 = "2 MULTI-UNIT"
    3 = "3 OTHER"  ;

  VALUE W200021W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 BUILDING HAS ONE FLOOR"
    2 = "2 BUILDING HAS MULTIPLE FLOORS"   ;

  VALUE W200022W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HOME"
    2 = "2 APARTMENT"
    3 = "3 ROOM"
    4 = "4 UNIT"
    5 = "5 SUITE"
    6 = "6 SOMETHING ELSE (SPECIFY)"  ;

  VALUE W200030W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SAMPLE PERSON (SP)"
    2 = "2 PROXY"  ;

  VALUE W200032W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HOSPITAL"
    2 = "2 NURSING HOME/REHAB CENTER"
    91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200035W
```

SAS ALGORITHM FOR DEMENTIA

```
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 SELF"
       2 = "2 SPOUSE/ PARTNER"
       3 = "3 DAUGHTER"
       4 = "4 SON"
       5 = "5 DAUGHTER-IN-LAW"
       6 = "6 SON-IN-LAW"
       7 = "7 STEPDAUGHTER"
       8 = "8 STEPSON"
       9 = "9 SISTER"
      10 = "10 BROTHER"
      11 = "11 SISTER-IN-LAW"
      12 = "12 BROTHER-IN-LAW"
      13 = "13 MOTHER"
      14 = "14 STEPMOTHER"
      15 = "15 MOTHER-IN-LAW"
      16 = "16 FATHER"
      17 = "17 STEPFATHER"
      18 = "18 FATHER-IN-LAW"
      19 = "19 GRANDDAUGHTER"
      20 = "20 GRANDSON"
      21 = "21 NIECE"
      22 = "22 NEPHEW"
      23 = "23 AUNT"
      24 = "24 UNCLE"
      25 = "25 COUSIN"
      26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
      27 = "27 STEPSON'S SON/ DAUGHTER"
      28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
      29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
      30 = "30 BOARDER/RENTER"
      31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
      32 = "32 ROOMMATE"
      33 = "33 EX-WIFE/ EX-HUSBAND"
      34 = "34 BOYFRIEND/ GIRLFRIEND"
      35 = "35 NEIGHBOR"
      36 = "36 FRIEND"
      37 = "37 SOMEONE/SERVICE FROM THE PLACE SP LIVES/DIED"
      38 = "38 CO-WORKER"
      39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
      40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
      91 = "91 OTHER RELATIVE"
      92 = "92 OTHER NONRELATIVE"  ;

   VALUE W200036W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 VERY FAMILIAR"
       2 = "2 SOMEWHAT FAMILIAR"
       3 = "3 A LITTLE FAMILIAR"
       4 = "4 NOT AT ALL FAMILIAR"  ;

   VALUE W200037W
      -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, SAME ADDRESS"
  2 = "2 NO, DIFFERENT ADDRESS"
  3 = "3 YES, SAME ADDRESS WITH MINOR CORRECTIONS"  ;

VALUE W200038W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
 10 = "10 OCTOBER"
 11 = "11 NOVEMBER"
 12 = "12 DECEMBER"  ;

VALUE W200039W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"
  3 = "3 YEAR2013"
  4 = "4 YEAR2014"
  5 = "5 YEAR2015"
  6 = "6 YEAR2016"
  7 = "7 YEAR2017"
  8 = "8 YEAR2018"
  9 = "9 YEAR2019"
 10 = "10 YEAR2020"  ;

VALUE W200040W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"  ;

VALUE W200041W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AT SPS OR SOMEONE ELSES HOME"
  2 = "2 IN A HOSPITAL"
  3 = "3 IN A NURSING HOME"
```

```
    4 = "4 IN A HOSPICE RESIDENCE"
    5 = "5 IN TRANSIT (AMBULANCE TO HOSPITAL)"
    91 = "91 SOMEWHERE ELSE (SPECIFY)";

  VALUE W200042W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP'S HOME"
   2 = "2 SOMEONE ELSE'S HOME"  ;

  VALUE W200043W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 INTENSIVE CARE UNIT"
   2 = "2 PALLIATIVE CARE UNIT"
   3 = "3 INPATIENT HOSPICE UNIT"
   4 = "4 EMERGENCY ROOM"
   5 = "5 ANOTHER KIND OF UNIT"  ;

  VALUE W200044W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 HOSPICE AT A HOSPITAL"
   2 = "2 HOSPICE AT A NURSING HOME"
   3 = "3 RESIDENTIAL HOSPICE"
   4 = "4 OTHER HOSPICE"  ;

  VALUE W200045W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 DAYS"
   2 = "2 WEEKS"
   3 = "3 MONTHS"
   4 = "4 YEARS"  ;

  VALUE W200046W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 AT SP'S HOME"
   2 = "2 IN A HOSPITAL"
   3 = "3 IN A NURSING HOME"
   4 = "4 IN A HOSPICE RESIDENCE"
   91 = "91 SOMEWHERE ELSE (SPECIFY)"  ;

  VALUE W200047W
  -7 = '-7 RF'
  -8 = '-8 DK'
```

```
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 EVERY DAY"
      2 = "2 MOST DAYS"
      3 = "3 SOME DAYS"
      4 = "4 RARELY"
      5 = "5 NOT AT ALL"  ;

  VALUE W200048W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 LESS THAN WAS NEEDED"
      2 = "2 MORE THAN WAS NEEDED"
      3 = "3 ABOUT RIGHT AMOUNT"  ;

  VALUE W200049W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 YES"
      2 = "2 NO"
      3 = "3 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

  VALUE W200050W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 ALWAYS"
      2 = "2 USUALLY"
      3 = "3 SOMETIMES"
      4 = "4 NEVER"
      5 = "5 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

  VALUE W200051W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 EXCELLENT"
      2 = "2 VERY GOOD"
      3 = "3 GOOD"
      4 = "4 FAIR"
      5 = "5 POOR"  ;

  VALUE W200052W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 NOT AT ALL"
      2 = "2 SEVERAL DAYS"
      3 = "3 MORE THAN HALF THE DAYS"
      4 = "4 NEARLY EVERY DAY"  ;
```

```
VALUE W200053W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
  2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
  3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"  ;

VALUE W200054W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
  2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
  3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"
  7 = "7 DON'T WAKE UP/NOT A PROBLEM"  ;

VALUE W200055W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 PRIVATE RESIDENCE"
  2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
  3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
  4 = "4 RELIGIOUS GROUP QUARTERS"
  91 = "91 OTHER (SPECIFY)"  ;

VALUE W200056W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 PLACE DOES NOT HAVE A NAME"  ;

VALUE W200057W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 APARTMENT"
  2 = "2 ROOM"
  3 = "3 UNIT"
  4 = "4 SUITE"
  91 = "91 SOMETHING ELSE (SPECIFY)"  ;

VALUE W200058W
```

```
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO, DIFFERENT PERSON"
    3 = "3 NO, NAME MISSPELLED"  ;

   VALUE W200060W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PRIVATE RESIDENCE"
    2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
    3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
    5 = "5 NURSING HOME"
   91 = "91 OTHER (SPECIFY)"  ;

   VALUE W200061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
    8 = "8 OTHER REASON"   ;

   VALUE W200067W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 COMMON OR SHARED ENTRANCE"
    2 = "2 ENTRANCE DIRECTLY INTO HOME"  ;

   VALUE W200068W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1"
    2 = "2"
    3 = "3"
    4 = "4+"  ;

   VALUE W200069W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 ALL ITEMS HERE"
    2 = "2 ADDED ONE OR MORE ITEMS"  ;
```

SAS ALGORITHM FOR DEMENTIA

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VALUE W200070W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE THAN $500"
  2 = "2 LESS THAN $500"
  3 = "3 JUST ABOUT $500"  ;

VALUE W200071W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE THAN $1,000"
  2 = "2 LESS THAN $1,000"
  3 = "3 JUST ABOUT $1,000"  ;

VALUE W200072W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE THAN $100"
  2 = "2 LESS THAN $100"
  3 = "3 JUST ABOUT $100"  ;

VALUE W200073W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 YES, DOESNT KNOW HOW TO USE A COMPUTER"  ;

VALUE W200074W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST DAYS"
  2 = "2 SOME DAYS"
  3 = "3 RARELY"  ;

VALUE W200076W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 DEAF"  ;

VALUE W200077W
 -7 = '-7 RF'
 -8 = '-8 DK'
```

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 BLIND"  ;

VALUE W200078W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY DAY (7 DAYS A WEEK)"
  2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
  3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"  ;

VALUE W200080W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, A CHANGE"
  2 = "2 NO, NO CHANGE"
  3 = "3 DEMENTIA/ALZHEIMER'S REPORTED BY PROXY"  ;

VALUE W200081W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE"
  2 = "2 SP IS UNABLE TO SPEAK"
  3 = "3 SP IS UNABLE TO HEAR"
  4 = "4 SP REFUSED"
  5 = "5 PROXY REFUSED"
  6 = "6 SP NOT PRESENT"
  7 = "7 SP TOO ILL"
  8 = "8 SP LANGUAGE BARRIER"
  91 = "91 OTHER (SPECIFY)"  ;

VALUE W200082W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MUCH BETTER"
  2 = "2 BETTER"
  3 = "3 SAME"
  4 = "4 WORSE"
  5 = "5 MUCH WORSE"  ;

VALUE W200083W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
```

```
    1 = "1 YES"
    2 = "2 NO/DON'T KNOW"   ;

  VALUE W200084W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 CONTINUE WITH ACTIVITY"
    2 = "2 SP REFUSES ACTIVITY"   ;

  VALUE W200085W
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "Word[1]"
    2 = "Word[2]"
    3 = "Word[3]"
    4 = "Word[4]"
    5 = "Word[5]"
    6 = "Word[6]"
    7 = "Word[7]"
    8 = "Word[8]"
    9 = "Word[9]"
   10 = "Word[10]"
   91 = "91 NO WORDS REMEMBERED"
   92 = "92 REFUSED"   ;

  VALUE W200086W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 DIFFICULTY HEARING ANY OF THE WORDS"
    2 = "2 INTERRUPTION OCCURRED WHILE LIST WAS BEING READ"
   91 = "91 OTHER PROBLEM (SPECIFY)"
   92 = "92 NO PROBLEMS OCCURRED"
   97 = "97 SP REFUSED WORD RECALL TASK"   ;

  VALUE W200087W
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SP ATTEMPTED CLOCK DRAWING"
    2 = "2 SP DID NOT ATTEMPT CLOCK DRAWING"
   97 = "3 SP REFUSED CLOCK DRAWING"   ;

  VALUE W200089W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY DAY (7 DAYS A WEEK)"
    2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
    3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
    4 = "4 RARELY (ONCE A WEEK OR LESS)"
    5 = "5 NEVER"   ;

  VALUE W200090W
```

```
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY TIME"
  2 = "2 MOST TIMES"
  3 = "3 SOMETIMES"
  4 = "4 RARELY"
  5 = "5 NEVER"   ;

VALUE W200092W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST TIMES"
  2 = "2 SOMETIMES"
  3 = "3 RARELY"
  4 = "4 NEVER"   ;

VALUE W200093W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NONE"
  2 = "2 A LITTLE"
  3 = "3 SOME"
  4 = "4 A LOT"   ;

VALUE W200094W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE OFTEN"
  2 = "2 LESS OFTEN"
  3 = "3 ABOUT THE SAME"   ;

VALUE W200095W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
 10 = "10 OCTOBER"
 11 = "11 NOVEMBER"
 12 = "12 DECEMBER"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"   ;
```

```
VALUE W200096W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

VALUE W200097W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO / NO LONGER DRIVE"  ;

VALUE W200098W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 NO, NO RAIN OR BAD WEATHER"  ;

VALUE W200099W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ALWAYS DID IT BY SELF"
  2 = "2 ALWAYS DID IT TOGETHER WITH SOMEONE ELSE"
  3 = "3 SOMEONE ELSE ALWAYS DID IT"
  4 = "4 IT VARIED (MORE THAN ONE WAY)"
  5 = "5 NOT DONE IN LAST MONTH"  ;

VALUE W200102W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE OFTEN"
  2 = "2 LESS OFTEN"
  3 = "3 SAME"  ;

VALUE W200106W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 ALWAYS FED THROUGH IV OR TUBE"  ;

VALUE W200107W
```

```
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY TIME"
  2 = "2 MOST TIMES"
  3 = "3 SOMETIMES"
  4 = "4 RARELY"   ;

 VALUE W200109W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SHOWERING"
  2 = "2 TAKING BATHS"
  3 = "3 WASHING UP SOME OTHER WAY"  ;


 VALUE W200114W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 VERY IMPORTANT"
  2 = "2 SOMEWHAT IMPORTANT"
  3 = "3 NOT SO IMPORTANT"  ;

 VALUE W200115W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
 95 = "95 NO ACTIVITY LISTED"  ;

 VALUE W200116W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LEFT"
  2 = "2 RIGHT"
  3 = "3 BOTH"  ;

 VALUE W200117W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LEFT SIDE"
  2 = "2 RIGHT SIDE"
  3 = "3 BOTH SIDES"  ;

 VALUE W200118W
 -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ONE SIDE"
     2 = "2 BOTH SIDES"  ;

  VALUE W200119W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 RECEIVE ALL TREATMENTS"
    2 = "2 STOP/REJECT ALL TREATMENTS"  ;

  VALUE W200120W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
    2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
    3 = "3 LIVING WITH AN ADULT CHILD"
    4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
    5 = "5 LIVING IN A NURSING HOME"  ;

  VALUE W200121W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
    4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

  VALUE W200122W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MAKE DECISIONS WITHOUT MUCH ADVICE FROM THEM"
    2 = "2 GET THEIR ADVICE AND THEN MAKE DECISIONS"
    3 = "3 MAKE DECISIONS TOGETHER"
    4 = "4 LEAVE DECISIONS UP TO THEM"  ;

  VALUE W200123W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HANDLE MOSTLY BY SELF"
    2 = "2 HANDLE TOGETHER WITH FAMILY OR CLOSE FRIENDS"
    3 = "3 FAMILY OR CLOSE FRIENDS MOSTLY HANDLE THESE THINGS"
    4 = "4 IT VARIES"  ;

  VALUE W200124W
```

```
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NEVER"
  2 = "2 RARELY"
  3 = "3 SOMETIMES"
  4 = "4 OFTEN"  ;

VALUE W200126W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AGREE A LOT"
  2 = "2 AGREE A LITTLE"
  3 = "3 DO NOT AGREE"  ;

VALUE W200127W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AGREE A LOT"
  2 = "2 AGREE A LITTLE"
  3 = "3 AGREE NOT AT ALL"  ;

VALUE W200129W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $1,000,"
  2 = "2 $1,000 to less than $2,000,"
  3 = "3 $2,000 to less than $3,000,"
  4 = "4 $3,000 to less than $5,000, or"
  5 = "5 $5,000 or more?"  ;

VALUE W200131W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 RETIRED/DON'T WORK ANYMORE"  ;

VALUE W200132W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY WEEK"
  2 = "2 EVERY TWO WEEKS"
  3 = "3 TWO TIMES A MONTH"
  4 = "4 ONCE A MONTH"
  5 = "5 DAILY"
```

```
        91 = "91 OTHER SCHEDULE (SPECIFY)"  ;

     VALUE W200133W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 OWN"
       2 = "2 RENT"
       3 = "3 SOME OTHER ARRANGEMENT"  ;

     VALUE W200134W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 PAID OFF"
       2 = "2 STILL MAKE PAYMENTS"
       3 = "3 REVERSE MORTGAGE"  ;

     VALUE W200135W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 less than $250,"
       2 = "2 $250-$499,"
       3 = "3 $500-$999, or"
       4 = "4 $1,000 or more?"  ;
     VALUE W500135W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 less than $250"
       2 = "2 $250 to less than $500"
       3 = "3 $500 to less than $1,000"
       4 = "4 $1,000 to less than $3,000"
         5 = "5 $3,000 to less than $5,000"
         6 = "6 $5,000 or more?"  ;
     VALUE W200136W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 5 YEARS"
       2 = "2 10 YEARS"
       3 = "3 LONGER THAN 10 YEARS"  ;

     VALUE W200137W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 less than $50,000,"
       2 = "2 between $50,000 and $100,000, or"
       3 = "3 over $100,000?"  ;
```

```
VALUE W200138W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $50,000,"
  2 = "2 $50,000-$74,999,"
  3 = "3 $75,000-$99,999,"
  4 = "4 $100,000-$199,999,"
  5 = "5 $200,000-$299,999,"
  6 = "6 $300,000-$499,999,"
  7 = "7 $500,000-$749,999, or"
  8 = "8 $750,000 or more?"  ;

VALUE W200139W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 PAY OFF BALANCE"
  2 = "2 PAY MINIMUM"
  3 = "3 PAY MORE THAN MINIMUM, BUT NOT ENTIRE BALANCE"
  4 = "4 DON'T HAVE ANY CREDIT CARDS"  ;

VALUE W200140W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $1,000,"
  2 = "2 $1,000 - $1,999,"
  3 = "3 $2,000 - $3,999,"
  4 = "4 $4,000 - $5,999,"
  5 = "5 $6,000 - $9,999,"
  6 = "6 $10,000 - $19,999, or"
  7 = "7 $20,000 or more?"  ;

VALUE W200141W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST"
  2 = "2 SOME"
  3 = "3 A LITTLE"  ;

VALUE W200142W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $500,"
  2 = "2 $500 - $999,"
  3 = "3 $1,000 - $1,999,"
  4 = "4 $2,000 - $3,999,"
  5 = "5 $4,000 - $5,999,"
```

```
      6 = "6 $6,000 - $9,999,"
      7 = "7 $10,000 - $19,999, or"
      8 = "8 $20,000 or more?"  ;

   VALUE W200146W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 NEARLY EVERY DAY"
     2 = "2 MORE THAN HALF THE DAYS"
     3 = "3 SEVERAL DAYS (LESS THAN HALF)"
     4 = "4 A FEW DAYS"  ;

   VALUE W200147W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 INCLUDED"
     2 = "2 EXTRA CHARGE"  ;

   VALUE W200148W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"  ;

VALUE F200006W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 FREE STANDING NURSING HOME"
     2 = "2 FREE STANDING ASSISTED LIVING FACILITY"
     3 = "3 NURSING HOME AND ASSISTED LIVING FACILITY"
     4 = "4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
     5 = "5 ADULT FAMILY CARE HOME"
     6 = "6 GROUP HOME"
     7 = "7 BOARD AND CARE HOME"
     8 = "8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
    91 = "91 OTHER (SPECIFY)"  ;

   VALUE F200007W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"  ;

   VALUE F200008W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
```

```
      1 = "1 INDEPENDENT LIVING"
      2 = "2 ASSISTED LIVING"
      3 = "3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
      4 = "4 NURSING HOME"
     91 = "91 OTHER (SPECIFY)"  ;

   VALUE F200009W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ASSISTED LIVING"
     2 = "2 NURSING HOME"  ;

   VALUE F200011W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES, SERVICE PROVIDED AS PART OF PACKAGE"
     2 = "2 YES, SERVICE PROVIDED AT AN EXTRA CHARGE"
     3 = "3 NO, SERVICE NOT PROVIDED"  ;

   VALUE F200012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 SP/FAMILY"
     2 = "2 SOCIAL SECURITY/SSI"
     3 = "3 MEDICAID"
     4 = "4 MEDICARE"
     5 = "5 OTHER SOURCE"  ;

   VALUE I200002W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
     2 = "2 No"  ;

   VALUE I200003W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 English"
     2 = "2 Spanish"
     3 = "3 Other (specify)"  ;

   VALUE I200005W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Friendly and interested"
```

```
     2 = "2 Cooperative but not particularly interested"
     3 = "3 Impatient and restless"
     4 = "4 Hostile"  ;

  VALUE I200006W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Good"
   2 = "2 Fair"
   3 = "3 Poor"  ;

  VALUE I200008W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 All of the time"
   2 = "2 Most of the time"
   3 = "3 Some of the time"
   4 = "4 Only for the cognition and/or performance parts"
   5 = "5 None of the time"  ;

  VALUE I200010W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
   2 = "2 No"
   3 = "3 Interview was conducted by telephone"  ;

  VALUE I200012W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
   2 = "2 No"
   3 = "3 Not Administered"  ;

  VALUE I200013W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
   2 = "2 No"  ;

  VALUE I200016W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"
   2 = "2 No"
```

```
     3 = "3 Entire interview conducted by telephone"  ;

   VALUE I200017W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Not at all cluttered"
     2 = "2 Somewhat cluttered"
     3 = "3 Very cluttered"
     4 = "4 Could not see other rooms"  ;

   VALUE I200018W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 None"
     2 = "2 A little"
     3 = "3 Some"
     4 = "4 A lot"
     5 = "5 Could not observe"  ;

   VALUE I200019W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 Yes"
     2 = "2 No"
     7 = "7 Could not observe"  ;


/* DERIVED VARIABLE FORMATS */
   VALUE LVGARRG
     1 = '1 Alone'
     2 = '2 With spouse/partner only (spouse/partner in household)'
     3 = '3 With spouse/partner and with others'
     4 = '4 With others only'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

   VALUE DOUTSFDF
     8 = '8 Not done in last month'
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE DOUTDEVI
     8 = '8 Not done in last month'
     1 = '1 No use of devices to go outside in last month'
```

```
    2 = '2 Use of devices to go outside in last month'
    3 = '3 DKRF If used devices to go outside in last month'
    4 = '4 DKRF If used devices in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE DOUTHELP
    8 = '8 Not done in last month'
    1 = '1 No help to go outside in last month'
    2 = '2 Had help to go outside in last month'
    3 = '3 DKRF If had help to go outside in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE DINSDSFD
    8 = '8 Not done in last month'
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE DINSDDEV
    8 = '8 Not done in last month'
    1 = '1 No use of devices inside in last month'
    2 = '2 Use of devices inside in last month'
    3 = '3 DKRF If used devices inside in last month'
    4 = '4 DKRF On use of devices'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dinsdhlp
    8 = '8 Not done in last month'
    1 = '1 No help to go around inside in last month'
    2 = '2 Had help to go around inside in last month'
    3 = '3 DKRF If had help to go around inside in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbedsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dbeddevi
    1 = '1 No use of cane or walker to get out of bed in last month'
    2 = '2 Use of cane or walker to get out of bed in last month'
```

```
     3 = '3 DKRF If Used cane or walker to get out of bed in last month'
     4 = '4 DKRF If used cane or walker in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dbedhelp
     1 = '1 No help to get out of bed in last month'
     2 = '2 Had help to get out of bed in last month'
     3 = '3 DKRF If had help to get out of bed in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';


  VALUE dlaunsfd
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';



  VALUE dlaunrea
     1= '1 Health/functioning reason only'
     2= '2 Other reason only'
     3= '3 Both health/functioning and other'
     4= '4 Service/someone from the place SP lives'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dshopsfd
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dshoprea
     1= '1 Health/functioning reason only'
     2= '2 Other reason only'
     3= '3 Both health/functioning and other'
     4= '4 Service/someone from the place SP lives'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
```

```
        -9 = '-9 Missing';

     VALUE dmealsfd
        1 = '1 Did not do by self in last month'
        2 = '2 Did by self in last month/No Difficulty'
        3 = '3 Did by self in last month/Difficulty'
        4 = '4 DKRF Did by self in last month/No Difficulty'
        5 = '5 DKRF Did by self in last month/Difficulty'
        6 = '6 Did by self in last month/DKRF Difficulty'
        7 = '7 DKRF Did by self in last month/DKRF Difficulty'
        8 = '8 Not done in last month'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

        VALUE dmealrea
        1= '1 Health/functioning reason only'
        2= '2 Other reason only'
        3= '3 Both health/functioning and other'
        4= '4 Service/someone from the place SP lives'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

     VALUE dbanksfd
        1 = '1 Did not do by self in last month'
        2 = '2 Did by self in last month/No Difficulty'
        3 = '3 Did by self in last month/Difficulty'
        4 = '4 DKRF Did by self in last month/No Difficulty'
        5 = '5 DKRF Did by self in last month/Difficulty'
        6 = '6 Did by self in last month/DKRF Difficulty'
        7 = '7 DKRF Did by self in last month/DKRF Difficulty'
        8 = '8 Not done in last month'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

     VALUE dbankrea
        1= '1 Health/functioning reason only'
        2= '2 Other reason only'
        3= '3 Both health/functioning and other'
        4= '4 Service/someone from the place SP lives'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

     VALUE deatdevi
        1 = '1 No use of adapted utensils in last month'
        2 = '2 Use of adapted utensils in last month'
        8 = '8 Not done in last month'
        3 = '3 DKRF If used adapted utensils in last month'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

     VALUE deathelp
```

```
  1 = '1 No help eating in last month'
  2 = '2 Had help eating in last month'
  3 = '3 DKRF If had help eating in last month'
  8 = '8 Not done in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE deatsfdf
  1 = '1 Did not do by self in last month'
  2 = '2 No Difficulty by self (and when using utensils)'
  3 = '3 Difficulty by self (and when using utensils)'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dbathdev
  1 = '1 No use of grab bars or bath seats in last month'
  2 = '2 Use of grab bars or bath seats in last month'
  3 = '3 DKRF If use of grab bars or bath seats in last month'
  4 = '4 DKRF If had grab bars or bath seats in last month'
  9 = '9 No bars/seats/shower/tub or washes up other way'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dbathhel
  1 = '1 No help bathing in last month'
  2 = '2 Had help bathing in last month'
  3 = '3 DKRF If had help bathing in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dbathsfd
  1 = '1 Did not do by self in last month'
  2 = '2 No Difficulty by self (and when using grab bars or tub seat)'
  3 = '3 Difficulty by self (and when using grab bars or tub seat)'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dtoildev
  1 = '1 No use of toileting devices in last month'
  2 = '2 Use of toileting devices in last month'
  3 = '3 DKRF of some and no use of other toileting devices in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dtoilhel
  1 = '1 No help toileting in last month'
  2 = '2 Had help toileting in last month'
  3 = '3 DKRF If had help toileting in last month'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';

VALUE dtoilsfd
```

```
     1 = '1 Did not do by self in last month'
     2 = '2 No Difficulty by self (and when using toileting devices)'
     3 = '3 Difficulty by self (and when using toileting devices)'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE ddresdev
     8 = '8 Not done in last month'
     9 = '9 DKRF If dressed in last month'
     2 = '2 Use of dressing devices in last month'
     1 = '1 No use of dressing devices in last month'
     3 = '3 DKRF If use of dressing devices in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE ddreshel
     8 = '8 Not done in last month'
     9 = '9 DKRF If dressed in last month'
     1 = '1 No help dressing in last month'
     2 = '2 Had help dressing in last month'
     3 = '3 DKRF If had help dressing in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE ddressfd
     1 = '1 Did not do by self in last month'
     2 = '2 No Difficulty by self (and when using dressing devices)'
     3 = '3 Difficulty by self (and when using dressing devices)'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
  VALUE dmedssfd
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     8 = '8 Not done in last month'
     9 = '9 No or DKRF if medications taken in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dmedsrea
     1 = '1 Health/functioning reason only'
     2 = '2 Other reason only'
     3 = '3 Both heath/functioning and other'
     4 = '4 Service/someone from the place SP lives'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
```

```
VALUE dmarstat
  1 = '1 Married'
  2 = '2 Living with a partner'
  3 = '3 Separated'
  4 = '4 Divorced'
  5 = '5 Widowed'
  6 = '6 Never married'
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing';
VALUE DSPSAGEC
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = " 1 UNDER 50"
   2 = " 2 50-54"
   3 = " 3 55-59"
   4 = " 4 60-64"
   5 = " 5 65-69"
   6 = " 6 70-74"
   7 = " 7 75-79"
   8 = " 8 80-84"
   9 = " 9 85-89"
  10 = "10 90 +"     ;

VALUE dresid
      -1 = '-1 Inapplicable'
   1 = '1 Community '
   2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
   3 = '3 Residential Care Resident not nursing home (FQ only)'
   4 = '4 Nursing Home Resident';
VALUE f_dresid
      -1 = '-1 Inapplicable'
   1 = '1 Community '
   2 = '2 Residential care not nursing home (SP interview)'
   3 = '3 Residential care not nursing home (FQ only)'
   4 = '4 Nursing home (SP interview)'
   5 = '5 Nursing home (FQ only)'
   6 = '6 Deceased'
   7 = '7 Residential care not nursing home in R1 and R5 (FQ only)'
   8 = '8 Nursing home in R1 and R5 (FQ only)' ;
VALUE f2dresid
      -1='-1 Inapplicable'
      1 = '1 Community '
   2 = '2 Residential care not nursing home (SP interview)'
   3 = '3 Residential care not nursing home (FQ only)'
   4 = '4 Nursing home (SP interview)'
   5 = '5 Nursing home (FQ only)'
   6 = '6 Deceased'
   7 = '7 Residential care not nursing home in R1 and R2 (FQ only)'
   8 = '8 Nursing home in R1 and R2 (FQ only)' ;
VALUE f3dresid
      -1='-1 Inapplicable'
```

```
            1 = '1 Community '
        2 = '2 Residential care not nursing home (SP interview)'
        3 = '3 Residential care not nursing home (FQ only)'
        4 = '4 Nursing home (SP interview)'
        5 = '5 Nursing home (FQ only)'
        6 = '6 Deceased'
        7 = '7 Residential care not nursing home in R1 and R3 (FQ only)'
        8 = '8 Nursing home in R1 and R3 (FQ only)' ;
    VALUE f4dresid
            -1='-1 Inapplicable'
            1 = '1 Community '
        2 = '2 Residential care not nursing home (SP interview)'
        3 = '3 Residential care not nursing home (FQ only)'
        4 = '4 Nursing home (SP interview)'
        5 = '5 Nursing home (FQ only)'
        6 = '6 Deceased'
        7 = '7 Residential care not nursing home in R1 and R4 (FQ only)'
        8 = '8 Nursing home in R1 and R4 (FQ only)' ;


VALUE QUARTILE
-9="-9 Missing"
-1="-1 Inapplicable";

VALUE SPPB
-9="-9 Missing"
-1="-1 Inapplicable";

    VALUE DCLCKSC
      0 = "0 Not recognizable as a clock"
      1 = "1 Severely distorted depiction of a clock"
      2 = "2 Moderately distorted depiction of a clock"
      3 = "3 Mildly distorted depiction of a clock"
      4 = "4 Reasonably accurate depiction of a clock"
      5 = "5 Accurate depiction of a clock (circular or square)"
    -7 = "-7 SP refused to draw clock"
    -8 = "-8 DK"
    -1 = "-1 Inapplicable"
    -2 = "-2 Proxy says cannot ask SP"
    -3 = "-3 Proxy says can ask SP but SP unable to answer"
    -4 = "-4 SP did not attempt to draw clock"
    -9 = "-9 Missing";

    VALUE DCLCKCL
      1 = '1 Very clear'
      2 = '2 Somewhat clear'
      3 = '3 Somewhat unclear'
      4 = '4 Very unclear'
      5 = '5 Blank'
    -7 = '-7 SP refused to draw clock'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -2 = '-2 Proxy says cannot ask SP'
    -3 = '-3 Proxy says can ask SP but SP unable to answer'
    -4 = '-4 SP did not attempt to draw clock'
    -9 = '-9 Missing';
```

# SAS ALGORITHM FOR DEMENTIA

```
VALUE RESULT
    -9='-9: MISSING'
    1='1: COMPLETED W RESULTS'
    2='2: COMPLETED MISSING RESULTS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    7='7: NO CHAIR/NO SPACE'
    9='9: NOT ATTEMPTED/MISSING';

    VALUE RESULT_SCH
    -9='-9: MISSING'
    1='1: COMPLETED W/OUT ARMS'
    2='2: COMPLETED W ARMS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    7='7: NO CHAIR/SAFETY REASON'
    8='8: NO CHAIR/NOT SAFETY REAS'
    9='9: NOT ATTEMPTED/MISSING'
    10='10: CH4=1 SINGLE CHAIR NOT COMPL';

    VALUE RESULT_RCH
    -9='-9: MISSING'
    1='1: COMPLETED W/OUT ARMS'
    2='2: COMPLETED MISSING RESULTS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    9='9: NO CHAIR OR NOT ATTEMPTED/MISSING';

    VALUE ZEROSCORE
    1="1: NOT ELIGIBLE DUE TO EXCLUSION CRITERIA"
    2="2: NOT ATTEMPTED FOR SAFETY REASON"
    3="3: ATTEMPTED CHAIR STANDS/NOT ATTEMPTED FOR SAFETY"
    4="4: ATTEMPTED"
    5="5: NEW WALKING EXCLUSION"
    9="9: NOT ASSIGNED A ZERO SCORE";

   VALUE D_LMLLOC
   1 = '1 Community'
   2 = '2 Residential Care'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

     VALUE D_LOCSP
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = "1 Independent Living/Housing/Retirement"
        2 = "2 Assisted Living/Personal Care"
        3 = "3 Special Care, Memory or Alzheimer's Unit"
        4 = "4 Nursing Home"
```

```
        8 = "8 Not Reported" ;

        VALUE PA25FMT
  -1 = '-1 Inapplicable'
   -8 = '-8 DK'
  -9 = '-9 Missing'
  111= '111 Sleeping Napping'
  131= '131 Eating'
  132= '132 Going out to eat'
  199= '199 Other self care activities'
  211= '211 Work and work-related activities'
  221= '221 Other income generating activities'
  241= '241 Volunteering'
  299= '299 Other productive activities'
  321= '321 Shopping for non-durable goods'
  399= '399 Other shopping'
  411= '411 Food and drink preparation'
  434= '434 Outdoor Maintenance'
  439= '439 Household chores (cannot tell if indoor/outdoor)'
  441= '441 Animal and pet care'
  442= '442 Walking and exercising pets'
  449= '449 Other animal and pet care'
  451= '451 Vehicle maintenance and repair'
  471= '471 Financial management'
  499= '499 Other household activities'
  511= '511 Physical care and assistance to others'
  599= '599 Other physical care'
  611= '611 Socializing with others in person'
  612= '612 Socializing with others on the phone'
  616= '616 Socializing and communicating on the computer'
  621= '621 Watching TV and movies'
  631= '631 Doing puzzles or games not on computer or online'
  632= '632 Gambling not online or at a casino'
  636= '636 Doing puzzles or games on a computer or online'
  641= '641 Arts and crafts or hobbies'
  642= '642 Reading'
  643= '643 Writing'
  644= '644 Listening to music'
  646= '646 Computer or online leisure activities'
  651= '651 Smoking or other tobacco use'
  652= '652 Drinking alcohol'
  661= '661 Doing nothing/relaxing'
  669= '669 No activity'
  699= '699 Other non active leisure'
  711= '711 Playing sports'
  712= '712 Walking or jogging'
  713= '713 Other outdoor recreating activities'
  714= '714 Attending sporting events'
  715= '715 Other physical activity, exercise, yoga, swimming, working out,
dancing'
  718= '718 Watching sporting events'
  721= '721 Attending arts  including plays and concerts'
  723= '723 Attending movies'
  724= '724 Attending casinos'
  737= '737 Travel for leisure'
  799= '799 Other active leisure'
  811= '811 Attending religious activities'
```

```
    812= '812 Other religious and spirtual activities'
    821= '821 Attending meetings or events'
    899= '899 Other organizational activity'
    991= '991 Other miscellaneous'
    992= '992 No favorite activity'
    997= '997 Refused'
    998= '998 Dont Know'
    999= '999 Not Codeable';


        VALUE OCC_CODE
1    ='1 Management Occupations: 0010-0430'
2    ='2 Business and Financial Operations Occupations:  0500-0950'
3    ='3 Computer and mathematical occupations:  1000-1240'
4    ='4 Architecture and Engineering Occupations:   1300-1560'
5    ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6    ='6 Community and Social Service Occupations:   2000-2060'
7    ='7 Legal Occupations:  2100-2160'
8    ='8 Education, Training, and Library Occupations:   2200-2550'
9    ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10   ='10 Healthcare Practitioners and Technical Occupations:    3000-3540'
11   ='11 Healthcare Support Occupations:    3600-3655'
12   ='12 Protective Service Occupations:    3700-3955'
13   ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14   ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15   ='15 Personal Care and Service Occupations: 4300-4650'
16   ='16 Sales and Related Occupations: 4700-4965'
17   ='17 Office and Administrative Support Occupations: 5000-5940'
18   ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19   ='19 Construction and Extraction Occupations:   6200-6940'
20   ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21   ='21 Production Occupations:    7700-8965'
22   ='22 Transportation and Material Moving Occupations:    9000-9750'
23   ='23 Military Specific Occupations: 9800-9830'
24   ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';

    Value fl_Dfac
1 = '1 Should have routed as facility but did not'
2 = '2 Routed as facility but determined not facility resident'
-1 = '-1 Inapplicable';
VALUE PE_RSLT
    -9='-9 Missing'
    -1 = '-1 Inapplicable'
    1='1 Completed'
    2='2 Attempted'
    3='3 Not attempted' ;
```

# SAS ALGORITHM FOR DEMENTIA

```
VALUE dosfacd /* FOR FQ2dosfacd  */
        -9= "-9 Missing"
        -8 = "-8 DK"
        -1 = "-1 INAPPLICABLE"
         1 = " 1 FREE STANDING NURSING HOME"
         2 = " 2 FREE STANDING ASSISTED LIVING FACILITY / RESIDENTIAL CARE
FACILITY"
         3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
         4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
         5 = " 5 ADULT FAMILY CARE HOME"
         6 = " 6 GROUP HOME"
         7 = " 7 BOARD AND CARE HOME / PERSONAL CARE HOME"
         8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
         9 = " 9 INDEPENDENT LIVING"
        10 = " 10 ASSISTED AND INDEPENDENT/RETIREMENT (NO NURSING HOME)"
        11 = " 11 HOUSING (APT, CONDO, ETC.)";
         ;
    VALUE dosfaca /* FOR FQ2dosfaca */
        -9= "-9 Missing"
        -8 = "-8 DK"
        -1 = "-1 INAPPLICABLE"
         1 = " 1 INDEPENDENT LIVING / HOUSING / RETIREMENT "
         2 = " 2 ASSISTED LIVING / PERSONAL CARE"
         3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
         4 = " 4 NURSING HOME"    ;

VALUE INAP_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -1 = '-1 Inapplicable' ;
VALUE CENDIV /* RE1DCENSDIV - Updated for R2 - Re-Release */
     1 =  '1 Northeast Region: New England Division (ME, NH, VT, MA, RI, CT)'
     2 =  '2 Northeast Region: Middle Atlantic Division (NY, NJ, PA)'
     3 =  '3 Midwest Region: East North Central Division (OH, IN, IL, MI, WI)'
     4 =  '4 Midwest Region: West North Central Division (MN, IA, MO, ND, SD,
NE, KS)'
     5 =  '5 South Region: South Atlantic Division (DE, MD, DC, VA, WV, NC,
SC, GA, FL)'
     6 =  '6 South Region: East South Central Division (KY, TN, AL, MS)'
     7 =  '7 South Region: West South Central Division (AR, LA, OK, TX)'
     8 =  '8 West Region: Mountain Division (MT, ID, WY, CO, NM, AZ, UT, NV)'
     9 =  '9 West Region: Pacific Division (WA, OR, CA, AK, HI)'
    -9 = '-9 Missing';

    VALUE W000002W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 MALE"
       2 = "2 FEMALE"  ;

    VALUE W000005W
     1 = ' 1 Yes'
     2 = ' 2 No'
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE R1DRESID
      -1 = '-1 Inapplicable'
      1 = '1 Community '
      2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
      3 = '3 Residential Care Resident not nursing home (FQ only)'
      4 = '4 Nursing Home Resident';

  VALUE W200016W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MEDICAID"
    2 = "2 MEDICARE"
    3 = "3 STATE PROGRAM"
    91 = "91 OTHER (SPECIFY)"   ;

    VALUE W200012W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 REGULAR"
    2 = "2 VARIED"  ;

  VALUE W200061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
    8 = "8 OTHER REASON"   ;

  VALUE d2hrsmth
    -13= '-13 Deceased '
    -12= '-12 Zero days/wk'
    -11= '-11 Hours missing'
    -10= '-10 Days missing'
    -9 = ' -9 Days and hrs missing'
    -1 = ' -1 Inapplicable'
    -7 = ' -7 RF'
    -8 = ' -8 DK'
     0-<1  ='<1'
     1-<10 =' 1-<10'
    10-<20 ='10-<20'
    20-<30 ='20-<30'
    30-<40 ='30-<40'
    40-<60 ='40-<60'
    60-<120 ='60-<120'
    120-<180='120-<180'
```

```
      180-744='180-744 (24/7)'
       9999='9999 Not codeable, <1 hour/day' ;


    VALUE dhrsmth
      -11= '-11:hours missing'
      -10= '-10:days missing'
      -9 = '-9:days and hrs missing'
      -1 = '-1 Inapplicable'
      -7 = '-7 RF'
      -8 = '-8 DK'
       0-<1  ='<1'
       1-<10 =' 1-<10'
      10-<20 ='10-<20'
      20-<30 ='20-<30'
      30-<40 ='30-<40'
      40-<60 ='40-<60'
      60-<120 ='60-<120'
      120-<180='120-<180'
      180-744='180-744 (24/7)'
       9999='9999 Not codeable, <1 hour/day' ;


 Value dmissadd
-1='-1 Inapplicable'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT  section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section';


Value d2mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT  section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section';


Value dopage3c
 -9='-9 Missing'
 -8='-8 RF'
 -7='-7 DK'
```

# SAS ALGORITHM FOR DEMENTIA

```
 -1='-1 Inapplicable'
  1='1 UNDER 30'
  2='2 30-39'
  3='3 40-49'
  4='4 50-59'
  5='5 60-69'
  6='6 70-79'
  7='7 80-89'
  8='8 90 +';

 Value dopagect
-9='-9 Missing'
-8='-8 DK'
-7='-7 RF'
-1='-1 Inapplicable'
 1='1 UNDER 20'
 2='2 20-24'
 3='3 25-29'
 4='4 30-34'
 5='5 35-39'
 6='6 40-44'
 7='7 45-49'
 8='8 50-54'
 9='9 55-59'
10='10 60-64'
11='11 65-69'
12='12 70-74'
13='13 75-79'
14='14 80-84'
15='15 85-89'
16='16 90 +';


   VALUE W200008W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 UNDER 20"
     2 = "2 20-24"
     3 = "3 25-29"
     4 = "4 30-34"
     5 = "5 35-39"
     6 = "6 40-44"
     7 = "7 45-49"
     8 = "8 50-54"
     9 = "9 55-59"
    10 = "10 60-65"
    11 = "11 66-69"
    12 = "12 70-74"
    13 = "13 75-79"
    14 = "14 80-85"
    15 = "15 86-89"
    16 = "16 90-94"
    17 = "17 95-99"
    18 = "18 100 +"
   ;
```

```
   VALUE NumCigs
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   999 = '999 SP smokes less than 1 cigarette / day';


 VALUE dlmlint
   1 = '1 Last month of life interview'
  -1 = '-1 Inapplicable'        ;

 VALUE d2intvra
    1 = '1 65 to 69'
    2 = '2 70 to 74'
    3 = '3 75 to 79'
    4 = '4 80 to 84'
    5 = '5 85 to 89'
    6 = '6 90+'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'       ;

 VALUE dad8dem
   1 = '1 DEMENTIA RESPONSE TO ANY AD8 ITEMS IN PRIOR ROUNDS'
  -1 = '-1 Inapplicable'     ;

 VALUE dwrdinon
1 = '1 No words remembered'
  -1 = '-1 Inapplicable'
    -9 = '-9 Missing'      ;

 VALUE dwrdirre
   1 = '1 Refused word recall task'
  -1 = '-1 Inapplicable'
     -9 = '-9 Missing'       ;

VALUE A0001AB
     1 = "1 AM"
     2 = "2 PM"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE A0002WA
     1 = "1 Yes, there is space to set up the walking course"
     2 = "2 No, there is not space to set up the walking course"
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE A0004WA
     1 = "1 None"
     2 = "2 Cane"
     3 = "3 Walker or rollator"
     9 = "9 Other, specify"
    -1 = '-1 Inapplicable'
    -7 = '-7 RF'
```

```
     -8 = '-8 DK'
     -9 = '-9 Missing';

 VALUE A0004CH
      1 = "1 No, chair stand not completed"
      2 = "2 Yes, chair stand completed"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0008CH
      1 = "1 With arms"
      2 = "2 Without arms"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0014CH
      1 = "1 1 Chair stand completed"
      2 = "2 2 Chair stands completed"
      3 = "3 3 Chair stands completed"
      4 = "4 4 Chair stands completed"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE BA1SS
    1 = '1 Eligible and recorded result for SxS Balance'
    2 = '2 Eligible and no recorded result for SxS Balance'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1STAN
    1 = '1 Eligible and recorded result for Semi Tandem Balance'
    2 = '2 Eligible and no recorded result for Semi Tandem Balance'
    3 = '3 Not administered because did not complete prior balance test'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1TAN
    1 = '1 Eligible and recorded result for full tandem balance'
    2 = '2 Eligible and no recorded result for full tandem balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1OP
    1 = '1 Eligible and recorded result for one leg eyes open balance'
    2 = '2 Eligible and no recorded result for one leg eyes open balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE BA1CL
    1 = '1 Eligible and recorded result for one leg eyes closed balance'
    2 = '2 Eligible and no recorded result for one leg eyes closed balance'
```

```
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WA1WLK
    1 = '1 Eligible and recorded result for walking course'
    2 = '2 Eligible and no recorded result for walking course'
    4 = '4 Not Eligible due to exclusion criteria'
    5 = '5 Not Eligible on exclusion criteria but recorded result (SP changed
mind)'
   -1 = '-1 Inapplicable '
   -9 = '-9 Missing';

VALUE CH1SCH
    1 = '1 Eligible and recorded result for single chair stand'
    2 = '2 Eligible and no recorded result for single chair stand'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE CH1RSH
    1 = '1 Eligible and recorded result for repeated chair stand'
    2 = '2 Eligible and no recorded result for repeated chair stand'
    3 = '3 Not administered because did not complete single chair stand w/o
arms'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE GR1GRIP
    1 = '1 Eligible and recorded result for grip strength'
    2 = '2 Eligible and no recorded result for grip strength'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WC1WAIST
    1 = '1 Eligible and recorded result for waist circumference'
    2 = '2 Eligible and no recorded result for waist circumference'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE PK1PEAK
    1 = '1 Eligible and recorded result for peak air flow'
    2 = '2 Eligible and no recorded result for peak air flow'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE RGT_LFT
   1 = '1 Right'
   2 = '2 Left'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

 VALUE PERSON
    1 = '1 Interviewer'
```

```
   2 = '2 Sample person'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

 VALUE STAND
    1 = '1 Standing'
    2 = '2 Sitting'
    3 = '3 Lying down'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE EFFORT
     1 = '1 Full effort'
     2 = '2 Less effort for health reason'
     3 = '3 Less effort for other reason'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
   VALUE WORDREC
       1 = ' 1 LIST 1'
       2 = ' 2 LIST 2'
       3 = ' 3 LIST 3'
      -1 = '-1 Inapplicable '
      -9 = '-9 Missing';
   VALUE WORDRE_N
      -1 = '-1 Inapplicable'
      -2 = '-2 Proxy says cannot ask SP'
      -3 = '-3 Proxy says can ask SP but SP unable to answer'
      -7 = '-7 SP refused activity'
      -9 = '-9 Missing';


          VALUE SP30051W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EXCELLENT"
  2 = "2 VERY GOOD"
  3 = "3 GOOD"
  4 = "4 FAIR"
  5 = "5 POOR"
  6 = "6 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"
 ;
   VALUE SP3019aW
     -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
```

```
    10 = "10 OCTOBER"
    11 = "11 NOVEMBER"
    12 = "12 DECEMBER"
    90 = "90 LAST INTERVIEW INFORMATION INCORRECT"
  ;
  VALUE RACEHISP
        1 = ' 1 White, non-hispanic'
        2 = ' 2 Black, non-hispanic'
        3 = ' 3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic'
        4 = ' 4 Hispanic'
        5 = ' 5 More than one DKRF primary'
        6 = ' 6 DKRF'
        -9 = '-9 Missing';

    VALUE SPPB_MIS
        -7 = '-7 RF'
   -8 = '-8 DK'
   -9 = '-9 Missing'
    -1="-1 Inapplicable"
   1="1 Proxy interview"
   2="2 Missing walk and repeat chair and balance"
   3="3 Missing walk and repeat chair"
   4="4 Missing walk and balance"
   5="5 Missing repeat chair and balance"
   6="6 Missing walk"
   7="7 Missing repeat chair"
   8="8 Missing balance"
   9="9 No space"
   10="10 No chair"
   11="11 No space walk and no chair"
   12="12 No space walk and non-safety missing"
   13="13 No chair and non-safety missing"
   14="14 Non-safety walk"
   15="15 Non-safety chair"
   16="16 Non-safety balance"
   17="17 Non-safety walk and chair"
   18="18 Non-safety walk and balance"
   19="19 Non-safety chair and balance"
   20="20 Non-safety walk and chair and balance";

    VALUE QUARTILES
-9="-9 Missing"
-1="-1 Inapplicable"
;
  VALUE SP30025W
        -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
   2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
   3 = "3 MOBILE HOME OR TRAILER"
   4 = "4 MULTI-UNIT (2+) BUILDING"
   91 = "91 OTHER (SPECIFY)"
  ;
```

```
   VALUE SP30046W
       -7 = '-7 RF'
  -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
    1 = "1 AT SP'S HOME"
     2 = "2 IN A HOSPITAL"
     3 = "3 IN A NURSING HOME"
     4 = "4 IN A HOSPICE RESIDENCE"
     5 = "5 AT SOMEONE ELSE'S HOME"
     91 = "91 SOMEWHERE ELSE (SPECIFY)"
  ;
   VALUE SP30076W
       -7 = '-7 RF'
  -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 YES, DOESNT KNOW HOW TO USE"
  ;
   VALUE W300151W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1 = "1 VERY GOOD"
    2 = "2 GOOD"
    3 = "3 FAIR"
    4 = "4 POOR"
   5 = "5 VERY POOR"  ;

   VALUE SP30076H
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
  95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM DAY TO DAY"  ;
   VALUE SP30076G
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
  95 = "95 NO USUAL TIME OR DIFFERENT FROM DAY TO DAY"  ;
        VALUE SP30076I
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
      95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM NIGHT TO NIGHT"
;
        VALUE SP30076J
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
      95 = "95 NO USUAL TIME OR DIFFERENT FROM NIGHT TO NIGHT"  ;
```

```
            VALUE SP30076K
             -7 = '-7 RF'
             -8 = '-8 DK'
             -1 = '-1 Inapplicable'
             -9 = '-9 Missing'
                 0 = "0 LESS THAN AN HOUR"
            90 = "90 FELL ASLEEP RIGHT AWAY"
            95 = "95 NO USUAL AMOUNT OF TIME TO FALL ASLEEP OR DIFFERENT FROM
NIGHT TO NIGHT"  ;
            VALUE SP30155W
             -7 = '-7 RF'
             -8 = '-8 DK'
             -1 = '-1 Inapplicable'
             -9 = '-9 Missing'
              1 = "1 NAPS PLANNED"
              2 = "2 FELL ASLEEP WITHOUT MEANING TO"
              3 = "3 BOTH (SOME PLANNED/SOME NOT)"  ;
    VALUE SP30120W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 OFTEN"
      2 = "2 SOMETIMES"
      3 = "3 RARELY"
      4 = "4 NEVER"  ;
Value HOURSF
 -13='-13 SP deceased/section not administered'
 -12='-12 Valid skip/staff'
 -11='-11 Hours missing'
 -10='-10 Days missing'
  -9='-9 Days and hrs missing'
  -1='-1 Inapplicable'
 0-  1='0-<1'
 1.01- 10='1-<10'
10.01- 20='10-<20'
20.01- 30='20-<30'
30.01-40='30-<40'
40.01-60='40-<60'
60.01-120='60-<120'
120.01-180='120-<180'
180.01-744='180-744 (24/7)'
9999='9999 Not codeable, <1 hour/day';
    VALUE SP30120W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 OFTEN"
      2 = "2 SOMETIMES"
      3 = "3 RARELY"
      4 = "4 NEVER"
   ;
    VALUE SP30118W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
```

# SAS ALGORITHM FOR DEMENTIA

```
     -9 = '-9 Missing'
      1 = "1 A LOT"
      2 = "2 SOME"
      3 = "3 A LITTLE"
      4 = "4 NOT AT ALL"   ;
   VALUE SP30141W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "less than $27,600,"
      2 = "$27,600-$41,999,"
      3 = "$42,000-$63,999,"
      4 = "$64,000-$107,999, or"
      5 = "$108,000 or more?"   ;
   VALUE SP30142W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "less than $14,000,"
      2 = "$14,000-$21,999,"
      3 = "$22,000-$35,999,"
      4 = "$36,000-$48,999, or"
      5 = "$49,000 or more?"   ;
   VALUE INVENT
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
            104="104-Arthritis"
            107="107-Lung Disease"
            109="109-Dementia or Alzheimer's disease"
            110="110-Cancer"
            113="113-Other serious disease, illness, health problem"
            114="114-Knee surgery/problem"
            115="115-Hip repair or replacement/problem"
            117="117-Back or Spine Surgery/problem"
            121="121-Sleep Problems"
            201="201-Hearing problems"
            202="202-Sight problems"
            205="205-Pain"
            301="301-Breathing problems"
            302="302-Upper body strength movement"
            303="303-Lower body strength movement"
            304="304-Low energy"
            305="305-Balance or coordination problems"
            306="306-Walking distances"
            307="307-Climbing stairs"
            308="308-Lifting and carrying items"
            309="309-Kneeling"
            310="310-Bending"
            311="311-Reaching"
            312="312-Opening Jars"
            313="313-Grasping"
            401="401-Memory"
            501="501-Getting out of bed"
```

```
          502="502-Getting around inside"
          503="503-Getting outside"
          504="504-Travel/transportation"
          601="601-Eating"
          602="602-Washing"
          603="603-Toileting"
          604="604-Dressing"
          605="605-Grooming"
          701="701-Laundry"
          702="702-Shopping"
          703="703-Cooking"
          705="705-Money matters"
          706="706-Indoor cleaning and maintenance"
          707="707-Outdoor cleaning and maintenance"
          801="801-Medications"
          802="802-Doctor visits"
          804="804-Other medical self-care"
          1211="1211-Working"
          1442="1442-Walking/exercising pets"
          1451="1451-Vehicle repair and maintenance"
          1461="1461-Appliance tool, and toy use, set-up, repair, &
maintenance"
          1462="1462-Computer use, set-up, repair, maintenance, and
education"
          1473="1473-Household organization"
          1512="1512-Looking after someone else"
          1611="1611-Socializing and communicating with others-in person"
          1612="1612-Socializing and communication with others by talking
on telephone"
          1613="1613-Attending or hosting party, wedding or social
occasions"
          1614="1614-Reading and sorting through the mail"
          1621="1621-Watch television and movies"
          1631="1631-Games & puzzles"
          1641="1641-Arts and crafts, collecting, and hobbies, making
music"
          1642="1642-Reading"
          1643="1642-Writing (personal, not on computer)"
          1644="1644-Listening to recorded music or radio"
          1711="1711-Playing/practicing sports or taking physical activity
class/lessons"
          1712="1712-Walking/jogging for exercise or pleasure or working
out"
          1713="1713-Other outdoor recreation activities"
          1813="1813-Religious & spiritual volunteer activities"
          1901="1901-Other, no existing code"
          1998="1998-Don't know"
          1999="1999-Refused/blank";
VALUE W500058W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MONTHS"
    2 = "2 YEARS"  ;
VALUE W500103W
   -7 = '-7 RF'
```

```
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES, A YEAR OR MORE"
   2 = "2 NO, LESS THAN A YEAR"  ;
 VALUE W500105W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MONTH AND YEAR"
   2 = "2 NUMBER OF MONTHS AGO"
   3 = "3 NUMBER OF YEARS AGO"
   4 = "4 AGE WHEN LAST DROVE"
   7 = "7 NEVER DROVE"  ;
VALUE W500123W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 STILL FAVORITE ACTIVITY"
   2 = "2 HAS A NEW FAVORITE ACTIVITY"
  95 = "95 NO FAVORITE ACTIVITY"   ;
VALUE W500124W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN 1 MONTH"
   2 = "2 1 TO 3 MONTHS"
   3 = "3 4 TO 5 MONTHS"
   4 = "4 6 OR MORE MONTHS" ;
 VALUE W500125W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN 1 WEEK"
   2 = "2 1 TO 2 WEEKS"
   3 = "3 3 TO 4 WEEKS"  ;
 VALUE W500126W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 A FRACTURE, SPRAIN, OR INJURY"
   2 = "2 A HIP, KNEE, OR OTHER JOINT REPLACEMENT"
   3 = "3 ANOTHER MUSCULOSKELETAL CONDITION"
   4 = "4 A STROKE OR TIA"
   5 = "5 A HEART ATTACK"
   6 = "6 ANOTHER HEART CONDITION OR VASCULAR DISEASE"
   7 = "7 A BREATHING CONDITION"
   8 = "8 A NEUROLOGICAL CONDITION LIKE MS OR PARKINSONS"
   9 = "9 CANCER"
  94 = "94 ANOTHER CONDITION (SPECIFY)"
  95 = "95 NO MEDICAL CONDITION (IF VOLUNTEERED)" ;
 VALUE W500128W
```

```
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 DIFFICULTY CHEWING OR SWALLOWING"
     2 = "2 DIFFICULTY SPEAKING OR BEING UNDERSTOOD"
     3 = "3 PAIN LEVEL"
     4 = "4 PROBLEM WITH BREATHING"
     5 = "5 PROBLEM WITH STRENGTH (MUSCLE WEAKNESS)"
     6 = "6 PROBLEM WITH MOVEMENT (RANGE OF MOTION)"
     7 = "7 LOW ENERGY LEVEL"
     8 = "8 PROBLEM WITH BALANCE OR COORDINATION"
     9 = "9 PROBLEM WITH FALLS"
    10 = "10 PROBLEM WITH MEMORY"
    95 = "95 NONE OF THESE PROBLEMS"  ;
  VALUE W500131W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 AS AN OVERNIGHT PATIENT IN A HOSPITAL, NURSING HOME OR REHAD
FACILITY"
     2 = "2 AT AN OUTPATIENT CENTER, CLINIC, DRs OR THERAPISTs OFFICE"
     3 = "3 HOME"
     4 = "4 SOMEWHERE ELSE"  ;
  VALUE W500132W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 IMPROVED"
     2 = "2 GOT WORSE"
     3 = "3 STAYED ABOUT THE SAME"
     4 = "4 VARIED/UP AND DOWN (IF VOLUNTEERED)"  ;
 VALUE W500133W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 A LOT"
    2 = "2 SOMEWHAT"
    3 = "3 A LITTLE"  ;

  VALUE W500137W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 WELL OFF"
    2 = "2 ABOVE AVERAGE"
    3 = "3 AVERAGE"
    4 = "4 BELOW AVERAGE"
    5 = "5 POOR"  ;
VALUE W500010W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
```

```
   -9 = '-9 Missing'
     1 = "1 MOTHER ONLY"
     2 = "2 FATHER ONLY"
     3 = "3 ANOTHER RELATIVE"
     4 = "4 NON-RELATIVES"
     5 = "5 VARIED/MOVED AROUND"  ;
  VALUE W500142W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 VERY WELL"
     2 = "2 WELL"
     3 = "3 NOT WELL"
     4 = "4 NOT AT ALL"  ;
  VALUE W500147W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 NUMBER OF YEARS"
     2 = "2 AGE"  ;
  VALUE W500150W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 ENTER PAYCHECK AMOUNT"
     2 = "2 ENTER PAY PER HOUR"
     3 = "3 ENTER PAY PER DAY"  ;
  VALUE W500151W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 ENTER OCCUPATION"
     2 = "2 NEVER WORKED ENTIRE LIFE"
     3 = "3 HOMEMAKER/RAISED CHILDREN/WORKED IN THE HOME"  ;
  VALUE W500152W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 SAME KIND OF WORK"
     2 = "2 SOMETHING DIFFERENT"  ;
  VALUE W500160W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 MAIL"
     2 = "2 DIRECT DEPOSIT"
     3 = "3 PREPAID CARD"  ;
  VALUE W500165W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
```

```
   -9 = '-9 Missing'
    1 = "1 ENTER COMBINED AMOUNT"
    2 = "2 ENTER SP AND SPOUSE/PARTNER AMOUNTS SEPARATELY"  ;
  VALUE W500166W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $1,300"
    2 = "2 $1,300 TO LESS THAN $1,700"
    3 = "3 $1,700 TO LESS THAN $2,200"
    4 = "4 $2,200 TO LESS THAN $2,600"
    5 = "5 $2,600 OR MORE"  ;
  VALUE W500167W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $700"
    2 = "2 $700 TO LESS THAN $1,000"
    3 = "3 $1,000 TO LESS THAN $1,300"
    4 = "4 $1,300 TO LESS THAN $1,600"
    5 = "5 $1,600 OR MORE"  ;
  VALUE W500168W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $300"
    2 = "2 $300 TO LESS THAN $700"
    3 = "3 $700 TO LESS THAN $1,000"
    4 = "4 $1,000 OR MORE"   ;
  VALUE W500169W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $100"
    2 = "2 $100 TO LESS THAN $200"
    3 = "3 $200 TO LESS THAN $400"
    4 = "4 $400 TO LESS THAN $700"
    5 = "5 $700 OR MORE"  ;
  VALUE W500170W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $1,000"
    2 = "2 $1,000 TO LESS THAN $1,400"
    3 = "3 $1,400 TO LESS THAN $1,800"
    4 = "4 $1,800 TO LESS THAN $2,200"
    5 = "5 $2,200 OR MORE"  ;
  VALUE W500171W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
```

```
   1 = "1 LESS THAN $500"
   2 = "2 $500 TO LESS THAN $700"
   3 = "3 $700 TO LESS THAN $900"
   4 = "4 $900 TO LESS THAN $1,100"
   5 = "5 $1,100 OR MORE"   ;
 VALUE W500172W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $600"
   2 = "2 $600 TO LESS THAN $1,300"
   3 = "3 $1,300 TO LESS THAN $2,100"
   4 = "4 $2,100 TO LESS THAN $5,900"
   5 = "5 $5,900 OR MORE"   ;
 VALUE W500173W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $400"
   2 = "2 $400 TO LESS THAN $900"
   3 = "3 $900 TO LESS THAN $1,600"
   4 = "4 $1,600 TO LESS THAN $3,800"
   5 = "5 $3,800 OR MORE"   ;
 VALUE W500174W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $34,000"
   2 = "2 $34,000 TO LESS THAN $82,000"
   3 = "3 $82,000 TO LESS THAN $175,000"
   4 = "4 $175,000 TO LESS THAN $413,000"
   5 = "5 $413,000 OR MORE"    ;
 VALUE W500175W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $20,000"
   2 = "2 $20,000 TO LESS THAN $47,000"
   3 = "3 $47,000 TO LESS THAN $92,000"
   4 = "4 $92,000 TO LESS THAN $218,000"
   5 = "5 $218,000 OR MORE"    ;
 VALUE W500176W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $200"
   2 = "2 $200 TO LESS THAN $500"
   3 = "3 $500 TO LESS THAN $1,000"
   4 = "4 $1,000 TO LESS THAN $2,500"
   5 = "5 $2,500 OR MORE"   ;
 VALUE W500177W
  -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $100"
  2 = "2 $100 TO LESS THAN $300"
  3 = "3 $300 TO LESS THAN $700"
  4 = "4 $700 TO LESS THAN $1,700"
  5 = "5 $1,700 OR MORE"  ;
VALUE W500178W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $2,400"
  2 = "2 $2,400 TO LESS THAN $6,000"
  3 = "3 $6,000 TO LESS THAN $12,000"
  4 = "4 $12,000 TO LESS THAN $30,000"
  5 = "5 $30,000 OR MORE"  ;
VALUE W500179W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $1,200"
  2 = "2 $1,200 TO LESS THAN $3,600"
  3 = "3 $3,600 TO LESS THAN $8,400"
  4 = "4 $8,400 TO LESS THAN $20,400"
  5 = "5 $20,400 OR MORE"  ;
VALUE W500180W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $9,000"
  2 = "2 $9,000 TO LESS THAN $18,000"
  3 = "3 $18,000 TO LESS THAN $93,000"
  4 = "4 $93,000 TO LESS THAN $350,000"
  5 = "5 $350,000 OR MORE"  ;
VALUE W500181W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $600"
  2 = "2 $600 TO LESS THAN $5,000"
  3 = "3 $5,000 TO LESS THAN $16,000"
  4 = "4 $16,000 TO LESS THAN $62,000"
  5 = "5 $62,000 OR MORE"  ;
VALUE W500182W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $8,000"
  2 = "2 $8,000 TO LESS THAN $62,000"
  3 = "3 $62,000 TO LESS THAN $192,000"
  4 = "4 $192,000 TO LESS THAN $213,000"
```

```
  5 = "5 $213,000 OR MORE"  ;
VALUE W500183W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $300"
  2 = "2 $300 TO LESS THAN $2,500"
  3 = "3 $2,500 TO LESS THAN $8,000"
  4 = "4 $8,000 TO LESS THAN $37,000"
  5 = "5 $37,000 OR MORE"  ;
VALUE W500184W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $11,000"
  2 = "2 $11,000 TO LESS THAN $25,000"
  3 = "3 $25,000 TO LESS THAN $50,000"
  4 = "4 $50,000 TO LESS THAN $108,000"
  5 = "5 $108,000 OR MORE"  ;
VALUE W500185W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $2,000"
  2 = "2 $2,000 TO LESS THAN $7,000"
  3 = "3 $7,000 TO LESS THAN $17,000"
  4 = "4 $17,000 TO LESS THAN $57,000"
  5 = "5 $57,000 OR MORE"  ;
VALUE W500186W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $8,000"
  2 = "2 $8,000 TO LESS THAN $13,000"
  3 = "3 $13,000 TO LESS THAN $28,000"
  4 = "4 $28,000 TO LESS THAN $54,000"
  5 = "5 $54,000 OR MORE"  ;
VALUE W500187W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $500"
  2 = "2 $500 TO LESS THAN $1,900"
  3 = "3 $1,900 TO LESS THAN $5,000"
  4 = "4 $5,000 TO LESS THAN $20,000"
  5 = "5 $20,000 OR MORE"  ;
VALUE W500188W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $200"
```

```
    2 = "2 $200 TO LESS THAN $1,000"
    3 = "3 $1,000 TO LESS THAN $4,000"
    4 = "4 $4,000 TO LESS THAN $16,000"
    5 = "5 $16,000 OR MORE"   ;
  VALUE W500189W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $400"
    2 = "2 $400 TO LESS THAN $1,000"
    3 = "3 $1,000 TO LESS THAN $2,000"
    4 = "4 $2,000 TO LESS THAN $11,000"
    5 = "5 $11,000 OR MORE"   ;
  VALUE W500190W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $30,000"
    2 = "2 $30,000 TO LESS THAN $101,000"
    3 = "3 $101,000 TO LESS THAN $247,000"
    4 = "4 $247,000 TO LESS THAN $703,000"
    5 = "5 $703,000 OR MORE"   ;
  VALUE W500191W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $18,000"
    2 = "2 $18,000 TO LESS THAN $68,000"
    3 = "3 $68,000 TO LESS THAN $122,000"
    4 = "4 $122,000 TO LESS THAN $293,000"
    5 = "5 $293,000 OR MORE"   ;
  VALUE W500192W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $3,600"
    2 = "2 $3,600 TO LESS THAN $12,000"
    3 = "3 $12,000 TO LESS THAN $25,000"
    4 = "4 $25,000 TO LESS THAN $64,000"
    5 = "5 $64,000 OR MORE"   ;
  VALUE W500193W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $3,600"
    2 = "2 $3,600 TO LESS THAN $7,200"
    3 = "3 $7,200 TO LESS THAN $14,000"
    4 = "4 $14,000 TO LESS THAN $38,000"
    5 = "5 $38,000 OR MORE"   ;
  VALUE W500194W
   -7 = '-7 RF'
   -8 = '-8 DK'
```

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $30,000"
  2 = "2 $30,000 TO LESS THAN $43,000"
  3 = "3 $43,000 TO LESS THAN $66,000"
  4 = "4 $66,000 TO LESS THAN $109,000"
  5 = "5 $109,000 OR MORE"  ;
VALUE W500195W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $18,000"
  2 = "2 $18,000 TO LESS THAN $22,000"
  3 = "3 $22,000 TO LESS THAN $36,000"
  4 = "4 $36,000 TO LESS THAN $56,000"
  5 = "5 $56,000 OR MORE" ;
VALUE W500209W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 CANT DO - DONT DO"  ;
VALUE W500196W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $2,500"
  2 = "2 $2,500 TO LESS THAN $5,000"
  3 = "3 $5,000 TO LESS THAN $10,000"
  4 = "4 $10,000 TO LESS THAN $20,000"
  5 = "5 $20,000 TO LESS THAN $50,000"
  6 = "6 $50,000 OR MORE"  ;
VALUE dage2us
    0 = "0 Less than age 1"
    997 = "997 Born in US"
 -8 = "-8 DK"
 -7 = "-7 RF"
 -1 = "-1 Inapplicable";
VALUE locsp
  -9 ="-9 MISSING"
 -8 ="-8 DK"
 -7 ="-7 RF"
 -1 ="-1 Inapplicable"
 1 = "1 Independent Living"
 2 = "2 Assisted Living"
 3 = "3 Special Care Unit"
 4 = "4 Nursing Home"
 8 = "8 Not Reported" ;

  VALUE resid
 -9 = '-9 Missing'
      -8 = "-8 DK"
      -7 = "-7 RF"
```

```
        -1 = "-1 Inapplicable"
        1 = "Community"
        2 = "Residential care not nursing home (SP interview)"
        3 = "Residential care not nursing home (FQ only)"
        4 = "Nursing home (SP interview)"
        5 = "Nursing home (FQ only)"
        6 = "Deceased"
        7 = "Residential care not nursing home in R1 and R2 (FQ only)"
        8 = "Nursing home in R1 and R2 (FQ only)";

   VALUE  residlml
        1 = "1 Community"
        2 = "2 Residential care"
        -1 = "-1 Inapplicable"
   -9 = '-9 Missing';

  VALUE SP50139W
    1 = "1 White/Caucasian"
    2 = "2 Black/African American"
    3 = "3 Other"
       -7 = '-7 RF'
       -8 = '-8 DK'
    -9 = '-9 Missing';

  VALUE Locat15w
        1= "1 Lives in same City and State as at age 15"
        2= "2 Lives in same state but different City (or DKRF city) as age
15"
        3= "3 Does not live in same State as age 15"
      -1= "-1 Inapplicable"
      -7 = '-7 RF'
      -8 = '-8 DK'
        -9 = '-9 Missing';
  Value  dresnew
        1 = "1 same residence as last int"
        2 = "2 new residence since last int"
       -1= "-1 Inapplicable"
    -7 = '-7 RF'
     -8 = '-8 DK'
     -9 = '-9 Missing';

   Value dcontnew
        1 = "1 Continuing sample from R1"
        2 = "2 New sample in R5"
       -1= "-1 Inapplicable"
    -7 = '-7 RF'
     -8 = '-8 DK'
     -9 = '-9 Missing';

     VALUE DMDDEVYR
      1 = ' 1 No Mobility device use in last year/since last interview'
      2 = ' 2 Mobility device use in last year/since last interview'
      -1 = '-1 Inapplicable '
      -7  = '-7 RF'
      -8  = '-8 DK'
      -9 = '-9 Missing';
```

```
VALUE DMDEVST
  0 = '0 less than 1 month of mobility device use'
  1 = '1 month of mobility device use'
  2 = '2 months of mobility device use'
  3 = '3 months of mobility device use'
  4 = '4 months of mobility device use'
  5 = '5 months of mobility device use'
  6 = '6 months of mobility device use'
  7 = '7 months of mobility device use'
  8 = '8 months of mobility device use'
  9 = '9 months of mobility device use'
 10 = '10 months of mobility device use'
 11 = '11 months of mobility device use'
 -7 = '-7 used last month but RF number of months of use in year'
 -8 = '-8 used last month but DK number of months of use in year'
 -1 = '-1 Inapplicable '
 -2 = '-2 Not asked of continuing sample';

VALUE DMDEVEND
   0 = '0 Between 11 and 12 months since device use ended'
  1 = '1 month since mobility device use ended'
  2 = '2 months since mobility device use ended'
  3 = '3 months since mobility device use ended'
  4 = '4 months since mobility device use ended'
  5 = '5 months since mobility device use ended'
  6 = '6 months since mobility device use ended'
  7 = '7 months since mobility device use ended'
  8 = '8 months since mobility device use ended'
  9 = '9 months since mobility device use ended'
 10 = '10 months since mobility device use ended'
 11 = '11 months since mobility device use ended'
 -7 = '-7 no use last month and RF number of months since device use
ended'
 -8 = '-8 no use last month and DK number of months since device use
ended'
 -1 = '-1 Inapplicable '
  -2 = '-2 Not asked of continuing sample' ;
VALUE DMDHLPYR
 1 = " 1 No mobility help in last year/since last interview"
 2 = " 2 Mobility help in last year/since last interview"
 -7 = " -7 RF"
 -8 = " -8 DK"
 -1 = " -1 Inapplicable "
        -2 = '-2 Not asked of continuing sample' ;

VALUE DMDHLPST
  0 = '0 less than 1 month of help'
  1 = '1 month of help'
  2 = '2 months of help'
  3 = '3 months of help'
  4 = '4 months of help'
  5 = '5 months of help'
  6 = '6 months of help'
  7 = '7 months of help'
  8 = '8 months of help'
  9 = '9 months of help'
 10 = '10 months of help'
```

```
   11 = '11 months of help'
   -7 = '-7 help last month but RF number of months of help in year'
   -8 = '-8 help last month but DK number of months of help in year'
  -1 = " -1 Inapplicable "
  -2 = " -2 Not asked of continuing sample ";
   VALUE DMDHLPEN
    0 = '0 less than 1 month since help ended'
    1 = '1 month since help ended'
    2 = '2 months since help ended'
    3 = '3 months since help ended'
    4 = '4 months since help ended'
    5 = '5 months since help ended'
    6 = '6 months since help ended'
    7 = '7 months since help ended'
    8 = '8 months since help ended'
    9 = '9 months since help ended'
   10 = '10 months since help ended'
   11 = '11 months since help ended'
   -7 = '-7 no help last month and RF number of months since help ended'
   -8 = '-8 no help last month and DK number of months since help ended'
   -1 = '-1 Inapplicable '
  -2 = '-2 Not asked of continuing sample';
   VALUE DMHLPYRS
    0  = '0 none or less than 1 year'
    997 = '997 since birth'
    -7  = '-7 RF'
    -8  = '-8 DK'
    -1  = '-1 Inapplicable '
    -2 = '-2 Not asked of continuing sample'
   -9  = '-9 Missing';
   VALUE DSDHLPYR
  1 = ' 1 No self care help in last year/since last interview'
  2 = ' 2 Self care help in last year/since last interview'
 -1 = '-1 Inapplicable'
 -7 = '-7 DK'
 -8 = '-8 RF'
 -9 = '-9 Missing';
   VALUE DSHLPND
          0 = ' 0 Between 11 and 12 months since self care help ended'
          1 = '1 Month since self care help ended'
          2 = '2 Months since self care help ended'
          3 = '3 Months since self care help ended'
          4 = '4 Months since self care help ended'
          5 = '5 Months since self care help ended'
          6 = '6 Months since self care help ended'
          7 = '7 Months since self care help ended'
          8 = '8 Months since self care help ended'
          9 = '9 Months since self care help ended'
          10 = '10 Months since self care help ended'
          11 = '11 Months since self care help ended'
       -7 = '-7 No help last month and RF number of months since help ended'
       -8 = '-8 No help last month and DK number of months since help ended'
       -1 = '-1 Inapplicable'
          -2 = '-2 Not asked of continuing sample'
       -9 = '-9 Missing'    ;

   VALUE DSHLPYRS
```

```
        0 = ' 0 None or less than 1 year of self care help'
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
         -2 = '-2 Not asked of continuing sample'
       -9 = '-9 Missing'
        997 = '997 since birth';
     VALUE SP5RH7W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
          1 = "1 As an overnight patient in a hospital, nursing home, or
rehab facility"
          2 = "2 At an outpatient center, clinic, or doctors office or
therapists office"
      3 = "3 At home"
      4 = "4 Somewhere else"  ;
     VALUE SP5LF5W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
      997 = "997 Number of hours vary each week"  ;

     VALUE  DMH_GRP
          1 = "1 Help started"
          2 = "2 Help ended"
          3 = "3 Help both interviews with gap"
          4 = "4 Help both interviews with no gap"
          5 = "5 Help between interviews only"
          6 = "6 No help either interview or between"
         11 = "11 Help started (month started missing)"
         21 = "21 Help ended (month ended missing)"
         41 = "41 Help both interviews (DK whether gap)"
         61 = "61 No help either interview (DK whether help between)"
         -9 = "-9 Missing"
         -1 = "-1 Inapplicable"
           -3 ="-3 Not asked of new sample"
       -999 = "-999 Not determined" ;

     VALUE  DMU_GRP
          1 = "1 Use started"
          2 = "2 Use ended"
          3 = "3 Use both interviews with gap"
          4 = "4 Use both interviews with no gap"
          5 = "5 Use between interviews only "
          6 = "6 No use either interview or between"
         11 = "11 Use started (month started missing)"
         21 = "21 Use ended (month ended missing)"
         41 = "41 Use both interviews (DK whether gap)"
         61 = "61 No use either interview (DK whether use between)"
         -9 = "-9 Missing"
         -1 = "-1 Inapplicable"
           -3 = "-3 Not asked of new sample"
       -999 = "-999 Not determined" ;
```

```
VALUE  DMDS5FLG
-1 = "-1 Inapplicable"
     -3 = "-3 Not asked of new sample"
 0 = "0 No current SP interview"
 1 = "1 No SP interview last round"
 2 = "2 Died and month death missing"
 3 = "3 Died <=1 month after last interview"
 4 = "4 Died 12-13 months after last interview"
 7 = "7 Skipped 1 or more help questions" ;
VALUE  DS_GRP
 1 = "1 Help started"
 2 = "2 Help ended"
 3 = "3 Help both interviews with gap"
 4 = "4 Help both interviews with no gap"
 5 = "5 Help between interviews only"
 6 = "6 No help either interview or between"
11 = "11 Help started (month started missing)"
21 = "21 Help ended (month ended missing)"
41 = "41 Help both interviews (DK whether gap)"
61 = "61 No help either interview (DK whether help between)"
-9 = "-9 Missing"
-1 = "-1 Inapplicable"
    -3 = "-3 Not asked of new sample"
-999 = "-999 Not determined" ;


value groupmo 1 = "1 Started"
        2 = "2 Ended"
          3 = "3 Both times with gap"
          4 = "4 Both times no gap"
            5 = "5 Between only (end missing)"
          6 = "6 Neither time AND not between"
         11 = "11 Started (start missing)"
         21 = "21 Ended (end missing)"
         41 = "41 Both times (gap missing)"
         61 = "61 Neither time (between missing)"
              -1= "-1 Inapplicable"
                 -3="-3 Not asked of new sample"
          -7= "-7 RF"
          -8= "-8 DK"
          -9= "-9 Missing"
        -999 = "-999 Not determined"
         -99 = "-99 Partial" ;


      VALUE nw_mths  0 = "0 Less than 1 month"
 1 ="1 month"
 2 ="2 months"
 3 ="3 months"
 4 ="4 months"
 5 ="5 months"
 6 ="6 months"
 7 ="7 months"
 8 ="8 months"
 9 ="9 months"
10= "10 months"
11= "11 months"
12= "12 months"
```

```
                13= "13 months"
                14= "14 months"
                15= "15 months"
                16= "16 months"
                17= "17 months"
                18= "18 months"
                19= "19 months"
                20= "20 months"
                90= "90 Last round disputed"
                999= "999 No months"
                -1= "-1 Inapplicable"
                    -3="-3 Not asked of new sample"
                -7= "-7 RF"
                -8= "-8 DK"
                -9= "-9 Missing"
                -10= "-10 Not ascertained"
                -12= "-12 Outside of range (greater than months between
interviews)"
                -13= "-13 None"
                -999= "-999 Not determined"
                -99= "-99 Partial";
                    VALUE chntinhh
                1 ="1 Yes, not in household"
                -1= "-1 Inapplicable"
                -7= "-7 RF"
                -8= "-8 DK"
                -9= "-9 Missing";
                Value d4mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section'
15='15 no flags and added at HL section'
16='16 no flags and added at SL section';
                VALUE HA5DWHL
                    1 = "1 Meals on wheels last month"
                    -1 = "-1 Inapplicable";
                VALUE HA5DTKO
                    1 = "1 Restaurant or take out last month"
                    -1 = "-1 Inapplicable";
                VALUE RE5BLDG
                 -7 = '-7 RF'
                 -8 = '-8 DK'
                 -1 = '-1 Inapplicable'
                 -9 = '-9 Missing'
```

```
              1 = "1 Building has one floor"
              2 = "2 Building has multiple floors"   ;
VALUE S000163W
    1 = "1 PRIVACY MORE IMPORTANT"
    2 = "2 SOCIALIZE MORE IMPORTANT"
    3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
            -1= "-1 Inapplicable"
            -7= "-7 RF"
            -8= "-8 DK"
            -9= "-9 Missing";

  VALUE S000164W
    1 = "1 SOCIALIZE MORE IMPORTANT"
    2 = "2 PRIVACY MORE IMPORTANT"
    3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
            -1= "-1 Inapplicable"
            -7= "-7 RF"
            -8= "-8 DK"
            -9= "-9 Missing";

  VALUE S000165W
    1 = "1 BEING SAFE MORE IMPORTANT"
    2 = "2 HAVING CHOICES MORE IMPORTANT"
    3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
   -1= "-1 Inapplicable"
   -7= "-7 RF"
   -8= "-8 DK"
   -9= "-9 Missing"  ;

  VALUE S000166W
    1 = "1 HAVING CHOICES MORE IMPORTANT"
    2 = "2 BEING SAFE MORE IMPORTANT"
    3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
   -1= "-1 Inapplicable"
   -7= "-7 RF"
   -8= "-8 DK"
   -9= "-9 Missing"  ;

  VALUE S000167W
    1 = "1 PRIVACY MORE IMPORTANT"
    2 = "2 BEING SAFE MORE IMPORTANT"
    3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
    -1= "-1 Inapplicable"
   -7= "-7 RF"
   -8= "-8 DK"
   -9= "-9 Missing" ;

  VALUE S000168W
    1 = "1 BEING SAFE MORE IMPORTANT"
    2 = "2 PRIVACY MORE IMPORTANT"
    3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
    -1= "-1 Inapplicable"
   -7= "-7 RF"
   -8= "-8 DK"
   -9= "-9 Missing" ;

  VALUE S000169W
```

```
   1 = "1 SOCIALIZING MORE IMPORTANT"
   2 = "2 HAVING CHOICES MORE IMPORTANT"
   3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing"  ;

 VALUE S000170W
   1 = "1 HAVING CHOICES MORE IMPORTANT"
   2 = "2 SOCIALIZING MORE IMPORTANT"
   3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing"  ;

 VALUE S000171W
   1 = "1 PRIVACY MORE IMPORTANT"
   2 = "2 HAVING CHOICES MORE IMPORTANT"
   3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing" ;

 VALUE S000172W
   1 = "1 HAVING CHOICES MORE IMPORTANT"
   2 = "2 PRIVACY MORE IMPORTANT"
   3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing" ;

 VALUE S000173W
   1 = "1 SOCIALIZING MORE IMPORTANT"
   2 = "2 BEING SAFE MORE IMPORTANT"
   3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing"  ;

 VALUE S000174W
   1 = "1 BEING SAFE MORE IMPORTANT"
   2 = "2 SOCIALIZING MORE IMPORTANT"
   3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing" ;

 VALUE S000175W
   1 = "1 LESS THAN 1 HOUR"
   2 = "2 MORE THAN 1 HOUR"
   3 = "3 ABOUT 1 HOUR"
```

# SAS ALGORITHM FOR DEMENTIA

```
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing"  ;

VALUE S000176W
   1 = "1 LESS THAN 15 MINUTES"
   2 = "2 15 MINUTES"
   3 = "3 BETWEEN 15 AND 30 MINUTES"
   4 = "4 30 MINUTES"
   5 = "5 BETWEEN 30 AND 45 MINUTES"
   6 = "6 45 MINUTES"
   7 = "7 BETWEEN 45 AND 60 MINUTES"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing" ;

VALUE S000177W
   1 = "1 ABOUT 1  HOURS"
   2 = "2 ABOUT 2 HOURS"
   3 = "3 ABOUT 3 HOURS"
   4 = "4 ABOUT 4 HOURS"
   5 = "5 ABOUT 5 HOURS"
   6 = "6 6 OR MORE HOURS"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing" ;

   VALUE W600001W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 STRONGLY AGREE"
   2 = "2 AGREE"
   3 = "3 DISAGREE"
     4 = "4 STRONGLY DISAGREE";
   VALUE W600002W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   0 = "0 NONE"
   1 = "1 1-2"
   2 = "2 3-5"
   3 = "3 6-10"
   4 = "4 11-15"
   5 = "5 16-20"
   6 = "6 MORE THAN 20";
   VALUE W600003W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 A (picture showing 4 pills)"
```

```
        2 = "2 B (picture showing 8 pills)"
        3 = "3 C (picture showing 12 pills)"
        4 = "4 D (picture showing 16 pills)"
        5 = "5 E (picture showing 20 pills)"
        6 = "6 F (picture showing 24 pills)";


           VALUE YNF
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 Yes"
    2 = "2 No";
           VALUE FQ6DLOCA
      1 = "1 Independent Living"
    2 = "2 Assisted Living"
    3 = "3 Special Care Unit"
    4 = "4 Nursing home"
      -8 = "-8 Not reported"
      -1 = "-1 Inapplicable";
            VALUE R6DRES1A
   1 = '1 Community'
   2 = '2 Residential Care'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
                   VALUE SP30023W
           -7 = '-7 RF'
           -8 = '-8 DK'
           -1 = '-1 Inapplicable'
           -9 = '-9 Missing'
            1 = "1 Building has one floor"
            2 = "2 Building has multiple floors"   ;
                   VALUE RE5BLDG
           -7 = '-7 RF'
           -8 = '-8 DK'
           -1 = '-1 Inapplicable'
           -9 = '-9 Missing'
            1 = "1 Building has one floor"
            2 = "2 Building has multiple floors"   ;
      VALUE WORDRECC
       -1 = '-1 Inapplicable'
       -2 = '-2 Proxy says cannot ask SP'
       -3 = '-3 Proxy says can ask SP but SP unable to answer'
       -7 = '-7 SP refused activity'
       -9 = '-9 Missing';
          VALUE OLDMTHS
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
          VALUE MONTHS
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
                   VALUE  FLAGS
           -1 = "-1 Inapplicable"
```

```
               -3 = "-3 Not asked of new sample"
            0 = "0 No current SP interview"
            1 = "1 No SP interview last round"
            2 = "2 Died and month death missing"
            3 = "3 Died <=1 month after last interview"
            4 = "4 Died 12-13 months after last interview"
            7 = "7 Skipped 1 or more help questions" ;
   VALUE DMDEVUSE
    0   = '0 none or less than 1 year'
    997 = '997 since birth'
    -7  = '-7 RF'
    -8  = '-8 DK'
    -1  = '-1 Inapplicable '
    -2 = '-2 Not asked of continuing sample'
   -9  = '-9 Missing';
   VALUE SPPB_MISSING
      -7 = '-7 RF'
  -8 = '-8 DK'
  -9 = '-9 Missing'
  -1="-1 Inapplicable"
  1="1 Proxy interview"
  2="2 Missing walk and repeat chair and balance"
  3="3 Missing walk and repeat chair"
  4="4 Missing walk and balance"
  5="5 Missing repeat chair and balance"
  6="6 Missing walk"
  7="7 Missing repeat chair"
  8="8 Missing balance"
  9="9 No space"
  10="10 No chair"
  11="11 No space walk and no chair"
  12="12 No space walk and non-safety missing"
  13="13 No chair and non-safety missing"
  14="14 Non-safety walk"
  15="15 Non-safety chair"
  16="16 Non-safety balance"
  17="17 Non-safety walk and chair"
  18="18 Non-safety walk and balance"
  19="19 Non-safety chair and balance"
  20="20 Non-safety walk and chair and balance";
  VALUE W700BC2W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Ineligible'
   -9 = '-9 Missing'
   1 = "1 Eligible and consented"
   2 = "2 Eligible and did not consent"
   3 = "3 Ineligible, proxy respondent";
     Value LMLHELPR
     1 = '1 Yes'
     2 = '2 No'
     -8 = '-8 DK'
     -7 = '-7 RF'
     -2 = '-2 Helper is relative'
     -1 = '-1 Inapplicable';
run;
```

SAS ALGORITHM FOR DEMENTIA

```sas
/*===================================================================*/

/* NHATS_Round_8_Combined_PROC_FORMAT_Statement.sas */

PROC FORMAT ;

    VALUE release
          -1 = '-1 Inapplicable'
           1 = '1 Main Sample'
           2 = '2 Reserve Sample'
           9 = '9 New Release Sample';

    VALUE STAT_DTa
           4 = " 4 April"
           5 = " 5 May"
           6 = " 6 June"
           7 = " 7 July"
           8 = " 8 August"
           9 = " 9 September"
          10 = "10 October"
          11 = "11 November"
          99 = "99 Prior to start of field work"
          -1 = '-1 Inapplicable';

    VALUE $DISP
          '10' = "10 Not Available "
          '11' = "11 Ready"
          '12' = "12 Started "
          '20' = "20 Final "
          '24' = "24 Not Required "
          '60' = "60 Complete "
          '61' = "61 Complete, NH facility"
          '62' = "62 Complete SP Deceased, Proxy Intv"
          '63' = "63 Complete SP, FQ not complete"
          '64' = "64 Complete FQ, SP not complete"
          '75' = "75 Physically/mentally unable to participate, no proxy"
          '76' = "76 Too ill to participate, no proxy"
          '77' = "77 Refusal, SP"
          '78' = "78 Language barrier"
          '79' = "79 Unable to locate"
          '80' = "80 Unavailable during field period"
          '82' = "82 Outside of PSU"
          '83' = "83 Ineligible"
          '85' = "85 Refusal, facility"
          '86' = "86 Deceased"
          '87' = "87 Refusal, proxy"
          '88' = "88 Work stopped"     ;

VALUE DISP_a
          10 = "10 Not Available"
          11 = "11 Ready"
          12 = "12 Started"
          20 = "20 Final"
          24 = "24 Not Required"
          60 = "60 Complete"
          61 = "61 Complete, NH facility"
          62 = "62 Complete SP Deceased, Proxy Intv"
```

```
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"     ;

    VALUE DISP_
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required";

    VALUE DISP_F
     -1 = '-1 Inapplicable'
        10 = "10 Not Available"
        11 = "11 Ready"
        12 = "12 Started"
        20 = "20 Final"
        24 = "24 Not Required"
        60 = "60 Complete"
        61 = "61 Complete, NH facility"
        62 = "62 Complete SP Deceased, Proxy Intv"
        63 = "63 Complete SP, FQ not complete"
        64 = "64 Complete FQ, SP not complete "
        75 = "75 Physically/mentally unable to participate, no proxy"
        76 = "76 Too ill to participate, no proxy"
        77 = "77 Refusal, SP"
        78 = "78 Language barrier"
        79 = "79 Unable to locate"
        80 = "80 Unavailable during field period"
           81 = "81 Final deceased, new sample only"
        82 = "82 Outside of PSU"
        83 = "83 Ineligible"
        85 = "85 Refusal, facility"
        86 = "86 Deceased"
        87 = "87 Refusal, proxy"
        88 = "88 Work stopped"
        89 = "89 Final, Other Specify";

    VALUE RFDK
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE $RFDK_F
    '-7' = '-7 RF'
```

```
        '-8' = '-8 DK'
        '-1' = '-1 Inapplicable'
        '-9' = '-9 Missing';

        VALUE RFDK_F
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

VALUE RFDK_B
        -1 = '-1 Inapplicable'
        1 = '1 Yes-Breakoff';

VALUE $RFDK_C
        '-1' = '-1 Inapplicable'
        'CL' ='CL - Closing'
        'EW' ='EW - Economic Well-Being'
        'FQ' ='FQ - Facility Questionnaire'
        'HL' ='HL - Helper'
        'HW' ='HW - Height and Weight'
        'IP' ='IP - Insurance Plans'
        'LF' ='LF - Labor Force'
        'PA' ='PA - Participation'
        'PE' ='PE - Performance'
        'WB' ='WB - Well-being' ;

VALUE $RFDK_2C
        '-1' = '-1 Inapplicable'
        '-7' = '-7 RF'
        '-8' = '-8 DK'
        '-9' = '-9 Missing';

        VALUE RFDK_Y
         1 = ' 1 Yes'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

VALUE RFDK_I
         0 = ' 0 No'
         1 = ' 1 Yes'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

        VALUE RFDK_YN
         1 = ' 1 Yes'
         2 = ' 2 No'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';

        VALUE DSTRP_G
```

```
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 =  '1 X condition and word color condition accuracy below threshold
(less than .42)'
    2 =  '2 word condition only below threshold (less than .42)'
    3 =  '3 X condition and word color condition meet criteria for accuracy'
    4 =  '4 fewer than 50% of X and word color condition trials answered'
  999 = '999 X condition only below threshold (less than .42)';

   VALUE DSTRP_R
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
 -999 = '-999 Inapplicable'
  other = 'Values ranging between -.353 and 1.115';

   VALUE DSTRP_M
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
 -999 = '-999 Inapplicable'
  other = 'Values ranging between -544.732 and 924.863';

VALUE FQ_4F
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
        1='1 YES'
        2='2 NO';

  VALUE CHILDDEC
   1 =  '1 CHILD DECEASED'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE W200001W
   12 = "12 STARTED"
   20 = "20 COMPLETE"
   21 = "21 INELIGIBLE - NOT 65+"   ;

  VALUE W200008x
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 UNDER 20"
   2 = "2 20-24"
   3 = "3 25-29"
   4 = "4 30-34"
   5 = "5 35-39"
   6 = "6 40-44"
   7 = "7 45-49"
```

```
   8 = "8 50-54"
   9 = "9 55-59"
  10 = "10 60-64"
  11 = "11 65-69"
  12 = "12 70-74"
  13 = "13 75-79"
  14 = "14 80-84"
  15 = "15 85-89"
  16 = "16 90 +";

VALUE W200009W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SAMPLE PERSON"
  2 = "2 SPOUSE/ PARTNER"
  3 = "3 DAUGHTER"
  4 = "4 SON"
  5 = "5 DAUGHTER-IN-LAW"
  6 = "6 SON-IN-LAW"
  7 = "7 STEPDAUGHTER"
  8 = "8 STEPSON"
  9 = "9 SISTER"
 10 = "10 BROTHER"
 11 = "11 SISTER-IN-LAW"
 12 = "12 BROTHER-IN-LAW"
 13 = "13 MOTHER"
 14 = "14 STEPMOTHER"
 15 = "15 MOTHER-IN-LAW"
 16 = "16 FATHER"
 17 = "17 STEPFATHER"
 18 = "18 FATHER-IN-LAW"
 19 = "19 GRANDDAUGHTER"
 20 = "20 GRANDSON"
 21 = "21 NIECE"
 22 = "22 NEPHEW"
 23 = "23 AUNT"
 24 = "24 UNCLE"
 25 = "25 COUSIN"
 26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
 27 = "27 STEPSON'S SON/ DAUGHTER"
 28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
 29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
 30 = "30 BOARDER/RENTER"
 31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
 32 = "32 ROOMMATE"
 33 = "33 EX-WIFE/ EX-HUSBAND"
 34 = "34 BOYFRIEND/ GIRLFRIEND"
 35 = "35 NEIGHBOR"
 36 = "36 FRIEND"
 37 = "37 SOMEONE/SERVICE AT THE PLACE SP LIVES/LIVED"
 38 = "38 CO-WORKER"
 39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
 40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
 41 = "41 DECEASED SPOUSE/PARTNER"
 91 = "91 OTHER RELATIVE"
```

```
      92 = "92 OTHER NONRELATIVE"    ;

    VALUE W200002W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MALE"
     2 = "2 FEMALE";

    VALUE W200005W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 NO SCHOOLING COMPLETED"
     2 = "2 1ST-8TH GRADE"
     3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
     4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
     5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
     6 = "6 SOME COLLEGE BUT NO DEGREE"
     7 = "7 ASSOCIATE'S DEGREE"
     8 = "8 BACHELOR'S DEGREE"
     9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"  ;

   VALUE W200010W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MARRIED"
     2 = "2 LIVING WITH A PARTNER"
     3 = "3 SEPARATED"
     4 = "4 DIVORCED"
     5 = "5 WIDOWED"
     6 = "6 NEVER MARRIED";

   VALUE W200011W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 PREVIOUSLY REPORTED"  ;
VALUE W200012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 REGULAR"
     2 = "2 VARIED"  ;

    VALUE W200013W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SP AND/OR FAMILY"
   2 = "2 GOVERNMENT PROGRAM"
   3 = "3 INSURANCE"
   91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200015W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1='1 HOURLY'
   2='2 WEEKLY'
   3='3 MONTHLY'
   4='4 DID NOT PAY IN LAST MONTH'
     91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200016W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MEDICAID"
   2 = "2 MEDICARE"
   3 = "3 STATE PROGRAM"
   91 = "91 OTHER (SPECIFY)"   ;

  VALUE W200018W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
   2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
     3 = "3 MOBILE HOME OR TRAILER"
     4 = "4 MULTI-UNIT (2+) BUILDING"
     91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200020W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 HOME"
   2 = "2 MULTI-UNIT"
   3 = "3 OTHER"  ;

  VALUE W200021W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 BUILDING HAS ONE FLOOR"
   2 = "2 BUILDING HAS MULTIPLE FLOORS"   ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W200022W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOME"
  2 = "2 APARTMENT"
  3 = "3 ROOM"
  4 = "4 UNIT"
  5 = "5 SUITE"
  6 = "6 SOMETHING ELSE (SPECIFY)"  ;

VALUE W200030W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SAMPLE PERSON (SP)"
  2 = "2 PROXY"  ;

VALUE W200032W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOSPITAL"
  2 = "2 NURSING HOME/REHAB CENTER"
 91 = "91 OTHER (SPECIFY)"  ;

VALUE W200035W
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SELF"
  2 = "2 SPOUSE/ PARTNER"
  3 = "3 DAUGHTER"
  4 = "4 SON"
  5 = "5 DAUGHTER-IN-LAW"
  6 = "6 SON-IN-LAW"
  7 = "7 STEPDAUGHTER"
  8 = "8 STEPSON"
  9 = "9 SISTER"
 10 = "10 BROTHER"
 11 = "11 SISTER-IN-LAW"
 12 = "12 BROTHER-IN-LAW"
 13 = "13 MOTHER"
 14 = "14 STEPMOTHER"
 15 = "15 MOTHER-IN-LAW"
 16 = "16 FATHER"
 17 = "17 STEPFATHER"
 18 = "18 FATHER-IN-LAW"
 19 = "19 GRANDDAUGHTER"
 20 = "20 GRANDSON"
 21 = "21 NIECE"
 22 = "22 NEPHEW"
 23 = "23 AUNT"
 24 = "24 UNCLE"
 25 = "25 COUSIN"
```

```
    26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
    27 = "27 STEPSON'S SON/ DAUGHTER"
    28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
    29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
    30 = "30 BOARDER/RENTER"
    31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
    32 = "32 ROOMMATE"
    33 = "33 EX-WIFE/ EX-HUSBAND"
    34 = "34 BOYFRIEND/ GIRLFRIEND"
    35 = "35 NEIGHBOR"
    36 = "36 FRIEND"
    37 = "37 SOMEONE/SERVICE FROM THE PLACE SP LIVES/DIED"
    38 = "38 CO-WORKER"
    39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
    40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
    91 = "91 OTHER RELATIVE"
    92 = "92 OTHER NONRELATIVE"  ;

 VALUE W200036W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 VERY FAMILIAR"
   2 = "2 SOMEWHAT FAMILIAR"
   3 = "3 A LITTLE FAMILIAR"
   4 = "4 NOT AT ALL FAMILIAR"  ;

 VALUE W200037W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES, SAME ADDRESS"
   2 = "2 NO, DIFFERENT ADDRESS"
   3 = "3 YES, SAME ADDRESS WITH MINOR CORRECTIONS"  ;

 VALUE W200038W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 JANUARY"
   2 = "2 FEBRUARY"
   3 = "3 MARCH"
   4 = "4 APRIL"
   5 = "5 MAY"
   6 = "6 JUNE"
   7 = "7 JULY"
   8 = "8 AUGUST"
   9 = "9 SEPTEMBER"
  10 = "10 OCTOBER"
  11 = "11 NOVEMBER"
  12 = "12 DECEMBER"  ;

 VALUE W200039W
  -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"
  3 = "3 YEAR2013"
  4 = "4 YEAR2014"
  5 = "5 YEAR2015"
  6 = "6 YEAR2016"
  7 = "7 YEAR2017"
  8 = "8 YEAR2018"
  9 = "9 YEAR2019"
 10 = "10 YEAR2020"  ;

VALUE W200040W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"  ;

VALUE W200041W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AT SPS OR SOMEONE ELSES HOME"
  2 = "2 IN A HOSPITAL"
  3 = "3 IN A NURSING HOME"
  4 = "4 IN A HOSPICE RESIDENCE"
  5 = "5 IN TRANSIT (AMBULANCE TO HOSPITAL)"
 91 = "91 SOMEWHERE ELSE (SPECIFY)";

VALUE W200042W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP'S HOME"
  2 = "2 SOMEONE ELSE'S HOME"  ;

VALUE W200043W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INTENSIVE CARE UNIT"
  2 = "2 PALLIATIVE CARE UNIT"
  3 = "3 INPATIENT HOSPICE UNIT"
  4 = "4 EMERGENCY ROOM"
  5 = "5 ANOTHER KIND OF UNIT"  ;

VALUE W200044W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
```

```
  -9 = '-9 Missing'
   1 = "1 HOSPICE AT A HOSPITAL"
   2 = "2 HOSPICE AT A NURSING HOME"
   3 = "3 RESIDENTIAL HOSPICE"
   4 = "4 OTHER HOSPICE"   ;

 VALUE W200045W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 DAYS"
   2 = "2 WEEKS"
   3 = "3 MONTHS"
   4 = "4 YEARS"   ;

 VALUE W200046W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 AT SP'S HOME"
   2 = "2 IN A HOSPITAL"
   3 = "3 IN A NURSING HOME"
   4 = "4 IN A HOSPICE RESIDENCE"
  91 = "91 SOMEWHERE ELSE (SPECIFY)"   ;

 VALUE W200047W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY DAY"
   2 = "2 MOST DAYS"
   3 = "3 SOME DAYS"
   4 = "4 RARELY"
   5 = "5 NOT AT ALL"   ;

 VALUE W200048W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN WAS NEEDED"
   2 = "2 MORE THAN WAS NEEDED"
   3 = "3 ABOUT RIGHT AMOUNT"   ;

 VALUE W200049W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   3 = "3 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"   ;

 VALUE W200050W
```

```
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 ALWAYS"
       2 = "2 USUALLY"
       3 = "3 SOMETIMES"
       4 = "4 NEVER"
       5 = "5 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

   VALUE W200051W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 EXCELLENT"
       2 = "2 VERY GOOD"
       3 = "3 GOOD"
       4 = "4 FAIR"
       5 = "5 POOR"  ;

   VALUE W200052W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 NOT AT ALL"
       2 = "2 SEVERAL DAYS"
       3 = "3 MORE THAN HALF THE DAYS"
       4 = "4 NEARLY EVERY DAY"  ;

   VALUE W200053W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
       2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
       3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
       4 = "4 RARELY (ONCE A WEEK OR LESS)"
       5 = "5 NEVER"  ;

   VALUE W200054W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
       2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
       3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
       4 = "4 RARELY (ONCE A WEEK OR LESS)"
       5 = "5 NEVER"
       7 = "7 DON'T WAKE UP/NOT A PROBLEM"  ;

   VALUE W200055W
      -7 = '-7 RF'
      -8 = '-8 DK'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 PRIVATE RESIDENCE"
     2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
     3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
     4 = "4 RELIGIOUS GROUP QUARTERS"
     91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200056W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 PLACE DOES NOT HAVE A NAME"  ;

  VALUE W200057W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 APARTMENT"
    2 = "2 ROOM"
    3 = "3 UNIT"
    4 = "4 SUITE"
    91 = "91 SOMETHING ELSE (SPECIFY)"  ;

  VALUE W200058W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO, DIFFERENT PERSON"
    3 = "3 NO, NAME MISSPELLED"  ;

   VALUE W200060W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 PRIVATE RESIDENCE"
    2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
    3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
    5 = "5 NURSING HOME"
    91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
```

```
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
    8 = "8 OTHER REASON"    ;

 VALUE W200067W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 COMMON OR SHARED ENTRANCE"
   2 = "2 ENTRANCE DIRECTLY INTO HOME"  ;

 VALUE W200068W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1"
   2 = "2"
   3 = "3"
   4 = "4+"   ;

 VALUE W200069W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 ALL ITEMS HERE"
   2 = "2 ADDED ONE OR MORE ITEMS"  ;

 VALUE W200070W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE THAN $500"
   2 = "2 LESS THAN $500"
   3 = "3 JUST ABOUT $500"  ;

 VALUE W200071W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE THAN $1,000"
   2 = "2 LESS THAN $1,000"
   3 = "3 JUST ABOUT $1,000"  ;

 VALUE W200072W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE THAN $100"
   2 = "2 LESS THAN $100"
   3 = "3 JUST ABOUT $100"  ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W200073W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 YES, DOESNT KNOW HOW TO USE A COMPUTER"  ;

VALUE W200074W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST DAYS"
  2 = "2 SOME DAYS"
  3 = "3 RARELY"  ;

VALUE W200076W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 DEAF"  ;

VALUE W200077W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 BLIND"  ;

VALUE W200078W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY DAY (7 DAYS A WEEK)"
  2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
  3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"  ;

VALUE W200080W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, A CHANGE"
  2 = "2 NO, NO CHANGE"
  3 = "3 DEMENTIA/ALZHEIMER'S REPORTED BY PROXY"  ;

VALUE W200081W
```

```
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE"
  2 = "2 SP IS UNABLE TO SPEAK"
  3 = "3 SP IS UNABLE TO HEAR"
  4 = "4 SP REFUSED"
  5 = "5 PROXY REFUSED"
  6 = "6 SP NOT PRESENT"
  7 = "7 SP TOO ILL"
  8 = "8 SP LANGUAGE BARRIER"
 91 = "91 OTHER (SPECIFY)"  ;

VALUE W200082W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MUCH BETTER"
  2 = "2 BETTER"
  3 = "3 SAME"
  4 = "4 WORSE"
  5 = "5 MUCH WORSE"  ;

VALUE W200083W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO/DON'T KNOW"  ;

VALUE W200084W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 CONTINUE WITH ACTIVITY"
  2 = "2 SP REFUSES ACTIVITY"  ;

VALUE W200085W
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "Word[1]"
  2 = "Word[2]"
  3 = "Word[3]"
  4 = "Word[4]"
  5 = "Word[5]"
  6 = "Word[6]"
  7 = "Word[7]"
  8 = "Word[8]"
  9 = "Word[9]"
 10 = "Word[10]"
 91 = "91 NO WORDS REMEMBERED"
 92 = "92 REFUSED"  ;
```

```
VALUE W200086W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 DIFFICULTY HEARING ANY OF THE WORDS"
  2 = "2 INTERRUPTION OCCURRED WHILE LIST WAS BEING READ"
 91 = "91 OTHER PROBLEM (SPECIFY)"
 92 = "92 NO PROBLEMS OCCURRED"
 97 = "97 SP REFUSED WORD RECALL TASK"  ;

VALUE W200087W
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP ATTEMPTED CLOCK DRAWING"
  2 = "2 SP DID NOT ATTEMPT CLOCK DRAWING"
 97 = "3 SP REFUSED CLOCK DRAWING"  ;

VALUE W200089W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY DAY (7 DAYS A WEEK)"
  2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
  3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
  4 = "4 RARELY (ONCE A WEEK OR LESS)"
  5 = "5 NEVER"  ;

VALUE W200090W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY TIME"
  2 = "2 MOST TIMES"
  3 = "3 SOMETIMES"
  4 = "4 RARELY"
  5 = "5 NEVER"  ;

VALUE W200092W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST TIMES"
  2 = "2 SOMETIMES"
  3 = "3 RARELY"
  4 = "4 NEVER"  ;

VALUE W200093W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NONE"
  2 = "2 A LITTLE"
```

```
    3 = "3 SOME"
    4 = "4 A LOT"  ;

 VALUE W200094W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE OFTEN"
  2 = "2 LESS OFTEN"
  3 = "3 ABOUT THE SAME"  ;

 VALUE W200095W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
 10 = "10 OCTOBER"
 11 = "11 NOVEMBER"
 12 = "12 DECEMBER"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

 VALUE W200096W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
 90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

 VALUE W200097W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO / NO LONGER DRIVE"  ;

 VALUE W200098W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 NO, NO RAIN OR BAD WEATHER"  ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W200099W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ALWAYS DID IT BY SELF"
  2 = "2 ALWAYS DID IT TOGETHER WITH SOMEONE ELSE"
  3 = "3 SOMEONE ELSE ALWAYS DID IT"
  4 = "4 IT VARIED (MORE THAN ONE WAY)"
  5 = "5 NOT DONE IN LAST MONTH"  ;

VALUE W200102W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE OFTEN"
  2 = "2 LESS OFTEN"
  3 = "3 SAME"  ;

VALUE W200106W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  7 = "7 ALWAYS FED THROUGH IV OR TUBE"  ;

VALUE W200107W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY TIME"
  2 = "2 MOST TIMES"
  3 = "3 SOMETIMES"
  4 = "4 RARELY"  ;

VALUE W200109W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SHOWERING"
  2 = "2 TAKING BATHS"
  3 = "3 WASHING UP SOME OTHER WAY"  ;


VALUE W200114W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 VERY IMPORTANT"
  2 = "2 SOMEWHAT IMPORTANT"
  3 = "3 NOT SO IMPORTANT"  ;
```

SAS ALGORITHM FOR DEMENTIA

```
   VALUE W200115W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
    95 = "95 NO ACTIVITY LISTED"  ;

   VALUE W200116W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LEFT"
     2 = "2 RIGHT"
     3 = "3 BOTH"  ;

   VALUE W200117W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LEFT SIDE"
     2 = "2 RIGHT SIDE"
     3 = "3 BOTH SIDES"  ;

   VALUE W200118W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 ONE SIDE"
     2 = "2 BOTH SIDES"  ;

   VALUE W200119W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 RECEIVE ALL TREATMENTS"
     2 = "2 STOP/REJECT ALL TREATMENTS"  ;

   VALUE W200120W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
     2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
     3 = "3 LIVING WITH AN ADULT CHILD"
     4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
     5 = "5 LIVING IN A NURSING HOME"  ;

   VALUE W200121W
```

```
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
    4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

 VALUE W200122W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MAKE DECISIONS WITHOUT MUCH ADVICE FROM THEM"
    2 = "2 GET THEIR ADVICE AND THEN MAKE DECISIONS"
    3 = "3 MAKE DECISIONS TOGETHER"
    4 = "4 LEAVE DECISIONS UP TO THEM"  ;

 VALUE W200123W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 HANDLE MOSTLY BY SELF"
    2 = "2 HANDLE TOGETHER WITH FAMILY OR CLOSE FRIENDS"
    3 = "3 FAMILY OR CLOSE FRIENDS MOSTLY HANDLE THESE THINGS"
    4 = "4 IT VARIES"  ;

 VALUE W200124W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 NEVER"
    2 = "2 RARELY"
    3 = "3 SOMETIMES"
    4 = "4 OFTEN"  ;

 VALUE W200126W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 AGREE A LOT"
    2 = "2 AGREE A LITTLE"
    3 = "3 DO NOT AGREE"  ;

 VALUE W200127W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 AGREE A LOT"
    2 = "2 AGREE A LITTLE"
    3 = "3 AGREE NOT AT ALL"  ;
```

```
VALUE W200129W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $1,000,"
  2 = "2 $1,000 to less than $2,000,"
  3 = "3 $2,000 to less than $3,000,"
  4 = "4 $3,000 to less than $5,000, or"
  5 = "5 $5,000 or more?"  ;

VALUE W200131W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 RETIRED/DON'T WORK ANYMORE"  ;

VALUE W200132W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY WEEK"
  2 = "2 EVERY TWO WEEKS"
  3 = "3 TWO TIMES A MONTH"
  4 = "4 ONCE A MONTH"
  5 = "5 DAILY"
 91 = "91 OTHER SCHEDULE (SPECIFY)"  ;

VALUE W200133W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 OWN"
  2 = "2 RENT"
  3 = "3 SOME OTHER ARRANGEMENT"  ;

VALUE W200134W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 PAID OFF"
  2 = "2 STILL MAKE PAYMENTS"
  3 = "3 REVERSE MORTGAGE"  ;

VALUE W200135W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $250,"
  2 = "2 $250-$499,"
```

```
   3 = "3 $500-$999, or"
   4 = "4 $1,000 or more?"  ;
 VALUE W500135W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $250"
  2 = "2 $250 to less than $500"
  3 = "3 $500 to less than $1,000"
  4 = "4 $1,000 to less than $3,000"
    5 = "5 $3,000 to less than $5,000"
    6 = "6 $5,000 or more?"  ;
 VALUE W200136W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 5 YEARS"
  2 = "2 10 YEARS"
  3 = "3 LONGER THAN 10 YEARS"  ;

 VALUE W200137W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $50,000,"
  2 = "2 between $50,000 and $100,000, or"
  3 = "3 over $100,000?"  ;

 VALUE W200138W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $50,000,"
  2 = "2 $50,000-$74,999,"
  3 = "3 $75,000-$99,999,"
  4 = "4 $100,000-$199,999,"
  5 = "5 $200,000-$299,999,"
  6 = "6 $300,000-$499,999,"
  7 = "7 $500,000-$749,999, or"
  8 = "8 $750,000 or more?"  ;

 VALUE W200139W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 PAY OFF BALANCE"
  2 = "2 PAY MINIMUM"
  3 = "3 PAY MORE THAN MINIMUM, BUT NOT ENTIRE BALANCE"
  4 = "4 DON'T HAVE ANY CREDIT CARDS"  ;

 VALUE W200140W
 -7 = '-7 RF'
```

```
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 less than $1,000,"
      2 = "2 $1,000 - $1,999,"
      3 = "3 $2,000 - $3,999,"
      4 = "4 $4,000 - $5,999,"
      5 = "5 $6,000 - $9,999,"
      6 = "6 $10,000 - $19,999, or"
      7 = "7 $20,000 or more?"  ;

   VALUE W200141W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MOST"
      2 = "2 SOME"
      3 = "3 A LITTLE"  ;

   VALUE W200142W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 less than $500,"
      2 = "2 $500 - $999,"
      3 = "3 $1,000 - $1,999,"
      4 = "4 $2,000 - $3,999,"
      5 = "5 $4,000 - $5,999,"
      6 = "6 $6,000 - $9,999,"
      7 = "7 $10,000 - $19,999, or"
      8 = "8 $20,000 or more?"  ;

   VALUE W200146W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 NEARLY EVERY DAY"
      2 = "2 MORE THAN HALF THE DAYS"
      3 = "3 SEVERAL DAYS (LESS THAN HALF)"
      4 = "4 A FEW DAYS"  ;

   VALUE W200147W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 INCLUDED"
      2 = "2 EXTRA CHARGE"  ;

   VALUE W200148W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
```

```
      1 = "1 Yes"  ;

   VALUE W800164W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 RECEIVE ALL TREATMENTS"
     2 = "2 STOP/REJECT ALL TREATMENTS"  ;

   VALUE W800165W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
     2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
     3 = "3 LIVING WITH AN ADULT CHILD"
     4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
     5 = "5 LIVING IN A NURSING HOME"  ;

   VALUE W800166W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
     4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

VALUE F200006W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 FREE STANDING NURSING HOME"
     2 = "2 FREE STANDING ASSISTED LIVING FACILITY"
     3 = "3 NURSING HOME AND ASSISTED LIVING FACILITY"
     4 = "4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
     5 = "5 ADULT FAMILY CARE HOME"
     6 = "6 GROUP HOME"
     7 = "7 BOARD AND CARE HOME"
     8 = "8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
    91 = "91 OTHER (SPECIFY)"  ;

   VALUE F200007W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"  ;

   VALUE F200008W
    -7 = '-7 RF'
```

```
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INDEPENDENT LIVING"
  2 = "2 ASSISTED LIVING"
  3 = "3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
  4 = "4 NURSING HOME"
 91 = "91 OTHER (SPECIFY)"  ;

VALUE F200009W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ASSISTED LIVING"
  2 = "2 NURSING HOME"  ;

VALUE F200011W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, SERVICE PROVIDED AS PART OF PACKAGE"
  2 = "2 YES, SERVICE PROVIDED AT AN EXTRA CHARGE"
  3 = "3 NO, SERVICE NOT PROVIDED"  ;

VALUE F200012W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP/FAMILY"
  2 = "2 SOCIAL SECURITY/SSI"
  3 = "3 MEDICAID"
  4 = "4 MEDICARE"
  5 = "5 OTHER SOURCE"  ;

VALUE I200002W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"  ;

VALUE I200003W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 English"
  2 = "2 Spanish"
  3 = "3 Other (specify)"  ;

VALUE I200005W
 -7 = '-7 RF'
 -8 = '-8 DK'
```

```
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Friendly and interested"
  2 = "2 Cooperative but not particularly interested"
  3 = "3 Impatient and restless"
  4 = "4 Hostile"  ;

VALUE I200006W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Good"
  2 = "2 Fair"
  3 = "3 Poor"  ;

VALUE I200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 All of the time"
  2 = "2 Most of the time"
  3 = "3 Some of the time"
  4 = "4 Only for the cognition and/or performance parts"
  5 = "5 None of the time"  ;

VALUE I200010W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Interview was conducted by telephone"  ;

VALUE I200012W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Not Administered"  ;

VALUE I200013W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"  ;

VALUE I200016W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
```

```
   -9 = '-9 Missing'
    1 = "1 Yes"
    2 = "2 No"
    3 = "3 Entire interview conducted by telephone"  ;

  VALUE I200017W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 Not at all cluttered"
    2 = "2 Somewhat cluttered"
    3 = "3 Very cluttered"
    4 = "4 Could not see other rooms"  ;

  VALUE I200018W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 None"
    2 = "2 A little"
    3 = "3 Some"
    4 = "4 A lot"
    5 = "5 Could not observe"  ;

  VALUE I200019W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 Yes"
    2 = "2 No"
    7 = "7 Could not observe"  ;


/* DERIVED VARIABLE FORMATS */
  VALUE LVGARRG
    1 = '1 Alone'
    2 = '2 With spouse/partner only (spouse/partner in household)'
    3 = '3 With spouse/partner and with others'
    4 = '4 With others only'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE DOUTSFDF
    8 = '8 Not done in last month'
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE DOUTDEVI
    8 = '8 Not done in last month'
    1 = '1 No use of devices to go outside in last month'
    2 = '2 Use of devices to go outside in last month'
    3 = '3 DKRF If used devices to go outside in last month'
    4 = '4 DKRF If used devices in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE DOUTHELP
    8 = '8 Not done in last month'
    1 = '1 No help to go outside in last month'
    2 = '2 Had help to go outside in last month'
    3 = '3 DKRF If had help to go outside in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE DINSDSFD
    8 = '8 Not done in last month'
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE DINSDDEV
    8 = '8 Not done in last month'
    1 = '1 No use of devices inside in last month'
    2 = '2 Use of devices inside in last month'
    3 = '3 DKRF If used devices inside in last month'
    4 = '4 DKRF On use of devices'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dinsdhlp
    8 = '8 Not done in last month'
    1 = '1 No help to go around inside in last month'
    2 = '2 Had help to go around inside in last month'
    3 = '3 DKRF If had help to go around inside in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dbedsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
```

SAS ALGORITHM FOR DEMENTIA

```
  VALUE dbeddevi
    1 = '1 No use of cane or walker to get out of bed in last month'
    2 = '2 Use of cane or walker to get out of bed in last month'
    3 = '3 DKRF If Used cane or walker to get out of bed in last month'
    4 = '4 DKRF If used cane or walker in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dbedhelp
    1 = '1 No help to get out of bed in last month'
    2 = '2 Had help to get out of bed in last month'
    3 = '3 DKRF If had help to get out of bed in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';


  VALUE dlaunsfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';



  VALUE dlaunrea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
    4= '4 Service/someone from the place SP lives'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dshopsfd
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

  VALUE dshoprea
    1= '1 Health/functioning reason only'
    2= '2 Other reason only'
    3= '3 Both health/functioning and other'
    4= '4 Service/someone from the place SP lives'
```

```
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE dmealsfd
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

   VALUE dmealrea
   1= '1 Health/functioning reason only'
   2= '2 Other reason only'
   3= '3 Both health/functioning and other'
   4= '4 Service/someone from the place SP lives'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE dbanksfd
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE dbankrea
   1= '1 Health/functioning reason only'
   2= '2 Other reason only'
   3= '3 Both health/functioning and other'
   4= '4 Service/someone from the place SP lives'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE deatdevi
   1 = '1 No use of adapted utensils in last month'
   2 = '2 Use of adapted utensils in last month'
   8 = '8 Not done in last month'
   3 = '3 DKRF If used adapted utensils in last month'
   -1 = '-1 Inapplicable'
```

```
     -9 = '-9 Missing';

  VALUE deathelp
    1 = '1 No help eating in last month'
    2 = '2 Had help eating in last month'
    3 = '3 DKRF If had help eating in last month'
    8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE deatsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using utensils)'
    3 = '3 Difficulty by self (and when using utensils)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dbathdev
    1 = '1 No use of grab bars or bath seats in last month'
    2 = '2 Use of grab bars or bath seats in last month'
    3 = '3 DKRF If use of grab bars or bath seats in last month'
    4 = '4 DKRF If had grab bars or bath seats in last month'
    9 = '9 No bars/seats/shower/tub or washes up other way'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dbathhel
    1 = '1 No help bathing in last month'
    2 = '2 Had help bathing in last month'
    3 = '3 DKRF If had help bathing in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dbathsfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using grab bars or tub seat)'
    3 = '3 Difficulty by self (and when using grab bars or tub seat)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dtoildev
    1 = '1 No use of toileting devices in last month'
    2 = '2 Use of toileting devices in last month'
    3 = '3 DKRF of some and no use of other toileting devices in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dtoilhel
    1 = '1 No help toileting in last month'
    2 = '2 Had help toileting in last month'
    3 = '3 DKRF If had help toileting in last month'
    -1 = '-1 Inapplicable'
```

```
      -9 = '-9 Missing';

   VALUE dtoilsfd
     1 = '1 Did not do by self in last month'
     2 = '2 No Difficulty by self (and when using toileting devices)'
     3 = '3 Difficulty by self (and when using toileting devices)'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE ddresdev
     8 = '8 Not done in last month'
     9 = '9 DKRF If dressed in last month'
     2 = '2 Use of dressing devices in last month'
     1 = '1 No use of dressing devices in last month'
     3 = '3 DKRF If use of dressing devices in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE ddreshel
     8 = '8 Not done in last month'
     9 = '9 DKRF If dressed in last month'
     1 = '1 No help dressing in last month'
     2 = '2 Had help dressing in last month'
     3 = '3 DKRF If had help dressing in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE ddressfd
     1 = '1 Did not do by self in last month'
     2 = '2 No Difficulty by self (and when using dressing devices)'
     3 = '3 Difficulty by self (and when using dressing devices)'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     8 = '8 Not done in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE dmedssfd
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     8 = '8 Not done in last month'
     9 = '9 No or DKRF if medications taken in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dmedsrea
     1 = '1 Health/functioning reason only'
     2 = '2 Other reason only'
     3 = '3 Both heath/functioning and other'
     4 = '4 Service/someone from the place SP lives'
     -7 = '-7 RF'
```

```
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

   VALUE dmarstat
      1 = '1 Married'
      2 = '2 Living with a partner'
      3 = '3 Separated'
      4 = '4 Divorced'
      5 = '5 Widowed'
      6 = '6 Never married'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE DSPSAGEC
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = " 1 UNDER 50"
       2 = " 2 50-54"
       3 = " 3 55-59"
       4 = " 4 60-64"
       5 = " 5 65-69"
       6 = " 6 70-74"
       7 = " 7 75-79"
       8 = " 8 80-84"
       9 = " 9 85-89"
      10 = "10 90 +"      ;

   VALUE dresid
             -1 = '-1 Inapplicable'
          1 = '1 Community '
          2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
          3 = '3 Residential Care Resident not nursing home (FQ only)'
          4 = '4 Nursing Home Resident';
   VALUE f_dresid
             -1 = '-1 Inapplicable'
          1 = '1 Community '
          2 = '2 Residential care not nursing home (SP interview)'
          3 = '3 Residential care not nursing home (FQ only)'
          4 = '4 Nursing home (SP interview)'
          5 = '5 Nursing home (FQ only)'
          6 = '6 Deceased'
          7 = '7 Residential care not nursing home in R1 and R5 (FQ only)'
          8 = '8 Nursing home in R1 and R5 (FQ only)' ;
   VALUE f2dresid
          -1='-1 Inapplicable'
           1 = '1 Community '
          2 = '2 Residential care not nursing home (SP interview)'
          3 = '3 Residential care not nursing home (FQ only)'
          4 = '4 Nursing home (SP interview)'
          5 = '5 Nursing home (FQ only)'
          6 = '6 Deceased'
          7 = '7 Residential care not nursing home in R1 and R2 (FQ only)'
```

```
          8 = '8 Nursing home in R1 and R2 (FQ only)' ;
      VALUE f3dresid
              -1='-1 Inapplicable'
              1 = '1 Community '
          2 = '2 Residential care not nursing home (SP interview)'
          3 = '3 Residential care not nursing home (FQ only)'
          4 = '4 Nursing home (SP interview)'
          5 = '5 Nursing home (FQ only)'
          6 = '6 Deceased'
          7 = '7 Residential care not nursing home in R1 and R3 (FQ only)'
          8 = '8 Nursing home in R1 and R3 (FQ only)' ;
      VALUE f4dresid
              -1='-1 Inapplicable'
              1 = '1 Community '
          2 = '2 Residential care not nursing home (SP interview)'
          3 = '3 Residential care not nursing home (FQ only)'
          4 = '4 Nursing home (SP interview)'
          5 = '5 Nursing home (FQ only)'
          6 = '6 Deceased'
          7 = '7 Residential care not nursing home in R1 and R4 (FQ only)'
          8 = '8 Nursing home in R1 and R4 (FQ only)' ;


VALUE QUARTILE
-9="-9 Missing"
-1="-1 Inapplicable";

VALUE SPPB
-9="-9 Missing"
-1="-1 Inapplicable";

      VALUE DCLCKSC
        0 = "0 Not recognizable as a clock"
        1 = "1 Severely distorted depiction of a clock"
        2 = "2 Moderately distorted depiction of a clock"
        3 = "3 Mildly distorted depiction of a clock"
        4 = "4 Reasonably accurate depiction of a clock"
        5 = "5 Accurate depiction of a clock (circular or square)"
      -7 = "-7 SP refused to draw clock"
      -8 = "-8 DK"
      -1 = "-1 Inapplicable"
      -2 = "-2 Proxy says cannot ask SP"
      -3 = "-3 Proxy says can ask SP but SP unable to answer"
      -4 = "-4 SP did not attempt to draw clock"
      -9 = "-9 Missing";

      VALUE DCLCKCL
        1 = '1 Very clear'
        2 = '2 Somewhat clear'
        3 = '3 Somewhat unclear'
        4 = '4 Very unclear'
        5 = '5 Blank'
      -7 = '-7 SP refused to draw clock'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -2 = '-2 Proxy says cannot ask SP'
      -3 = '-3 Proxy says can ask SP but SP unable to answer'
```

```
    -4 = '-4 SP did not attempt to draw clock'
    -9 = '-9 Missing';

VALUE RESULT
    -9='-9: MISSING'
    1='1: COMPLETED W RESULTS'
    2='2: COMPLETED MISSING RESULTS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    7='7: NO CHAIR/NO SPACE'
    9='9: NOT ATTEMPTED/MISSING';

    VALUE RESULT_SCH
    -9='-9: MISSING'
    1='1: COMPLETED W/OUT ARMS'
    2='2: COMPLETED W ARMS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    7='7: NO CHAIR/SAFETY REASON'
    8='8: NO CHAIR/NOT SAFETY REAS'
    9='9: NOT ATTEMPTED/MISSING'
    10='10: CH4=1 SINGLE CHAIR NOT COMPL';

    VALUE RESULT_RCH
    -9='-9: MISSING'
    1='1: COMPLETED W/OUT ARMS'
    2='2: COMPLETED MISSING RESULTS'
    3='3: ATTEMPTED W RESULTS'
    4='4: ATTEMPTED MISSING RESULTS'
    5='5: NOT ATTEMPTED SAFETY'
    6='6: NOT ATTEMPTED NOT SAFETY REASON'
    9='9: NO CHAIR OR NOT ATTEMPTED/MISSING';

    VALUE ZEROSCORE
    1="1: NOT ELIGIBLE DUE TO EXCLUSION CRITERIA"
    2="2: NOT ATTEMPTED FOR SAFETY REASON"
    3="3: ATTEMPTED CHAIR STANDS/NOT ATTEMPTED FOR SAFETY"
    4="4: ATTEMPTED"
    5="5: NEW WALKING EXCLUSION"
    9="9: NOT ASSIGNED A ZERO SCORE";

   VALUE D_LMLLOC
    1 = '1 Community'
    2 = '2 Residential Care'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

      VALUE D_LOCSP
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
        1 = "1 Independent Living/Housing/Retirement"
```

```
        2 = "2 Assisted Living/Personal Care"
        3 = "3 Special Care, Memory or Alzheimer's Unit"
        4 = "4 Nursing Home"
        8 = "8 Not Reported" ;

        VALUE PA25FMT
 -1 = '-1 Inapplicable'
   -8 = '-8 DK'
 -9 = '-9 Missing'
 111= '111 Sleeping Napping'
 131= '131 Eating'
 132= '132 Going out to eat'
 199= '199 Other self care activities'
 211= '211 Work and work-related activities'
 221= '221 Other income generating activities'
 241= '241 Volunteering'
 299= '299 Other productive activities'
 321= '321 Shopping for non-durable goods'
 399= '399 Other shopping'
 411= '411 Food and drink preparation'
 434= '434 Outdoor Maintenance'
 439= '439 Household chores (cannot tell if indoor/outdoor)'
 441= '441 Animal and pet care'
 442= '442 Walking and exercising pets'
 449= '449 Other animal and pet care'
 451= '451 Vehicle maintenance and repair'
 471= '471 Financial management'
 499= '499 Other household activities'
 511= '511 Physical care and assistance to others'
 599= '599 Other physical care'
 611= '611 Socializing with others in person'
 612= '612 Socializing with others on the phone'
 616= '616 Socializing and communicating on the computer'
 621= '621 Watching TV and movies'
 631= '631 Doing puzzles or games not on computer or online'
 632= '632 Gambling not online or at a casino'
 636= '636 Doing puzzles or games on a computer or online'
 641= '641 Arts and crafts or hobbies'
 642= '642 Reading'
 643= '643 Writing'
 644= '644 Listening to music'
 646= '646 Computer or online leisure activities'
 651= '651 Smoking or other tobacco use'
 652= '652 Drinking alcohol'
 661= '661 Doing nothing/relaxing'
 669= '669 No activity'
 699= '699 Other non active leisure'
 711= '711 Playing sports'
 712= '712 Walking or jogging'
 713= '713 Other outdoor recreating activities'
 714= '714 Attending sporting events'
 715= '715 Other physical activity, exercise, yoga, swimming, working out,
dancing'
 718= '718 Watching sporting events'
 721= '721 Attending arts  including plays and concerts'
 723= '723 Attending movies'
 724= '724 Attending casinos'
```

```
   737= '737 Travel for leisure'
   799= '799 Other active leisure'
   811= '811 Attending religious activities'
   812= '812 Other religious and spirtual activities'
   821= '821 Attending meetings or events'
   899= '899 Other organizational activity'
   991= '991 Other miscellaneous'
   992= '992 No favorite activity'
   997= '997 Refused'
   998= '998 Dont Know'
   999= '999 Not Codeable';


        VALUE OCC_CODE
1    ='1 Management Occupations: 0010-0430'
2    ='2 Business and Financial Operations Occupations:  0500-0950'
3    ='3 Computer and mathematical occupations:  1000-1240'
4    ='4 Architecture and Engineering Occupations:   1300-1560'
5    ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6    ='6 Community and Social Service Occupations:   2000-2060'
7    ='7 Legal Occupations:  2100-2160'
8    ='8 Education, Training, and Library Occupations:   2200-2550'
9    ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10   ='10 Healthcare Practitioners and Technical Occupations:    3000-3540'
11   ='11 Healthcare Support Occupations:    3600-3655'
12   ='12 Protective Service Occupations:    3700-3955'
13   ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14   ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15   ='15 Personal Care and Service Occupations: 4300-4650'
16   ='16 Sales and Related Occupations: 4700-4965'
17   ='17 Office and Administrative Support Occupations: 5000-5940'
18   ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19   ='19 Construction and Extraction Occupations:   6200-6940'
20   ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21   ='21 Production Occupations:    7700-8965'
22   ='22 Transportation and Material Moving Occupations:    9000-9750'
23   ='23 Military Specific Occupations: 9800-9830'
24   ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';


    Value fl_Dfac
1 = '1 Should have routed as facility but did not'
2 = '2 Routed as facility but determined not facility resident'
-1 = '-1 Inapplicable';
VALUE PE_RSLT
    -9='-9 Missing'
    -1 = '-1 Inapplicable'
```

```
    1='1 Completed'
    2='2 Attempted'
    3='3 Not attempted' ;
VALUE dosfacd /* FOR FQ2dosfacd  */
     -9= "-9 Missing"
     -8 = "-8 DK"
     -1 = "-1 INAPPLICABLE"
      1 = " 1 FREE STANDING NURSING HOME"
      2 = " 2 FREE STANDING ASSISTED LIVING FACILITY / RESIDENTIAL CARE
FACILITY"
      3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
      4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
      5 = " 5 ADULT FAMILY CARE HOME"
      6 = " 6 GROUP HOME"
      7 = " 7 BOARD AND CARE HOME / PERSONAL CARE HOME"
      8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
      9 = " 9 INDEPENDENT LIVING"
     10 = " 10 ASSISTED AND INDEPENDENT/RETIREMENT (NO NURSING HOME)"
     11 = " 11 HOUSING (APT, CONDO, ETC.)";
        ;
    VALUE dosfaca /* FOR FQ2dosfaca */
     -9= "-9 Missing"
     -8 = "-8 DK"
     -1 = "-1 INAPPLICABLE"
      1 = " 1 INDEPENDENT LIVING / HOUSING / RETIREMENT "
      2 = " 2 ASSISTED LIVING / PERSONAL CARE"
      3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
      4 = " 4 NURSING HOME"   ;

VALUE INAP_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -1 = '-1 Inapplicable' ;
VALUE CENDIV /* RE1DCENSDIV - Updated for R2 - Re-Release */
    1 =  '1 Northeast Region: New England Division (ME, NH, VT, MA, RI, CT)'
    2 =  '2 Northeast Region: Middle Atlantic Division (NY, NJ, PA)'
    3 =  '3 Midwest Region: East North Central Division (OH, IN, IL, MI, WI)'
    4 =  '4 Midwest Region: West North Central Division (MN, IA, MO, ND, SD,
NE, KS)'
    5 =  '5 South Region: South Atlantic Division (DE, MD, DC, VA, WV, NC,
SC, GA, FL)'
    6 =  '6 South Region: East South Central Division (KY, TN, AL, MS)'
    7 =  '7 South Region: West South Central Division (AR, LA, OK, TX)'
    8 =  '8 West Region: Mountain Division (MT, ID, WY, CO, NM, AZ, UT, NV)'
    9 =  '9 West Region: Pacific Division (WA, OR, CA, AK, HI)'
    -9 = '-9 Missing';

    VALUE W000002W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MALE"
      2 = "2 FEMALE"  ;

    VALUE W000005W
     1 = ' 1 Yes'
```

```
   2 = ' 2 No'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

   VALUE R1DRESID
    -1 = '-1 Inapplicable'
    1 = '1 Community '
    2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
    3 = '3 Residential Care Resident not nursing home (FQ only)'
    4 = '4 Nursing Home Resident';

  VALUE W200016W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MEDICAID"
   2 = "2 MEDICARE"
   3 = "3 STATE PROGRAM"
   91 = "91 OTHER (SPECIFY)"   ;

   VALUE W200012W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 REGULAR"
   2 = "2 VARIED"  ;

  VALUE W200061W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SEPARATION OR DIVORCE"
   2 = "2 DECEASED"
   3 = "3 MOVED ELSEWHERE"
   5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
   8 = "8 OTHER REASON"   ;

  VALUE d2hrsmth
   -13= '-13 Deceased '
   -12= '-12 Zero days/wk'
   -11= '-11 Hours missing'
   -10= '-10 Days missing'
   -9 = ' -9 Days and hrs missing'
   -1 = ' -1 Inapplicable'
   -7 = ' -7 RF'
   -8 = ' -8 DK'
    0-<1  ='<1'
    1-<10 =' 1-<10'
   10-<20 ='10-<20'
   20-<30 ='20-<30'
   30-<40 ='30-<40'
```

```
    40-<60 ='40-<60'
    60-<120 ='60-<120'
    120-<180='120-<180'
    180-744='180-744 (24/7)'
     9999='9999 Not codeable, <1 hour/day' ;

  VALUE dhrsmth
    -11= '-11:hours missing'
    -10= '-10:days missing'
    -9 = '-9:days and hrs missing'
    -1 = '-1 Inapplicable'
    -7 = '-7 RF'
    -8 = '-8 DK'
     0-<1  ='<1'
     1-<10 =' 1-<10'
    10-<20 ='10-<20'
    20-<30 ='20-<30'
    30-<40 ='30-<40'
    40-<60 ='40-<60'
    60-<120 ='60-<120'
    120-<180='120-<180'
    180-744='180-744 (24/7)'
     9999='9999 Not codeable, <1 hour/day' ;

 Value dmissadd
-1='-1 Inapplicable'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section';

Value d2mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section';

Value dopage3c
```

# SAS ALGORITHM FOR DEMENTIA

```
-9='-9 Missing'
-8='-8 RF'
-7='-7 DK'
-1='-1 Inapplicable'
 1='1 UNDER 30'
 2='2 30-39'
 3='3 40-49'
 4='4 50-59'
 5='5 60-69'
 6='6 70-79'
 7='7 80-89'
 8='8 90 +';

Value dopagect
-9='-9 Missing'
-8='-8 DK'
-7='-7 RF'
-1='-1 Inapplicable'
 1='1 UNDER 20'
 2='2 20-24'
 3='3 25-29'
 4='4 30-34'
 5='5 35-39'
 6='6 40-44'
 7='7 45-49'
 8='8 50-54'
 9='9 55-59'
10='10 60-64'
11='11 65-69'
12='12 70-74'
13='13 75-79'
14='14 80-84'
15='15 85-89'
16='16 90 +';


VALUE W200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 UNDER 20"
  2 = "2 20-24"
  3 = "3 25-29"
  4 = "4 30-34"
  5 = "5 35-39"
  6 = "6 40-44"
  7 = "7 45-49"
  8 = "8 50-54"
  9 = "9 55-59"
 10 = "10 60-65"
 11 = "11 66-69"
 12 = "12 70-74"
 13 = "13 75-79"
 14 = "14 80-85"
 15 = "15 86-89"
 16 = "16 90-94"
```

```
    17 = "17 95-99"
    18 = "18 100 +"
  ;
    VALUE NumCigs
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    999 = '999 SP smokes less than 1 cigarette / day';


  VALUE dlmlint
    1 = '1 Last month of life interview'
   -1 = '-1 Inapplicable'      ;

  VALUE d2intvra
    1 = '1 65 to 69'
    2 = '2 70 to 74'
    3 = '3 75 to 79'
    4 = '4 80 to 84'
    5 = '5 85 to 89'
    6 = '6 90+'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'       ;

  VALUE dad8dem
    1 = '1 DEMENTIA RESPONSE TO ANY AD8 ITEMS IN PRIOR ROUNDS'
   -1 = '-1 Inapplicable'    ;

  VALUE dwrdinon
 1 = '1 No words remembered'
   -1 = '-1 Inapplicable'
     -9 = '-9 Missing'       ;

  VALUE dwrdirre
    1 = '1 Refused word recall task'
   -1 = '-1 Inapplicable'
       -9 = '-9 Missing'       ;

 VALUE A0001AB
      1 = "1 AM"
      2 = "2 PM"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0002WA
      1 = "1 Yes, there is space to set up the walking course"
      2 = "2 No, there is not space to set up the walking course"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0004WA
      1 = "1 None"
      2 = "2 Cane"
      3 = "3 Walker or rollator"
```

```
         9 = "9 Other, specify"
        -1 = '-1 Inapplicable'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -9 = '-9 Missing';


   VALUE A0004CH
         1 = "1 No, chair stand not completed"
         2 = "2 Yes, chair stand completed"
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';


   VALUE A0008CH
         1 = "1 With arms"
         2 = "2 Without arms"
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';


   VALUE A0014CH
         1 = "1 1 Chair stand completed"
         2 = "2 2 Chair stands completed"
         3 = "3 3 Chair stands completed"
         4 = "4 4 Chair stands completed"
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';


VALUE BA1SS
     1 = '1 Eligible and recorded result for SxS Balance'
     2 = '2 Eligible and no recorded result for SxS Balance'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';


VALUE BA1STAN
     1 = '1 Eligible and recorded result for Semi Tandem Balance'
     2 = '2 Eligible and no recorded result for Semi Tandem Balance'
     3 = '3 Not administered because did not complete prior balance test'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';


VALUE BA1TAN
     1 = '1 Eligible and recorded result for full tandem balance'
     2 = '2 Eligible and no recorded result for full tandem balance'
     3 = '3 Not administered because did not complete prior balance tests'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';


VALUE BA1OP
     1 = '1 Eligible and recorded result for one leg eyes open balance'
     2 = '2 Eligible and no recorded result for one leg eyes open balance'
     3 = '3 Not administered because did not complete prior balance tests'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
```

SAS ALGORITHM FOR DEMENTIA


```
VALUE BA1CL
    1 = '1 Eligible and recorded result for one leg eyes closed balance'
    2 = '2 Eligible and no recorded result for one leg eyes closed balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WA1WLK
    1 = '1 Eligible and recorded result for walking course'
    2 = '2 Eligible and no recorded result for walking course'
    4 = '4 Not Eligible due to exclusion criteria'
    5 = '5 Not Eligible on exclusion criteria but recorded result (SP changed
mind)'
   -1 = '-1 Inapplicable '
   -9 = '-9 Missing';

VALUE CH1SCH
    1 = '1 Eligible and recorded result for single chair stand'
    2 = '2 Eligible and no recorded result for single chair stand'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE CH1RSH
    1 = '1 Eligible and recorded result for repeated chair stand'
    2 = '2 Eligible and no recorded result for repeated chair stand'
    3 = '3 Not administered because did not complete single chair stand w/o
arms'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE GR1GRIP
    1 = '1 Eligible and recorded result for grip strength'
    2 = '2 Eligible and no recorded result for grip strength'
    4 = '4 Not Eligible due to exclusion criteria'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE WC1WAIST
    1 = '1 Eligible and recorded result for waist circumference'
    2 = '2 Eligible and no recorded result for waist circumference'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE PK1PEAK
    1 = '1 Eligible and recorded result for peak air flow'
    2 = '2 Eligible and no recorded result for peak air flow'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE RGT_LFT
   1 = '1 Right'
   2 = '2 Left'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE PERSON
    1 = '1 Interviewer'
    2 = '2 Sample person'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE STAND
    1 = '1 Standing'
    2 = '2 Sitting'
    3 = '3 Lying down'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

VALUE EFFORT
    1 = '1 Full effort'
    2 = '2 Less effort for health reason'
    3 = '3 Less effort for other reason'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
   VALUE WORDREC
    1 = ' 1 LIST 1'
    2 = ' 2 LIST 2'
    3 = ' 3 LIST 3'
   -1 = '-1 Inapplicable '
   -9 = '-9 Missing';
   VALUE WORDRE_N
   -1 = '-1 Inapplicable'
   -2 = '-2 Proxy says cannot ask SP'
   -3 = '-3 Proxy says can ask SP but SP unable to answer'
   -7 = '-7 SP refused activity'
   -9 = '-9 Missing';


        VALUE SP30051W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EXCELLENT"
  2 = "2 VERY GOOD"
  3 = "3 GOOD"
  4 = "4 FAIR"
  5 = "5 POOR"
  6 = "6 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"
 ;
   VALUE SP3019aW
    -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
```

```sas
        7 = "7 JULY"
        8 = "8 AUGUST"
        9 = "9 SEPTEMBER"
       10 = "10 OCTOBER"
       11 = "11 NOVEMBER"
       12 = "12 DECEMBER"
       90 = "90 LAST INTERVIEW INFORMATION INCORRECT"
     ;
   VALUE RACEHISP
          1 = ' 1 White, non-hispanic'
          2 = ' 2 Black, non-hispanic'
          3 = ' 3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic'
          4 = ' 4 Hispanic'
          5 = ' 5 More than one DKRF primary'
          6 = ' 6 DKRF'
         -9 = '-9 Missing';

    VALUE SPPB_MIS
        -7 = '-7 RF'
     -8 = '-8 DK'
     -9 = '-9 Missing'
     -1="-1 Inapplicable"
     1="1 Proxy interview"
     2="2 Missing walk and repeat chair and balance"
     3="3 Missing walk and repeat chair"
     4="4 Missing walk and balance"
     5="5 Missing repeat chair and balance"
     6="6 Missing walk"
     7="7 Missing repeat chair"
     8="8 Missing balance"
     9="9 No space"
     10="10 No chair"
     11="11 No space walk and no chair"
     12="12 No space walk and non-safety missing"
     13="13 No chair and non-safety missing"
     14="14 Non-safety walk"
     15="15 Non-safety chair"
     16="16 Non-safety balance"
     17="17 Non-safety walk and chair"
     18="18 Non-safety walk and balance"
     19="19 Non-safety chair and balance"
     20="20 Non-safety walk and chair and balance";

    VALUE QUARTILES
-9="-9 Missing"
-1="-1 Inapplicable"
;
   VALUE SP30025W
        -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
      2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
      3 = "3 MOBILE HOME OR TRAILER"
```

```
        4 = "4 MULTI-UNIT (2+) BUILDING"
        91 = "91 OTHER (SPECIFY)"
     ;
        VALUE SP30046W
            -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
        1 = "1 AT SP'S HOME"
          2 = "2 IN A HOSPITAL"
          3 = "3 IN A NURSING HOME"
          4 = "4 IN A HOSPICE RESIDENCE"
          5 = "5 AT SOMEONE ELSE'S HOME"
          91 = "91 SOMEWHERE ELSE (SPECIFY)"
     ;
        VALUE SP30076W
            -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
          1 = "1 YES"
          2 = "2 NO"
          7 = "7 YES, DOESNT KNOW HOW TO USE"
     ;
        VALUE W300151W
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
         1 = "1 VERY GOOD"
         2 = "2 GOOD"
         3 = "3 FAIR"
         4 = "4 POOR"
        5 = "5 VERY POOR"  ;

        VALUE SP30076H
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
       95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM DAY TO DAY"  ;
        VALUE SP30076G
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
       95 = "95 NO USUAL TIME OR DIFFERENT FROM DAY TO DAY"  ;
            VALUE SP30076I
             -7 = '-7 RF'
             -8 = '-8 DK'
             -1 = '-1 Inapplicable'
             -9 = '-9 Missing'
           95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM NIGHT TO NIGHT"
  ;
            VALUE SP30076J
             -7 = '-7 RF'
             -8 = '-8 DK'
```

```
             -1 = '-1 Inapplicable'
             -9 = '-9 Missing'
             95 = "95 NO USUAL TIME OR DIFFERENT FROM NIGHT TO NIGHT"  ;
               VALUE SP30076K
               -7 = '-7 RF'
               -8 = '-8 DK'
               -1 = '-1 Inapplicable'
               -9 = '-9 Missing'
                 0 = "0 LESS THAN AN HOUR"
             90 = "90 FELL ASLEEP RIGHT AWAY"
             95 = "95 NO USUAL AMOUNT OF TIME TO FALL ASLEEP OR DIFFERENT FROM
NIGHT TO NIGHT"  ;
               VALUE SP30155W
               -7 = '-7 RF'
               -8 = '-8 DK'
               -1 = '-1 Inapplicable'
               -9 = '-9 Missing'
                1 = "1 NAPS PLANNED"
                2 = "2 FELL ASLEEP WITHOUT MEANING TO"
                3 = "3 BOTH (SOME PLANNED/SOME NOT)"  ;
         VALUE SP30120W
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
           1 = "1 OFTEN"
           2 = "2 SOMETIMES"
           3 = "3 RARELY"
           4 = "4 NEVER"  ;
Value HOURSF
 -13='-13 SP deceased/section not administered'
 -12='-12 Valid skip/staff'
 -11='-11 Hours missing'
 -10='-10 Days missing'
  -9='-9 Days and hrs missing'
  -1='-1 Inapplicable'
  0-  1='0-<1'
 1.01- 10='1-<10'
10.01- 20='10-<20'
20.01- 30='20-<30'
30.01-40='30-<40'
40.01-60='40-<60'
60.01-120='60-<120'
120.01-180='120-<180'
180.01-744='180-744 (24/7)'
9999='9999 Not codeable, <1 hour/day';
         VALUE SP30120W
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
           1 = "1 OFTEN"
           2 = "2 SOMETIMES"
           3 = "3 RARELY"
           4 = "4 NEVER"
         ;
         VALUE SP30118W
```

```
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 A LOT"
  2 = "2 SOME"
  3 = "3 A LITTLE"
  4 = "4 NOT AT ALL"  ;
VALUE SP30141W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "less than $27,600,"
  2 = "$27,600-$41,999,"
  3 = "$42,000-$63,999,"
  4 = "$64,000-$107,999, or"
  5 = "$108,000 or more?"  ;
VALUE SP30142W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "less than $14,000,"
  2 = "$14,000-$21,999,"
  3 = "$22,000-$35,999,"
  4 = "$36,000-$48,999, or"
  5 = "$49,000 or more?"  ;
VALUE INVENT
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
        104="104-Arthritis"
        107="107-Lung Disease"
        109="109-Dementia or Alzheimer's disease"
        110="110-Cancer"
        113="113-Other serious disease, illness, health problem"
        114="114-Knee surgery/problem"
        115="115-Hip repair or replacement/problem"
        117="117-Back or Spine Surgery/problem"
        121="121-Sleep Problems"
        201="201-Hearing problems"
        202="202-Sight problems"
        205="205-Pain"
        301="301-Breathing problems"
        302="302-Upper body strength movement"
        303="303-Lower body strength movement"
        304="304-Low energy"
        305="305-Balance or coordination problems"
        306="306-Walking distances"
        307="307-Climbing stairs"
        308="308-Lifting and carrying items"
        309="309-Kneeling"
        310="310-Bending"
        311="311-Reaching"
        312="312-Opening Jars"
```

```
            313="313-Grasping"
            401="401-Memory"
            501="501-Getting out of bed"
            502="502-Getting around inside"
            503="503-Getting outside"
            504="504-Travel/transportation"
            601="601-Eating"
            602="602-Washing"
            603="603-Toileting"
            604="604-Dressing"
            605="605-Grooming"
            701="701-Laundry"
            702="702-Shopping"
            703="703-Cooking"
            705="705-Money matters"
            706="706-Indoor cleaning and maintenance"
            707="707-Outdoor cleaning and maintenance"
            801="801-Medications"
            802="802-Doctor visits"
            804="804-Other medical self-care"
            1211="1211-Working"
            1442="1442-Walking/exercising pets"
            1451="1451-Vehicle repair and maintenance"
            1461="1461-Appliance tool, and toy use, set-up, repair, &
maintenance"
            1462="1462-Computer use, set-up, repair, maintenance, and
education"
            1473="1473-Household organization"
            1512="1512-Looking after someone else"
            1611="1611-Socializing and communicating with others-in person"
            1612="1612-Socializing and communication with others by talking
on telephone"
            1613="1613-Attending or hosting party, wedding or social
occasions"
            1614="1614-Reading and sorting through the mail"
            1621="1621-Watch television and movies"
            1631="1631-Games & puzzles"
            1641="1641-Arts and crafts, collecting, and hobbies, making
music"
            1642="1642-Reading"
            1643="1642-Writing (personal, not on computer)"
            1644="1644-Listening to recorded music or radio"
            1711="1711-Playing/practicing sports or taking physical activity
class/lessons"
            1712="1712-Walking/jogging for exercise or pleasure or working
out"
            1713="1713-Other outdoor recreation activities"
            1813="1813-Religious & spiritual volunteer activities"
            1901="1901-Other, no existing code"
            1998="1998-Don't know"
            1999="1999-Refused/blank";
VALUE W500058W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MONTHS"
```

```
        2 = "2 YEARS"   ;
VALUE W500103W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
       1 = "1 YES, A YEAR OR MORE"
       2 = "2 NO, LESS THAN A YEAR"  ;
  VALUE W500105W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
       1 = "1 MONTH AND YEAR"
       2 = "2 NUMBER OF MONTHS AGO"
       3 = "3 NUMBER OF YEARS AGO"
       4 = "4 AGE WHEN LAST DROVE"
       7 = "7 NEVER DROVE"   ;
VALUE W500123W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
       1 = "1 STILL FAVORITE ACTIVITY"
       2 = "2 HAS A NEW FAVORITE ACTIVITY"
      95 = "95 NO FAVORITE ACTIVITY"    ;
VALUE W500124W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
       1 = "1 LESS THAN 1 MONTH"
       2 = "2 1 TO 3 MONTHS"
       3 = "3 4 TO 5 MONTHS"
       4 = "4 6 OR MORE MONTHS" ;
  VALUE W500125W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN 1 WEEK"
    2 = "2 1 TO 2 WEEKS"
    3 = "3 3 TO 4 WEEKS"  ;
  VALUE W500126W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 A FRACTURE, SPRAIN, OR INJURY"
    2 = "2 A HIP, KNEE, OR OTHER JOINT REPLACEMENT"
    3 = "3 ANOTHER MUSCULOSKELETAL CONDITION"
    4 = "4 A STROKE OR TIA"
    5 = "5 A HEART ATTACK"
    6 = "6 ANOTHER HEART CONDITION OR VASCULAR DISEASE"
    7 = "7 A BREATHING CONDITION"
    8 = "8 A NEUROLOGICAL CONDITION LIKE MS OR PARKINSONS"
    9 = "9 CANCER"
```

```
    94 = "94 ANOTHER CONDITION (SPECIFY)"
    95 = "95 NO MEDICAL CONDITION (IF VOLUNTEERED)" ;
  VALUE W500128W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
    1 = "1 DIFFICULTY CHEWING OR SWALLOWING"
    2 = "2 DIFFICULTY SPEAKING OR BEING UNDERSTOOD"
    3 = "3 PAIN LEVEL"
    4 = "4 PROBLEM WITH BREATHING"
    5 = "5 PROBLEM WITH STRENGTH (MUSCLE WEAKNESS)"
    6 = "6 PROBLEM WITH MOVEMENT (RANGE OF MOTION)"
    7 = "7 LOW ENERGY LEVEL"
    8 = "8 PROBLEM WITH BALANCE OR COORDINATION"
    9 = "9 PROBLEM WITH FALLS"
    10 = "10 PROBLEM WITH MEMORY"
    95 = "95 NONE OF THESE PROBLEMS"  ;
  VALUE W500131W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
    1 = "1 AS AN OVERNIGHT PATIENT IN A HOSPITAL, NURSING HOME OR REHAD
FACILITY"
    2 = "2 AT AN OUTPATIENT CENTER, CLINIC, DRs OR THERAPISTs OFFICE"
    3 = "3 HOME"
    4 = "4 SOMEWHERE ELSE"  ;
  VALUE W500132W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
    1 = "1 IMPROVED"
    2 = "2 GOT WORSE"
    3 = "3 STAYED ABOUT THE SAME"
    4 = "4 VARIED/UP AND DOWN (IF VOLUNTEERED)"  ;
 VALUE W500133W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
  1 = "1 A LOT"
  2 = "2 SOMEWHAT"
  3 = "3 A LITTLE"  ;

  VALUE W500137W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
    1 = "1 WELL OFF"
    2 = "2 ABOVE AVERAGE"
    3 = "3 AVERAGE"
    4 = "4 BELOW AVERAGE"
    5 = "5 POOR"  ;
VALUE W500010W
```

```
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MOTHER ONLY"
      2 = "2 FATHER ONLY"
      3 = "3 ANOTHER RELATIVE"
      4 = "4 NON-RELATIVES"
      5 = "5 VARIED/MOVED AROUND"  ;
  VALUE W500142W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 VERY WELL"
      2 = "2 WELL"
      3 = "3 NOT WELL"
      4 = "4 NOT AT ALL"  ;
  VALUE W500147W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 NUMBER OF YEARS"
      2 = "2 AGE"  ;
  VALUE W500150W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 ENTER PAYCHECK AMOUNT"
      2 = "2 ENTER PAY PER HOUR"
      3 = "3 ENTER PAY PER DAY"  ;
  VALUE W500151W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 ENTER OCCUPATION"
      2 = "2 NEVER WORKED ENTIRE LIFE"
      3 = "3 HOMEMAKER/RAISED CHILDREN/WORKED IN THE HOME"  ;
  VALUE W500152W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 SAME KIND OF WORK"
      2 = "2 SOMETHING DIFFERENT"  ;
  VALUE W500160W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MAIL"
      2 = "2 DIRECT DEPOSIT"
      3 = "3 PREPAID CARD"  ;
  VALUE W500165W
```

```
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 ENTER COMBINED AMOUNT"
    2 = "2 ENTER SP AND SPOUSE/PARTNER AMOUNTS SEPARATELY"  ;
  VALUE W500166W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $1,300"
    2 = "2 $1,300 TO LESS THAN $1,700"
    3 = "3 $1,700 TO LESS THAN $2,200"
    4 = "4 $2,200 TO LESS THAN $2,600"
    5 = "5 $2,600 OR MORE"  ;
  VALUE W500167W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $700"
    2 = "2 $700 TO LESS THAN $1,000"
    3 = "3 $1,000 TO LESS THAN $1,300"
    4 = "4 $1,300 TO LESS THAN $1,600"
    5 = "5 $1,600 OR MORE"  ;
  VALUE W500168W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $300"
    2 = "2 $300 TO LESS THAN $700"
    3 = "3 $700 TO LESS THAN $1,000"
    4 = "4 $1,000 OR MORE"   ;
  VALUE W500169W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $100"
    2 = "2 $100 TO LESS THAN $200"
    3 = "3 $200 TO LESS THAN $400"
    4 = "4 $400 TO LESS THAN $700"
    5 = "5 $700 OR MORE"  ;
  VALUE W500170W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $1,000"
    2 = "2 $1,000 TO LESS THAN $1,400"
    3 = "3 $1,400 TO LESS THAN $1,800"
    4 = "4 $1,800 TO LESS THAN $2,200"
    5 = "5 $2,200 OR MORE"  ;
  VALUE W500171W
   -7 = '-7 RF'
```

```
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $500"
   2 = "2 $500 TO LESS THAN $700"
   3 = "3 $700 TO LESS THAN $900"
   4 = "4 $900 TO LESS THAN $1,100"
   5 = "5 $1,100 OR MORE"  ;
VALUE W500172W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $600"
   2 = "2 $600 TO LESS THAN $1,300"
   3 = "3 $1,300 TO LESS THAN $2,100"
   4 = "4 $2,100 TO LESS THAN $5,900"
   5 = "5 $5,900 OR MORE"  ;
VALUE W500173W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $400"
   2 = "2 $400 TO LESS THAN $900"
   3 = "3 $900 TO LESS THAN $1,600"
   4 = "4 $1,600 TO LESS THAN $3,800"
   5 = "5 $3,800 OR MORE"  ;
VALUE W500174W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $34,000"
   2 = "2 $34,000 TO LESS THAN $82,000"
   3 = "3 $82,000 TO LESS THAN $175,000"
   4 = "4 $175,000 TO LESS THAN $413,000"
   5 = "5 $413,000 OR MORE"   ;
VALUE W500175W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $20,000"
   2 = "2 $20,000 TO LESS THAN $47,000"
   3 = "3 $47,000 TO LESS THAN $92,000"
   4 = "4 $92,000 TO LESS THAN $218,000"
   5 = "5 $218,000 OR MORE"   ;
VALUE W500176W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $200"
   2 = "2 $200 TO LESS THAN $500"
   3 = "3 $500 TO LESS THAN $1,000"
   4 = "4 $1,000 TO LESS THAN $2,500"
```

```
     5 = "5 $2,500 OR MORE"   ;
   VALUE W500177W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $100"
     2 = "2 $100 TO LESS THAN $300"
     3 = "3 $300 TO LESS THAN $700"
     4 = "4 $700 TO LESS THAN $1,700"
     5 = "5 $1,700 OR MORE"   ;
   VALUE W500178W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $2,400"
     2 = "2 $2,400 TO LESS THAN $6,000"
     3 = "3 $6,000 TO LESS THAN $12,000"
     4 = "4 $12,000 TO LESS THAN $30,000"
     5 = "5 $30,000 OR MORE"   ;
   VALUE W500179W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $1,200"
     2 = "2 $1,200 TO LESS THAN $3,600"
     3 = "3 $3,600 TO LESS THAN $8,400"
     4 = "4 $8,400 TO LESS THAN $20,400"
     5 = "5 $20,400 OR MORE"   ;
   VALUE W500180W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $9,000"
     2 = "2 $9,000 TO LESS THAN $18,000"
     3 = "3 $18,000 TO LESS THAN $93,000"
     4 = "4 $93,000 TO LESS THAN $350,000"
     5 = "5 $350,000 OR MORE"   ;
   VALUE W500181W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $600"
     2 = "2 $600 TO LESS THAN $5,000"
     3 = "3 $5,000 TO LESS THAN $16,000"
     4 = "4 $16,000 TO LESS THAN $62,000"
     5 = "5 $62,000 OR MORE"   ;
   VALUE W500182W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $8,000"
```

```
     2 = "2 $8,000 TO LESS THAN $62,000"
     3 = "3 $62,000 TO LESS THAN $192,000"
     4 = "4 $192,000 TO LESS THAN $213,000"
     5 = "5 $213,000 OR MORE"   ;
   VALUE W500183W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $300"
     2 = "2 $300 TO LESS THAN $2,500"
     3 = "3 $2,500 TO LESS THAN $8,000"
     4 = "4 $8,000 TO LESS THAN $37,000"
     5 = "5 $37,000 OR MORE"   ;
   VALUE W500184W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $11,000"
     2 = "2 $11,000 TO LESS THAN $25,000"
     3 = "3 $25,000 TO LESS THAN $50,000"
     4 = "4 $50,000 TO LESS THAN $108,000"
     5 = "5 $108,000 OR MORE"   ;
   VALUE W500185W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $2,000"
     2 = "2 $2,000 TO LESS THAN $7,000"
     3 = "3 $7,000 TO LESS THAN $17,000"
     4 = "4 $17,000 TO LESS THAN $57,000"
     5 = "5 $57,000 OR MORE"   ;
   VALUE W500186W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $8,000"
     2 = "2 $8,000 TO LESS THAN $13,000"
     3 = "3 $13,000 TO LESS THAN $28,000"
     4 = "4 $28,000 TO LESS THAN $54,000"
     5 = "5 $54,000 OR MORE"   ;
   VALUE W500187W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 LESS THAN $500"
     2 = "2 $500 TO LESS THAN $1,900"
     3 = "3 $1,900 TO LESS THAN $5,000"
     4 = "4 $5,000 TO LESS THAN $20,000"
     5 = "5 $20,000 OR MORE"   ;
   VALUE W500188W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $200"
   2 = "2 $200 TO LESS THAN $1,000"
   3 = "3 $1,000 TO LESS THAN $4,000"
   4 = "4 $4,000 TO LESS THAN $16,000"
   5 = "5 $16,000 OR MORE"  ;
VALUE W500189W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $400"
   2 = "2 $400 TO LESS THAN $1,000"
   3 = "3 $1,000 TO LESS THAN $2,000"
   4 = "4 $2,000 TO LESS THAN $11,000"
   5 = "5 $11,000 OR MORE"  ;
VALUE W500190W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $30,000"
   2 = "2 $30,000 TO LESS THAN $101,000"
   3 = "3 $101,000 TO LESS THAN $247,000"
   4 = "4 $247,000 TO LESS THAN $703,000"
   5 = "5 $703,000 OR MORE"  ;
VALUE W500191W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $18,000"
   2 = "2 $18,000 TO LESS THAN $68,000"
   3 = "3 $68,000 TO LESS THAN $122,000"
   4 = "4 $122,000 TO LESS THAN $293,000"
   5 = "5 $293,000 OR MORE"  ;
VALUE W500192W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $3,600"
   2 = "2 $3,600 TO LESS THAN $12,000"
   3 = "3 $12,000 TO LESS THAN $25,000"
   4 = "4 $25,000 TO LESS THAN $64,000"
   5 = "5 $64,000 OR MORE"  ;
VALUE W500193W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 LESS THAN $3,600"
   2 = "2 $3,600 TO LESS THAN $7,200"
   3 = "3 $7,200 TO LESS THAN $14,000"
   4 = "4 $14,000 TO LESS THAN $38,000"
   5 = "5 $38,000 OR MORE"  ;
```

```
VALUE W500194W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $30,000"
  2 = "2 $30,000 TO LESS THAN $43,000"
  3 = "3 $43,000 TO LESS THAN $66,000"
  4 = "4 $66,000 TO LESS THAN $109,000"
  5 = "5 $109,000 OR MORE"  ;
VALUE W500195W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $18,000"
  2 = "2 $18,000 TO LESS THAN $22,000"
  3 = "3 $22,000 TO LESS THAN $36,000"
  4 = "4 $36,000 TO LESS THAN $56,000"
  5 = "5 $56,000 OR MORE" ;
VALUE W500209W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 CANT DO - DONT DO"  ;
VALUE W500196W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $2,500"
  2 = "2 $2,500 TO LESS THAN $5,000"
  3 = "3 $5,000 TO LESS THAN $10,000"
  4 = "4 $10,000 TO LESS THAN $20,000"
  5 = "5 $20,000 TO LESS THAN $50,000"
  6 = "6 $50,000 OR MORE"  ;
VALUE dage2us
    0 = "0 Less than age 1"
  997 = "997 Born in US"
 -8 = "-8 DK"
 -7 = "-7 RF"
 -1 = "-1 Inapplicable";
VALUE locsp
 -9 ="-9 MISSING"
 -8 ="-8 DK"
 -7 ="-7 RF"
 -1 ="-1 Inapplicable"
  1 = "1 Independent Living"
  2 = "2 Assisted Living"
  3 = "3 Special Care Unit"
  4 = "4 Nursing Home"
  8 = "8 Not Reported" ;

  VALUE resid
```

```
    -9 = '-9 Missing'
        -8 = "-8 DK"
        -7 = "-7 RF"
        -1 = "-1 Inapplicable"
        1 = "Community"
        2 = "Residential care not nursing home (SP interview)"
        3 = "Residential care not nursing home (FQ only)"
        4 = "Nursing home (SP interview)"
        5 = "Nursing home (FQ only)"
        6 = "Deceased"
        7 = "Residential care not nursing home in R1 and R2 (FQ only)"
        8 = "Nursing home in R1 and R2 (FQ only)";

    VALUE  residlml
        1 = "1 Community"
        2 = "2 Residential care"
        -1 = "-1 Inapplicable"
    -9 = '-9 Missing';

  VALUE SP50139W
    1 = "1 White/Caucasian"
    2 = "2 Black/African American"
    3 = "3 Other"
      -7 = '-7 RF'
      -8 = '-8 DK'
    -9 = '-9 Missing';

  VALUE Locat15w
        1= "1 Lives in same City and State as at age 15"
        2= "2 Lives in same state but different City (or DKRF city) as age
15"
        3= "3 Does not live in same State as age 15"
      -1= "-1 Inapplicable"
      -7 = '-7 RF'
      -8 = '-8 DK'
        -9 = '-9 Missing';
  Value  dresnew
        1 = "1 same residence as last int"
        2 = "2 new residence since last int"
      -1= "-1 Inapplicable"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -9 = '-9 Missing';

  Value dcontnew
        1 = "1 Continuing sample from R1"
        2 = "2 New sample in R5"
      -1= "-1 Inapplicable"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -9 = '-9 Missing';

    VALUE DMDDEVYR
      1 = ' 1 No Mobility device use in last year/since last interview'
      2 = ' 2 Mobility device use in last year/since last interview'
      -1 = '-1 Inapplicable '
      -7  = '-7 RF'
```

```
  -8  = '-8 DK'
  -9 = '-9 Missing';

VALUE DMDEVST
  0 = '0 less than 1 month of mobility device use'
  1 = '1 month of mobility device use'
  2 = '2 months of mobility device use'
  3 = '3 months of mobility device use'
  4 = '4 months of mobility device use'
  5 = '5 months of mobility device use'
  6 = '6 months of mobility device use'
  7 = '7 months of mobility device use'
  8 = '8 months of mobility device use'
  9 = '9 months of mobility device use'
 10 = '10 months of mobility device use'
 11 = '11 months of mobility device use'
 -7 = '-7 used last month but RF number of months of use in year'
 -8 = '-8 used last month but DK number of months of use in year'
 -1 = '-1 Inapplicable '
  -2 = '-2 Not asked of continuing sample';

VALUE DMDEVEND
    0 = '0 Between 11 and 12 months since device use ended'
  1 = '1 month since mobility device use ended'
  2 = '2 months since mobility device use ended'
  3 = '3 months since mobility device use ended'
  4 = '4 months since mobility device use ended'
  5 = '5 months since mobility device use ended'
  6 = '6 months since mobility device use ended'
  7 = '7 months since mobility device use ended'
  8 = '8 months since mobility device use ended'
  9 = '9 months since mobility device use ended'
 10 = '10 months since mobility device use ended'
 11 = '11 months since mobility device use ended'
 -7 = '-7 no use last month and RF number of months since device use
ended'
 -8 = '-8 no use last month and DK number of months since device use
ended'
 -1 = '-1 Inapplicable '
  -2 = '-2 Not asked of continuing sample' ;
VALUE DMDHLPYR
  1 = " 1 No mobility help in last year/since last interview"
  2 = " 2 Mobility help in last year/since last interview"
 -7 = " -7 RF"
 -8 = " -8 DK"
 -1 = " -1 Inapplicable "
        -2 = '-2 Not asked of continuing sample' ;

VALUE DMDHLPST
  0 = '0 less than 1 month of help'
  1 = '1 month of help'
  2 = '2 months of help'
  3 = '3 months of help'
  4 = '4 months of help'
  5 = '5 months of help'
  6 = '6 months of help'
  7 = '7 months of help'
```

```
  8 = '8 months of help'
  9 = '9 months of help'
 10 = '10 months of help'
 11 = '11 months of help'
 -7 = '-7 help last month but RF number of months of help in year'
 -8 = '-8 help last month but DK number of months of help in year'
-1 = " -1 Inapplicable "
-2 = " -2 Not asked of continuing sample ";
 VALUE DMDHLPEN
  0 = '0 less than 1 month since help ended'
  1 = '1 month since help ended'
  2 = '2 months since help ended'
  3 = '3 months since help ended'
  4 = '4 months since help ended'
  5 = '5 months since help ended'
  6 = '6 months since help ended'
  7 = '7 months since help ended'
  8 = '8 months since help ended'
  9 = '9 months since help ended'
 10 = '10 months since help ended'
 11 = '11 months since help ended'
 -7 = '-7 no help last month and RF number of months since help ended'
 -8 = '-8 no help last month and DK number of months since help ended'
 -1 = '-1 Inapplicable '
-2 = '-2 Not asked of continuing sample';
 VALUE DMHLPYRS
  0  = '0 none or less than 1 year'
 997 = '997 since birth'
 -7  = '-7 RF'
 -8  = '-8 DK'
 -1  = '-1 Inapplicable '
 -2 = '-2 Not asked of continuing sample'
-9  = '-9 Missing';
 VALUE DSDHLPYR
 1 = ' 1 No self care help in last year/since last interview'
 2 = ' 2 Self care help in last year/since last interview'
-1 = '-1 Inapplicable'
-7 = '-7 DK'
-8 = '-8 RF'
-9 = '-9 Missing';
 VALUE DSHLPND
          0 = ' 0 Between 11 and 12 months since self care help ended'
          1 = '1 Month since self care help ended'
          2 = '2 Months since self care help ended'
          3 = '3 Months since self care help ended'
          4 = '4 Months since self care help ended'
          5 = '5 Months since self care help ended'
          6 = '6 Months since self care help ended'
          7 = '7 Months since self care help ended'
          8 = '8 Months since self care help ended'
          9 = '9 Months since self care help ended'
          10 = '10 Months since self care help ended'
          11 = '11 Months since self care help ended'
     -7 = '-7 No help last month and RF number of months since help ended'
     -8 = '-8 No help last month and DK number of months since help ended'
     -1 = '-1 Inapplicable'
          -2 = '-2 Not asked of continuing sample'
```

```
        -9 = '-9 Missing'    ;

    VALUE DSHLPYRS
        0 = ' 0 None or less than 1 year of self care help'
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
         -2 = '-2 Not asked of continuing sample'
       -9 = '-9 Missing'
        997 = '997 since birth';
    VALUE SP5RH7W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
          1 = "1 As an overnight patient in a hospital, nursing home, or
rehab facility"
          2 = "2 At an outpatient center, clinic, or doctors office or
therapists office"
       3 = "3 At home"
       4 = "4 Somewhere else"  ;
    VALUE SP5LF5W
       -7 = '-7 RF'
       -8 = '-8 DK'
       -1 = '-1 Inapplicable'
       -9 = '-9 Missing'
      997 = "997 Number of hours vary each week"  ;

    VALUE  DMH_GRP
          1 = "1 Help started"
          2 = "2 Help ended"
          3 = "3 Help both interviews with gap"
          4 = "4 Help both interviews with no gap"
          5 = "5 Help between interviews only"
          6 = "6 No help either interview or between"
         11 = "11 Help started (month started missing)"
         21 = "21 Help ended (month ended missing)"
         41 = "41 Help both interviews (DK whether gap)"
         61 = "61 No help either interview (DK whether help between)"
         -9 = "-9 Missing"
         -1 = "-1 Inapplicable"
           -3 ="-3 Not asked of new sample"
       -999 = "-999 Not determined" ;

     VALUE  DMU_GRP
          1 = "1 Use started"
          2 = "2 Use ended"
          3 = "3 Use both interviews with gap"
          4 = "4 Use both interviews with no gap"
          5 = "5 Use between interviews only "
          6 = "6 No use either interview or between"
         11 = "11 Use started (month started missing)"
         21 = "21 Use ended (month ended missing)"
         41 = "41 Use both interviews (DK whether gap)"
         61 = "61 No use either interview (DK whether use between)"
         -9 = "-9 Missing"
         -1 = "-1 Inapplicable"
```

```
            -3 = "-3 Not asked of new sample"
      -999 = "-999 Not determined" ;

        VALUE   DMDS5FLG
       -1 = "-1 Inapplicable"
             -3 = "-3 Not asked of new sample"
        0 = "0 No current SP interview"
        1 = "1 No SP interview last round"
        2 = "2 Died and month death missing"
        3 = "3 Died <=1 month after last interview"
        4 = "4 Died 12-13 months after last interview"
        7 = "7 Skipped 1 or more help questions" ;
        VALUE   DS_GRP
        1 = "1 Help started"
        2 = "2 Help ended"
        3 = "3 Help both interviews with gap"
        4 = "4 Help both interviews with no gap"
        5 = "5 Help between interviews only"
        6 = "6 No help either interview or between"
       11 = "11 Help started (month started missing)"
       21 = "21 Help ended (month ended missing)"
       41 = "41 Help both interviews (DK whether gap)"
       61 = "61 No help either interview (DK whether help between)"
       -9 = "-9 Missing"
       -1 = "-1 Inapplicable"
             -3 = "-3 Not asked of new sample"
      -999 = "-999 Not determined" ;


        value groupmo 1 = "1 Started"
            2 = "2 Ended"
              3 = "3 Both times with gap"
              4 = "4 Both times no gap"
                  5 = "5 Between only (end missing)"
              6 = "6 Neither time AND not between"
             11 = "11 Started (start missing)"
             21 = "21 Ended (end missing)"
             41 = "41 Both times (gap missing)"
             61 = "61 Neither time (between missing)"
                  -1= "-1 Inapplicable"
                     -3="-3 Not asked of new sample"
             -7= "-7 RF"
             -8= "-8 DK"
             -9= "-9 Missing"
          -999 = "-999 Not determined"
           -99 = "-99 Partial" ;

           VALUE nw_mths  0 = "0 Less than 1 month"
        1 ="1 month"
        2 ="2 months"
        3 ="3 months"
        4 ="4 months"
        5 ="5 months"
        6 ="6 months"
        7 ="7 months"
        8 ="8 months"
        9 ="9 months"
```

```
            10= "10 months"
            11= "11 months"
            12= "12 months"
            13= "13 months"
            14= "14 months"
            15= "15 months"
            16= "16 months"
            17= "17 months"
            18= "18 months"
            19= "19 months"
            20= "20 months"
            90= "90 Last round disputed"
            999= "999 No months"
            -1= "-1 Inapplicable"
                -3="-3 Not asked of new sample"
            -7= "-7 RF"
            -8= "-8 DK"
            -9= "-9 Missing"
            -10= "-10 Not ascertained"
            -12= "-12 Outside of range (greater than months between
interviews)"
            -13= "-13 None"
            -999= "-999 Not determined"
            -99= "-99 Partial";
                VALUE chntinhh
            1 ="1 Yes, not in household"
            -1= "-1 Inapplicable"
            -7= "-7 RF"
            -8= "-8 DK"
            -9= "-9 Missing";
            Value d4mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section'
15='15 no flags and added at HL section'
16='16 no flags and added at SL section';
            VALUE HA5DWHL
                1 = "1 Meals on wheels last month"
                -1 = "-1 Inapplicable";
            VALUE HA5DTKO
                1 = "1 Restaurant or take out last month"
                -1 = "-1 Inapplicable";
            VALUE RE5BLDG
             -7 = '-7 RF'
```

```
                   -8 = '-8 DK'
                   -1 = '-1 Inapplicable'
                   -9 = '-9 Missing'
                    1 = "1 Building has one floor"
                    2 = "2 Building has multiple floors"    ;
VALUE S000163W
     1 = "1 PRIVACY MORE IMPORTANT"
     2 = "2 SOCIALIZE MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
                  -1= "-1 Inapplicable"
                  -7= "-7 RF"
                  -8= "-8 DK"
                  -9= "-9 Missing";

   VALUE S000164W
     1 = "1 SOCIALIZE MORE IMPORTANT"
     2 = "2 PRIVACY MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
                  -1= "-1 Inapplicable"
                  -7= "-7 RF"
                  -8= "-8 DK"
                  -9= "-9 Missing";

   VALUE S000165W
     1 = "1 BEING SAFE MORE IMPORTANT"
     2 = "2 HAVING CHOICES MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
    -1= "-1 Inapplicable"
    -7= "-7 RF"
    -8= "-8 DK"
    -9= "-9 Missing"  ;

   VALUE S000166W
     1 = "1 HAVING CHOICES MORE IMPORTANT"
     2 = "2 BEING SAFE MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
    -1= "-1 Inapplicable"
    -7= "-7 RF"
    -8= "-8 DK"
    -9= "-9 Missing"  ;

   VALUE S000167W
     1 = "1 PRIVACY MORE IMPORTANT"
     2 = "2 BEING SAFE MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
     -1= "-1 Inapplicable"
    -7= "-7 RF"
    -8= "-8 DK"
    -9= "-9 Missing" ;

   VALUE S000168W
     1 = "1 BEING SAFE MORE IMPORTANT"
     2 = "2 PRIVACY MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
     -1= "-1 Inapplicable"
    -7= "-7 RF"
    -8= "-8 DK"
```

```
 -9= "-9 Missing" ;

VALUE S000169W
  1 = "1 SOCIALIZING MORE IMPORTANT"
  2 = "2 HAVING CHOICES MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing"  ;

VALUE S000170W
  1 = "1 HAVING CHOICES MORE IMPORTANT"
  2 = "2 SOCIALIZING MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing"  ;

VALUE S000171W
  1 = "1 PRIVACY MORE IMPORTANT"
  2 = "2 HAVING CHOICES MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing" ;

VALUE S000172W
  1 = "1 HAVING CHOICES MORE IMPORTANT"
  2 = "2 PRIVACY MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing" ;

VALUE S000173W
  1 = "1 SOCIALIZING MORE IMPORTANT"
  2 = "2 BEING SAFE MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing"  ;

VALUE S000174W
  1 = "1 BEING SAFE MORE IMPORTANT"
  2 = "2 SOCIALIZING MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing" ;

VALUE S000175W
```

# SAS ALGORITHM FOR DEMENTIA

```
   1 = "1 LESS THAN 1 HOUR"
   2 = "2 MORE THAN 1 HOUR"
   3 = "3 ABOUT 1 HOUR"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing"  ;

  VALUE S000176W
   1 = "1 LESS THAN 15 MINUTES"
   2 = "2 15 MINUTES"
   3 = "3 BETWEEN 15 AND 30 MINUTES"
   4 = "4 30 MINUTES"
   5 = "5 BETWEEN 30 AND 45 MINUTES"
   6 = "6 45 MINUTES"
   7 = "7 BETWEEN 45 AND 60 MINUTES"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing" ;

  VALUE S000177W
   1 = "1 ABOUT 1  HOURS"
   2 = "2 ABOUT 2 HOURS"
   3 = "3 ABOUT 3 HOURS"
   4 = "4 ABOUT 4 HOURS"
   5 = "5 ABOUT 5 HOURS"
   6 = "6 6 OR MORE HOURS"
  -1= "-1 Inapplicable"
  -7= "-7 RF"
  -8= "-8 DK"
  -9= "-9 Missing" ;

    VALUE W600001W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 STRONGLY AGREE"
   2 = "2 AGREE"
   3 = "3 DISAGREE"
     4 = "4 STRONGLY DISAGREE";
    VALUE W600002W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   0 = "0 NONE"
   1 = "1 1-2"
   2 = "2 3-5"
   3 = "3 6-10"
   4 = "4 11-15"
   5 = "5 16-20"
   6 = "6 MORE THAN 20";
    VALUE W600003W
  -7 = '-7 RF'
  -8 = '-8 DK'
```

# SAS ALGORITHM FOR DEMENTIA

```
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 A (picture showing 4 pills)"
 2 = "2 B (picture showing 8 pills)"
 3 = "3 C (picture showing 12 pills)"
 4 = "4 D (picture showing 16 pills)"
 5 = "5 E (picture showing 20 pills)"
 6 = "6 F (picture showing 24 pills)";


     VALUE YNF
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 Yes"
 2 = "2 No";
     VALUE FQ6DLOCA
  1 = "1 Independent Living"
 2 = "2 Assisted Living"
 3 = "3 Special Care Unit"
 4 = "4 Nursing home"
  -8 = "-8 Not reported"
  -1 = "-1 Inapplicable";
     VALUE R6DRES1A
1 = '1 Community'
2 = '2 Residential Care'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';
           VALUE SP30023W
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = "1 Building has one floor"
         2 = "2 Building has multiple floors"   ;
           VALUE RE5BLDG
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = "1 Building has one floor"
         2 = "2 Building has multiple floors"   ;
     VALUE WORDRECC
    -1 = '-1 Inapplicable'
    -2 = '-2 Proxy says cannot ask SP'
    -3 = '-3 Proxy says can ask SP but SP unable to answer'
    -7 = '-7 SP refused activity'
    -9 = '-9 Missing';
     VALUE OLDMTHS
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';
     VALUE MONTHS
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
```

```
      -9 = '-9 Missing';
                    VALUE   FLAGS
             -1 = "-1 Inapplicable"
                 -3 = "-3 Not asked of new sample"
           0 = "0 No current SP interview"
           1 = "1 No SP interview last round"
           2 = "2 Died and month death missing"
           3 = "3 Died <=1 month after last interview"
           4 = "4 Died 12-13 months after last interview"
           7 = "7 Skipped 1 or more help questions" ;
     VALUE DMDEVUSE
      0   = '0 none or less than 1 year'
      997 = '997 since birth'
      -7  = '-7 RF'
      -8  = '-8 DK'
      -1  = '-1 Inapplicable '
      -2 = '-2 Not asked of continuing sample'
     -9  = '-9 Missing';
     VALUE SPPB_MISSING
        -7 = '-7 RF'
    -8 = '-8 DK'
    -9 = '-9 Missing'
    -1="-1 Inapplicable"
    1="1 Proxy interview"
    2="2 Missing walk and repeat chair and balance"
    3="3 Missing walk and repeat chair"
    4="4 Missing walk and balance"
    5="5 Missing repeat chair and balance"
    6="6 Missing walk"
    7="7 Missing repeat chair"
    8="8 Missing balance"
    9="9 No space"
    10="10 No chair"
    11="11 No space walk and no chair"
    12="12 No space walk and non-safety missing"
    13="13 No chair and non-safety missing"
    14="14 Non-safety walk"
    15="15 Non-safety chair"
    16="16 Non-safety balance"
    17="17 Non-safety walk and chair"
    18="18 Non-safety walk and balance"
    19="19 Non-safety chair and balance"
    20="20 Non-safety walk and chair and balance";
   VALUE W700BC2W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Ineligible'
    -9 = '-9 Missing'
    1 = "1 Eligible and consented"
    2 = "2 Eligible and did not consent"
    3 = "3 Ineligible, proxy respondent";
      Value LMLHELPR
      1 = '1 Yes'
      2 = '2 No'
      -8 = '-8 DK'
      -7 = '-7 RF'
      -2 = '-2 Helper is relative'
```

```
        -1 = '-1 Inapplicable';
run;

/*==================================================================*/

/* NHATS_Round_9_Combined_PROC_FORMAT_Statement.sas */

PROC FORMAT ;

    VALUE release
         -1 = '-1 Inapplicable'
          1 = '1 Main Sample'
          2 = '2 Reserve Sample'
          9 = '9 New Release Sample';

    VALUE STAT_DTa
          4 = " 4 April"
          5 = " 5 May"
          6 = " 6 June"
          7 = " 7 July"
          8 = " 8 August"
          9 = " 9 September"
         10 = "10 October"
         11 = "11 November"
         99 = "99 Prior to start of field work"
         -1 = '-1 Inapplicable';

    VALUE $DISP
         '10' = "10 Not Available "
         '11' = "11 Ready"
         '12' = "12 Started "
         '20' = "20 Final "
         '24' = "24 Not Required "
         '60' = "60 Complete "
         '61' = "61 Complete, NH facility"
         '62' = "62 Complete SP Deceased, Proxy Intv"
         '63' = "63 Complete SP, FQ not complete"
         '64' = "64 Complete FQ, SP not complete"
         '75' = "75 Physically/mentally unable to participate, no proxy"
         '76' = "76 Too ill to participate, no proxy"
         '77' = "77 Refusal, SP"
         '78' = "78 Language barrier"
         '79' = "79 Unable to locate"
         '80' = "80 Unavailable during field period"
         '82' = "82 Outside of PSU"
         '83' = "83 Ineligible"
         '85' = "85 Refusal, facility"
         '86' = "86 Deceased"
         '87' = "87 Refusal, proxy"
         '88' = "88 Work stopped"    ;

VALUE DISP_a
         10 = "10 Not Available"
         11 = "11 Ready"
         12 = "12 Started"
         20 = "20 Final"
         24 = "24 Not Required"
```

```
      60 = "60 Complete"
      61 = "61 Complete, NH facility"
      62 = "62 Complete SP Deceased, Proxy Intv"
      63 = "63 Complete SP, FQ not complete"
      64 = "64 Complete FQ, SP not complete "
      75 = "75 Physically/mentally unable to participate, no proxy"
      76 = "76 Too ill to participate, no proxy"
      77 = "77 Refusal, SP"
      78 = "78 Language barrier"
      79 = "79 Unable to locate"
      80 = "80 Unavailable during field period"
      82 = "82 Outside of PSU"
      83 = "83 Ineligible"
      85 = "85 Refusal, facility"
      86 = "86 Deceased"
      87 = "87 Refusal, proxy"
      88 = "88 Work stopped"    ;

  VALUE DISP_
      10 = "10 Not Available"
      11 = "11 Ready"
      12 = "12 Started"
      20 = "20 Final"
      24 = "24 Not Required";

  VALUE DISP_F
   -1 = '-1 Inapplicable'
      10 = "10 Not Available"
      11 = "11 Ready"
      12 = "12 Started"
      20 = "20 Final"
      24 = "24 Not Required"
      60 = "60 Complete"
      61 = "61 Complete, NH facility"
      62 = "62 Complete SP Deceased, Proxy Intv"
      63 = "63 Complete SP, FQ not complete"
      64 = "64 Complete FQ, SP not complete "
      75 = "75 Physically/mentally unable to participate, no proxy"
      76 = "76 Too ill to participate, no proxy"
      77 = "77 Refusal, SP"
      78 = "78 Language barrier"
      79 = "79 Unable to locate"
      80 = "80 Unavailable during field period"
       81 = "81 Final deceased, new sample only"
      82 = "82 Outside of PSU"
      83 = "83 Ineligible"
      85 = "85 Refusal, facility"
      86 = "86 Deceased"
      87 = "87 Refusal, proxy"
      88 = "88 Work stopped"
      89 = "89 Final, Other Specify";

  VALUE RFDK
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
```

```
    VALUE $RFDK_F
    '-7' = '-7 RF'
    '-8' = '-8 DK'
    '-1' = '-1 Inapplicable'
    '-9' = '-9 Missing';

    VALUE RFDK_F
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE RFDK_B
    -1 = '-1 Inapplicable'
    1 = '1 Yes-Breakoff';

VALUE $RFDK_C
    '-1' = '-1 Inapplicable'
    'CL' ='CL - Closing'
    'EW' ='EW - Economic Well-Being'
    'FQ' ='FQ - Facility Questionnaire'
    'HL' ='HL - Helper'
    'HW' ='HW - Height and Weight'
    'IP' ='IP - Insurance Plans'
    'LF' ='LF - Labor Force'
    'PA' ='PA - Participation'
    'PE' ='PE - Performance'
    'WB' ='WB - Well-being' ;

VALUE $RFDK_2C
    '-1' = '-1 Inapplicable'
    '-7' = '-7 RF'
    '-8' = '-8 DK'
    '-9' = '-9 Missing';

    VALUE RFDK_Y
     1 = ' 1 Yes'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE RFDK_I
     0 = ' 0 No'
     1 = ' 1 Yes'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE RFDK_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
```

```
    -9 = '-9 Missing';

    VALUE DSTRP_G
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1 =  '1 X condition and word color condition accuracy below threshold
(less than .42)'
    2 =  '2 word condition only below threshold (less than .42)'
    3 =  '3 X condition and word color condition meet criteria for accuracy'
    4 =  '4 fewer than 50% of X and word color condition trials answered'
    999 = '999 X condition only below threshold (less than .42)';

    VALUE DSTRP_R
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -999 = '-999 Inapplicable'
    other = 'Values ranging between -.353 and 1.115';

    VALUE DSTRP_M
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -999 = '-999 Inapplicable'
    other = 'Values ranging between -544.732 and 924.863';

VALUE FQ_4F
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
          1='1 YES'
          2='2 NO';

  VALUE CHILDDEC
    1 =  '1 CHILD DECEASED'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE W200001W
    12 = "12 STARTED"
    20 = "20 COMPLETE"
    21 = "21 INELIGIBLE - NOT 65+"   ;

  VALUE W200008x
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1 = "1 UNDER 20"
    2 = "2 20-24"
    3 = "3 25-29"
    4 = "4 30-34"
```

```
     5 = "5 35-39"
     6 = "6 40-44"
     7 = "7 45-49"
     8 = "8 50-54"
     9 = "9 55-59"
    10 = "10 60-64"
    11 = "11 65-69"
    12 = "12 70-74"
    13 = "13 75-79"
    14 = "14 80-84"
    15 = "15 85-89"
    16 = "16 90 +";

   VALUE W200009W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SAMPLE PERSON"
    2 = "2 SPOUSE/ PARTNER"
    3 = "3 DAUGHTER"
    4 = "4 SON"
    5 = "5 DAUGHTER-IN-LAW"
    6 = "6 SON-IN-LAW"
    7 = "7 STEPDAUGHTER"
    8 = "8 STEPSON"
    9 = "9 SISTER"
   10 = "10 BROTHER"
   11 = "11 SISTER-IN-LAW"
   12 = "12 BROTHER-IN-LAW"
   13 = "13 MOTHER"
   14 = "14 STEPMOTHER"
   15 = "15 MOTHER-IN-LAW"
   16 = "16 FATHER"
   17 = "17 STEPFATHER"
   18 = "18 FATHER-IN-LAW"
   19 = "19 GRANDDAUGHTER"
   20 = "20 GRANDSON"
   21 = "21 NIECE"
   22 = "22 NEPHEW"
   23 = "23 AUNT"
   24 = "24 UNCLE"
   25 = "25 COUSIN"
   26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
   27 = "27 STEPSON'S SON/ DAUGHTER"
   28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
   29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
   30 = "30 BOARDER/RENTER"
   31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
   32 = "32 ROOMMATE"
   33 = "33 EX-WIFE/ EX-HUSBAND"
   34 = "34 BOYFRIEND/ GIRLFRIEND"
   35 = "35 NEIGHBOR"
   36 = "36 FRIEND"
   37 = "37 SOMEONE/SERVICE AT THE PLACE SP LIVES/LIVED"
   38 = "38 CO-WORKER"
   39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
```

```
      40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
      41 = "41 DECEASED SPOUSE/PARTNER"
      91 = "91 OTHER RELATIVE"
      92 = "92 OTHER NONRELATIVE"    ;

    VALUE W200002W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MALE"
     2 = "2 FEMALE";

    VALUE W200005W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 NO SCHOOLING COMPLETED"
     2 = "2 1ST-8TH GRADE"
     3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
     4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
     5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
     6 = "6 SOME COLLEGE BUT NO DEGREE"
     7 = "7 ASSOCIATE'S DEGREE"
     8 = "8 BACHELOR'S DEGREE"
     9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"  ;

    VALUE W200010W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MARRIED"
     2 = "2 LIVING WITH A PARTNER"
     3 = "3 SEPARATED"
     4 = "4 DIVORCED"
     5 = "5 WIDOWED"
     6 = "6 NEVER MARRIED";

    VALUE W200011W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 PREVIOUSLY REPORTED"  ;
VALUE W200012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 REGULAR"
     2 = "2 VARIED"  ;
```

```
VALUE W200013W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 SP AND/OR FAMILY"
 2 = "2 GOVERNMENT PROGRAM"
 3 = "3 INSURANCE"
 91 = "91 OTHER (SPECIFY)"   ;

VALUE W200015W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1='1 HOURLY'
 2='2 WEEKLY'
 3='3 MONTHLY'
 4='4 DID NOT PAY IN LAST MONTH'
    91 = "91 OTHER (SPECIFY)"   ;

VALUE W200016W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 MEDICAID"
 2 = "2 MEDICARE"
 3 = "3 STATE PROGRAM"
 91 = "91 OTHER (SPECIFY)"   ;

VALUE W200018W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
 2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
 3 = "3 MOBILE HOME OR TRAILER"
 4 = "4 MULTI-UNIT (2+) BUILDING"
 91 = "91 OTHER (SPECIFY)"  ;

VALUE W200020W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 HOME"
 2 = "2 MULTI-UNIT"
 3 = "3 OTHER"  ;

VALUE W200021W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
```

```
      1 = "1 BUILDING HAS ONE FLOOR"
      2 = "2 BUILDING HAS MULTIPLE FLOORS"    ;

   VALUE W200022W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 HOME"
     2 = "2 APARTMENT"
     3 = "3 ROOM"
     4 = "4 UNIT"
     5 = "5 SUITE"
     6 = "6 SOMETHING ELSE (SPECIFY)"  ;

   VALUE W200030W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 SAMPLE PERSON (SP)"
     2 = "2 PROXY"  ;

   VALUE W200032W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 HOSPITAL"
     2 = "2 NURSING HOME/REHAB CENTER"
    91 = "91 OTHER (SPECIFY)"  ;

   VALUE W200035W
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 SELF"
     2 = "2 SPOUSE/ PARTNER"
     3 = "3 DAUGHTER"
     4 = "4 SON"
     5 = "5 DAUGHTER-IN-LAW"
     6 = "6 SON-IN-LAW"
     7 = "7 STEPDAUGHTER"
     8 = "8 STEPSON"
     9 = "9 SISTER"
    10 = "10 BROTHER"
    11 = "11 SISTER-IN-LAW"
    12 = "12 BROTHER-IN-LAW"
    13 = "13 MOTHER"
    14 = "14 STEPMOTHER"
    15 = "15 MOTHER-IN-LAW"
    16 = "16 FATHER"
    17 = "17 STEPFATHER"
    18 = "18 FATHER-IN-LAW"
    19 = "19 GRANDDAUGHTER"
    20 = "20 GRANDSON"
    21 = "21 NIECE"
    22 = "22 NEPHEW"
```

```
    23 = "23 AUNT"
    24 = "24 UNCLE"
    25 = "25 COUSIN"
    26 = "26 STEPDAUGHTER'S SON/ DAUGHTER"
    27 = "27 STEPSON'S SON/ DAUGHTER"
    28 = "28 DAUGHTER-IN-LAW'S SON/ DAUGHTER"
    29 = "29 SON-IN-LAW'S SON/ DAUGHTER"
    30 = "30 BOARDER/RENTER"
    31 = "31 PAID AIDE/ HOUSEKEEPER/ EMPLOYEE"
    32 = "32 ROOMMATE"
    33 = "33 EX-WIFE/ EX-HUSBAND"
    34 = "34 BOYFRIEND/ GIRLFRIEND"
    35 = "35 NEIGHBOR"
    36 = "36 FRIEND"
    37 = "37 SOMEONE/SERVICE FROM THE PLACE SP LIVES/DIED"
    38 = "38 CO-WORKER"
    39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
    40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
    91 = "91 OTHER RELATIVE"
    92 = "92 OTHER NONRELATIVE"  ;

  VALUE W200036W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 VERY FAMILIAR"
    2 = "2 SOMEWHAT FAMILIAR"
    3 = "3 A LITTLE FAMILIAR"
    4 = "4 NOT AT ALL FAMILIAR"  ;

  VALUE W200037W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES, SAME ADDRESS"
    2 = "2 NO, DIFFERENT ADDRESS"
    3 = "3 YES, SAME ADDRESS WITH MINOR CORRECTIONS"  ;

  VALUE W200038W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 JANUARY"
    2 = "2 FEBRUARY"
    3 = "3 MARCH"
    4 = "4 APRIL"
    5 = "5 MAY"
    6 = "6 JUNE"
    7 = "7 JULY"
    8 = "8 AUGUST"
    9 = "9 SEPTEMBER"
   10 = "10 OCTOBER"
   11 = "11 NOVEMBER"
   12 = "12 DECEMBER"  ;
```

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```
VALUE W200039W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"
  3 = "3 YEAR2013"
  4 = "4 YEAR2014"
  5 = "5 YEAR2015"
  6 = "6 YEAR2016"
  7 = "7 YEAR2017"
  8 = "8 YEAR2018"
  9 = "9 YEAR2019"
 10 = "10 YEAR2020"  ;

VALUE W200040W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 2011"
  2 = "2 2012"  ;

VALUE W200041W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AT SPS OR SOMEONE ELSES HOME"
  2 = "2 IN A HOSPITAL"
  3 = "3 IN A NURSING HOME"
  4 = "4 IN A HOSPICE RESIDENCE"
  5 = "5 IN TRANSIT (AMBULANCE TO HOSPITAL)"
 91 = "91 SOMEWHERE ELSE (SPECIFY)";

VALUE W200042W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP'S HOME"
  2 = "2 SOMEONE ELSE'S HOME"  ;

VALUE W200043W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INTENSIVE CARE UNIT"
  2 = "2 PALLIATIVE CARE UNIT"
  3 = "3 INPATIENT HOSPICE UNIT"
  4 = "4 EMERGENCY ROOM"
  5 = "5 ANOTHER KIND OF UNIT"  ;

VALUE W200044W
```

```
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 HOSPICE AT A HOSPITAL"
  2 = "2 HOSPICE AT A NURSING HOME"
  3 = "3 RESIDENTIAL HOSPICE"
  4 = "4 OTHER HOSPICE"  ;

VALUE W200045W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 DAYS"
  2 = "2 WEEKS"
  3 = "3 MONTHS"
  4 = "4 YEARS"  ;

VALUE W200046W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AT SP'S HOME"
  2 = "2 IN A HOSPITAL"
  3 = "3 IN A NURSING HOME"
  4 = "4 IN A HOSPICE RESIDENCE"
 91 = "91 SOMEWHERE ELSE (SPECIFY)"  ;

VALUE W200047W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EVERY DAY"
  2 = "2 MOST DAYS"
  3 = "3 SOME DAYS"
  4 = "4 RARELY"
  5 = "5 NOT AT ALL"  ;

VALUE W200048W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN WAS NEEDED"
  2 = "2 MORE THAN WAS NEEDED"
  3 = "3 ABOUT RIGHT AMOUNT"  ;

VALUE W200049W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
```

```
        3 = "3 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

    VALUE W200050W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 ALWAYS"
      2 = "2 USUALLY"
      3 = "3 SOMETIMES"
      4 = "4 NEVER"
      5 = "5 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"  ;

    VALUE W200051W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 EXCELLENT"
      2 = "2 VERY GOOD"
      3 = "3 GOOD"
      4 = "4 FAIR"
      5 = "5 POOR"  ;

    VALUE W200052W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 NOT AT ALL"
      2 = "2 SEVERAL DAYS"
      3 = "3 MORE THAN HALF THE DAYS"
      4 = "4 NEARLY EVERY DAY"  ;

    VALUE W200053W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
      2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
      3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
      4 = "4 RARELY (ONCE A WEEK OR LESS)"
      5 = "5 NEVER"  ;

    VALUE W200054W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 EVERY NIGHT (7 NIGHTS A WEEK)"
      2 = "2 MOST NIGHTS (5-6 NIGHTS A WEEK)"
      3 = "3 SOME NIGHTS (2-4 NIGHTS A WEEK)"
      4 = "4 RARELY (ONCE A WEEK OR LESS)"
      5 = "5 NEVER"
      7 = "7 DON'T WAKE UP/NOT A PROBLEM"  ;
```

```
   VALUE W200055W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 PRIVATE RESIDENCE"
     2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
     3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
     4 = "4 RELIGIOUS GROUP QUARTERS"
    91 = "91 OTHER (SPECIFY)"  ;

   VALUE W200056W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 PLACE DOES NOT HAVE A NAME"  ;

   VALUE W200057W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 APARTMENT"
     2 = "2 ROOM"
     3 = "3 UNIT"
     4 = "4 SUITE"
    91 = "91 SOMETHING ELSE (SPECIFY)"  ;

   VALUE W200058W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO, DIFFERENT PERSON"
     3 = "3 NO, NAME MISSPELLED"  ;

   VALUE W200060W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 PRIVATE RESIDENCE"
     2 = "2 A GROUP HOME, BOARD AND CARE, OR SUPERVISED HOUSING"
     3 = "3 ASSISTED LIVING FACILITY OR CONTINUING CARE RETIREMENT COMMUNITY
(CCRC)"
     5 = "5 NURSING HOME"
    91 = "91 OTHER (SPECIFY)"  ;

   VALUE W200061W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
```

```
  -9 = '-9 Missing'
   1 = "1 SEPARATION OR DIVORCE"
   2 = "2 DECEASED"
   3 = "3 MOVED ELSEWHERE"
   5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
   8 = "8 OTHER REASON"   ;

VALUE W200067W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 COMMON OR SHARED ENTRANCE"
  2 = "2 ENTRANCE DIRECTLY INTO HOME"  ;

VALUE W200068W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1"
  2 = "2"
  3 = "3"
  4 = "4+"   ;

VALUE W200069W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ALL ITEMS HERE"
  2 = "2 ADDED ONE OR MORE ITEMS"  ;

VALUE W200070W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE THAN $500"
  2 = "2 LESS THAN $500"
  3 = "3 JUST ABOUT $500"  ;

VALUE W200071W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE THAN $1,000"
  2 = "2 LESS THAN $1,000"
  3 = "3 JUST ABOUT $1,000"   ;

VALUE W200072W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MORE THAN $100"
```

```
    2 = "2 LESS THAN $100"
    3 = "3 JUST ABOUT $100"  ;

  VALUE W200073W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 YES, DOESNT KNOW HOW TO USE A COMPUTER"  ;

  VALUE W200074W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MOST DAYS"
   2 = "2 SOME DAYS"
   3 = "3 RARELY"  ;

  VALUE W200076W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 DEAF"  ;

  VALUE W200077W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 BLIND"  ;

  VALUE W200078W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY DAY (7 DAYS A WEEK)"
   2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
   3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
   4 = "4 RARELY (ONCE A WEEK OR LESS)"
   5 = "5 NEVER"  ;

  VALUE W200080W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES, A CHANGE"
   2 = "2 NO, NO CHANGE"
```

```
    3 = "3 DEMENTIA/ALZHEIMER'S REPORTED BY PROXY"  ;

  VALUE W200081W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE"
    2 = "2 SP IS UNABLE TO SPEAK"
    3 = "3 SP IS UNABLE TO HEAR"
    4 = "4 SP REFUSED"
    5 = "5 PROXY REFUSED"
    6 = "6 SP NOT PRESENT"
    7 = "7 SP TOO ILL"
    8 = "8 SP LANGUAGE BARRIER"
   91 = "91 OTHER (SPECIFY)"  ;

  VALUE W200082W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MUCH BETTER"
    2 = "2 BETTER"
    3 = "3 SAME"
    4 = "4 WORSE"
    5 = "5 MUCH WORSE"  ;

  VALUE W200083W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO/DON'T KNOW"  ;

  VALUE W200084W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 CONTINUE WITH ACTIVITY"
    2 = "2 SP REFUSES ACTIVITY"  ;

  VALUE W200085W
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "Word[1]"
    2 = "Word[2]"
    3 = "Word[3]"
    4 = "Word[4]"
    5 = "Word[5]"
    6 = "Word[6]"
    7 = "Word[7]"
    8 = "Word[8]"
    9 = "Word[9]"
   10 = "Word[10]"
```

```
    91 = "91 NO WORDS REMEMBERED"
    92 = "92 REFUSED"   ;

  VALUE W200086W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 DIFFICULTY HEARING ANY OF THE WORDS"
    2 = "2 INTERRUPTION OCCURRED WHILE LIST WAS BEING READ"
   91 = "91 OTHER PROBLEM (SPECIFY)"
   92 = "92 NO PROBLEMS OCCURRED"
   97 = "97 SP REFUSED WORD RECALL TASK"  ;

  VALUE W200087W
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SP ATTEMPTED CLOCK DRAWING"
    2 = "2 SP DID NOT ATTEMPT CLOCK DRAWING"
   97 = "3 SP REFUSED CLOCK DRAWING"  ;

  VALUE W200089W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY DAY (7 DAYS A WEEK)"
    2 = "2 MOST DAYS (5-6 DAYS A WEEK)"
    3 = "3 SOME DAYS (2-4 DAYS A WEEK)"
    4 = "4 RARELY (ONCE A WEEK OR LESS)"
    5 = "5 NEVER"  ;

  VALUE W200090W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 EVERY TIME"
    2 = "2 MOST TIMES"
    3 = "3 SOMETIMES"
    4 = "4 RARELY"
    5 = "5 NEVER"  ;

  VALUE W200092W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MOST TIMES"
    2 = "2 SOMETIMES"
    3 = "3 RARELY"
    4 = "4 NEVER"  ;

  VALUE W200093W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
```

```
  -9 = '-9 Missing'
   1 = "1 NONE"
   2 = "2 A LITTLE"
   3 = "3 SOME"
   4 = "4 A LOT"  ;

 VALUE W200094W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE OFTEN"
   2 = "2 LESS OFTEN"
   3 = "3 ABOUT THE SAME"  ;

 VALUE W200095W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 JANUARY"
   2 = "2 FEBRUARY"
   3 = "3 MARCH"
   4 = "4 APRIL"
   5 = "5 MAY"
   6 = "6 JUNE"
   7 = "7 JULY"
   8 = "8 AUGUST"
   9 = "9 SEPTEMBER"
  10 = "10 OCTOBER"
  11 = "11 NOVEMBER"
  12 = "12 DECEMBER"
  90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

 VALUE W200096W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
  90 = "90 LAST INTERVIEW INFORMATION INCORRECT"  ;

 VALUE W200097W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO / NO LONGER DRIVE"  ;

 VALUE W200098W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
```

```
    2 = "2 NO"
    7 = "7 NO, NO RAIN OR BAD WEATHER"  ;

  VALUE W200099W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 ALWAYS DID IT BY SELF"
   2 = "2 ALWAYS DID IT TOGETHER WITH SOMEONE ELSE"
   3 = "3 SOMEONE ELSE ALWAYS DID IT"
   4 = "4 IT VARIED (MORE THAN ONE WAY)"
   5 = "5 NOT DONE IN LAST MONTH"  ;

  VALUE W200102W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MORE OFTEN"
   2 = "2 LESS OFTEN"
   3 = "3 SAME"  ;

  VALUE W200106W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   7 = "7 ALWAYS FED THROUGH IV OR TUBE"  ;

  VALUE W200107W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY TIME"
   2 = "2 MOST TIMES"
   3 = "3 SOMETIMES"
   4 = "4 RARELY"  ;

  VALUE W200109W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 SHOWERING"
   2 = "2 TAKING BATHS"
   3 = "3 WASHING UP SOME OTHER WAY"  ;


  VALUE W200114W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
```

```
    1 = "1 VERY IMPORTANT"
    2 = "2 SOMEWHAT IMPORTANT"
    3 = "3 NOT SO IMPORTANT"   ;

  VALUE W200115W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
   95 = "95 NO ACTIVITY LISTED"   ;

  VALUE W200116W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LEFT"
    2 = "2 RIGHT"
    3 = "3 BOTH"   ;

  VALUE W200117W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LEFT SIDE"
    2 = "2 RIGHT SIDE"
    3 = "3 BOTH SIDES"   ;

  VALUE W200118W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 ONE SIDE"
    2 = "2 BOTH SIDES"   ;

  VALUE W200119W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 RECEIVE ALL TREATMENTS"
    2 = "2 STOP/REJECT ALL TREATMENTS"   ;

  VALUE W200120W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
    2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
    3 = "3 LIVING WITH AN ADULT CHILD"
    4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
```

```
     5 = "5 LIVING IN A NURSING HOME"  ;

  VALUE W200121W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
   4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

  VALUE W200122W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 MAKE DECISIONS WITHOUT MUCH ADVICE FROM THEM"
   2 = "2 GET THEIR ADVICE AND THEN MAKE DECISIONS"
   3 = "3 MAKE DECISIONS TOGETHER"
   4 = "4 LEAVE DECISIONS UP TO THEM"  ;

  VALUE W200123W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 HANDLE MOSTLY BY SELF"
   2 = "2 HANDLE TOGETHER WITH FAMILY OR CLOSE FRIENDS"
   3 = "3 FAMILY OR CLOSE FRIENDS MOSTLY HANDLE THESE THINGS"
   4 = "4 IT VARIES"  ;

  VALUE W200124W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 NEVER"
   2 = "2 RARELY"
   3 = "3 SOMETIMES"
   4 = "4 OFTEN"  ;

  VALUE W200126W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 AGREE A LOT"
   2 = "2 AGREE A LITTLE"
   3 = "3 DO NOT AGREE"  ;

  VALUE W200127W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 AGREE A LOT"
```

```
    2 = "2 AGREE A LITTLE"
    3 = "3 AGREE NOT AT ALL"   ;

  VALUE W200129W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 less than $1,000,"
   2 = "2 $1,000 to less than $2,000,"
   3 = "3 $2,000 to less than $3,000,"
   4 = "4 $3,000 to less than $5,000, or"
   5 = "5 $5,000 or more?"   ;

  VALUE W200131W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   3 = "3 RETIRED/DON'T WORK ANYMORE"   ;

  VALUE W200132W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EVERY WEEK"
   2 = "2 EVERY TWO WEEKS"
   3 = "3 TWO TIMES A MONTH"
   4 = "4 ONCE A MONTH"
   5 = "5 DAILY"
   91 = "91 OTHER SCHEDULE (SPECIFY)"   ;

  VALUE W200133W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 OWN"
   2 = "2 RENT"
   3 = "3 SOME OTHER ARRANGEMENT"   ;

  VALUE W200134W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 PAID OFF"
   2 = "2 STILL MAKE PAYMENTS"
   3 = "3 REVERSE MORTGAGE"   ;

  VALUE W200135W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
```

```
  -9 = '-9 Missing'
   1 = "1 less than $250,"
   2 = "2 $250-$499,"
   3 = "3 $500-$999, or"
   4 = "4 $1,000 or more?"  ;
 VALUE W500135W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 less than $250"
   2 = "2 $250 to less than $500"
   3 = "3 $500 to less than $1,000"
   4 = "4 $1,000 to less than $3,000"
     5 = "5 $3,000 to less than $5,000"
     6 = "6 $5,000 or more?"  ;
 VALUE W200136W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 5 YEARS"
   2 = "2 10 YEARS"
   3 = "3 LONGER THAN 10 YEARS"  ;

 VALUE W200137W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 less than $50,000,"
   2 = "2 between $50,000 and $100,000, or"
   3 = "3 over $100,000?"  ;

 VALUE W200138W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 less than $50,000,"
   2 = "2 $50,000-$74,999,"
   3 = "3 $75,000-$99,999,"
   4 = "4 $100,000-$199,999,"
   5 = "5 $200,000-$299,999,"
   6 = "6 $300,000-$499,999,"
   7 = "7 $500,000-$749,999, or"
   8 = "8 $750,000 or more?"  ;

 VALUE W200139W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 PAY OFF BALANCE"
   2 = "2 PAY MINIMUM"
   3 = "3 PAY MORE THAN MINIMUM, BUT NOT ENTIRE BALANCE"
   4 = "4 DON'T HAVE ANY CREDIT CARDS"  ;
```

```
VALUE W200140W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $1,000,"
  2 = "2 $1,000 - $1,999,"
  3 = "3 $2,000 - $3,999,"
  4 = "4 $4,000 - $5,999,"
  5 = "5 $6,000 - $9,999,"
  6 = "6 $10,000 - $19,999, or"
  7 = "7 $20,000 or more?"  ;

VALUE W200141W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MOST"
  2 = "2 SOME"
  3 = "3 A LITTLE"  ;

VALUE W200142W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 less than $500,"
  2 = "2 $500 - $999,"
  3 = "3 $1,000 - $1,999,"
  4 = "4 $2,000 - $3,999,"
  5 = "5 $4,000 - $5,999,"
  6 = "6 $6,000 - $9,999,"
  7 = "7 $10,000 - $19,999, or"
  8 = "8 $20,000 or more?"  ;

VALUE W200146W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NEARLY EVERY DAY"
  2 = "2 MORE THAN HALF THE DAYS"
  3 = "3 SEVERAL DAYS (LESS THAN HALF)"
  4 = "4 A FEW DAYS"  ;

VALUE W200147W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INCLUDED"
  2 = "2 EXTRA CHARGE"  ;

VALUE W200148W
 -7 = '-7 RF'
```

```
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 Yes"  ;

    VALUE W800164W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 RECEIVE ALL TREATMENTS"
       2 = "2 STOP/REJECT ALL TREATMENTS"  ;

    VALUE W800165W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 LIVING IN THEIR OWN HOME WITH HELP FROM FRIENDS AND FAMILY"
       2 = "2 LIVING IN THEIR OWN HOME WITH HELP FROM SOMEONE PAID TO COME IN"
       3 = "3 LIVING WITH AN ADULT CHILD"
       4 = "4 LIVING IN AN ASSISTED LIVING FACILITY OR CONTINUING CARE
RESIDENCE"
       5 = "5 LIVING IN A NURSING HOME"  ;

    VALUE W800166W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 YES"
       2 = "2 NO"
       3 = "3 DOESNT HAVE ANY MONEY TO PAY A CAREGIVER"
       4 = "4 WOULD NOT USE A PAID CAREGIVER"  ;

VALUE F200006W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 FREE STANDING NURSING HOME"
       2 = "2 FREE STANDING ASSISTED LIVING FACILITY"
       3 = "3 NURSING HOME AND ASSISTED LIVING FACILITY"
       4 = "4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
       5 = "5 ADULT FAMILY CARE HOME"
       6 = "6 GROUP HOME"
       7 = "7 BOARD AND CARE HOME"
       8 = "8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
      91 = "91 OTHER (SPECIFY)"  ;

    VALUE F200007W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 YES"
       2 = "2 NO"  ;
```

```
VALUE F200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 INDEPENDENT LIVING"
  2 = "2 ASSISTED LIVING"
  3 = "3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
  4 = "4 NURSING HOME"
 91 = "91 OTHER (SPECIFY)"  ;

VALUE F200009W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 ASSISTED LIVING"
  2 = "2 NURSING HOME"  ;

VALUE F200011W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES, SERVICE PROVIDED AS PART OF PACKAGE"
  2 = "2 YES, SERVICE PROVIDED AT AN EXTRA CHARGE"
  3 = "3 NO, SERVICE NOT PROVIDED"  ;

VALUE F200012W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 SP/FAMILY"
  2 = "2 SOCIAL SECURITY/SSI"
  3 = "3 MEDICAID"
  4 = "4 MEDICARE"
  5 = "5 OTHER SOURCE"  ;

VALUE I200002W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"  ;

VALUE I200003W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 English"
  2 = "2 Spanish"
  3 = "3 Other (specify)"  ;
```

```
VALUE I200005W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Friendly and interested"
  2 = "2 Cooperative but not particularly interested"
  3 = "3 Impatient and restless"
  4 = "4 Hostile"  ;

VALUE I200006W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Good"
  2 = "2 Fair"
  3 = "3 Poor"  ;

VALUE I200008W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 All of the time"
  2 = "2 Most of the time"
  3 = "3 Some of the time"
  4 = "4 Only for the cognition and/or performance parts"
  5 = "5 None of the time"  ;

 VALUE I200010W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Interview was conducted by telephone"  ;

VALUE I200012W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"
  3 = "3 Not Administered"  ;

VALUE I200013W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 Yes"
  2 = "2 No"  ;

VALUE I200016W
```

```
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 Yes"
       2 = "2 No"
       3 = "3 Entire interview conducted by telephone"  ;

   VALUE I200017W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 Not at all cluttered"
       2 = "2 Somewhat cluttered"
       3 = "3 Very cluttered"
       4 = "4 Could not see other rooms"  ;

   VALUE I200018W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 None"
       2 = "2 A little"
       3 = "3 Some"
       4 = "4 A lot"
       5 = "5 Could not observe"  ;

   VALUE I200019W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 Yes"
       2 = "2 No"
       7 = "7 Could not observe"  ;


/* DERIVED VARIABLE FORMATS */
   VALUE LVGARRG
       1 = '1 Alone'
       2 = '2 With spouse/partner only (spouse/partner in household)'
       3 = '3 With spouse/partner and with others'
       4 = '4 With others only'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

   VALUE DOUTSFDF
       8 = '8 Not done in last month'
       1 = '1 Did not do by self in last month'
       2 = '2 Did by self in last month/No Difficulty'
       3 = '3 Did by self in last month/Difficulty'
       4 = '4 DKRF Did by self in last month/No Difficulty'
       5 = '5 DKRF Did by self in last month/Difficulty'
       6 = '6 Did by self in last month/DKRF Difficulty'
       7 = '7 DKRF Did by self in last month/DKRF Difficulty'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE DOUTDEVI
    8 = '8 Not done in last month'
    1 = '1 No use of devices to go outside in last month'
    2 = '2 Use of devices to go outside in last month'
    3 = '3 DKRF If used devices to go outside in last month'
    4 = '4 DKRF If used devices in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE DOUTHELP
    8 = '8 Not done in last month'
    1 = '1 No help to go outside in last month'
    2 = '2 Had help to go outside in last month'
    3 = '3 DKRF If had help to go outside in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE DINSDSFD
    8 = '8 Not done in last month'
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE DINSDDEV
    8 = '8 Not done in last month'
    1 = '1 No use of devices inside in last month'
    2 = '2 Use of devices inside in last month'
    3 = '3 DKRF If used devices inside in last month'
    4 = '4 DKRF On use of devices'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dinsdhlp
    8 = '8 Not done in last month'
    1 = '1 No help to go around inside in last month'
    2 = '2 Had help to go around inside in last month'
    3 = '3 DKRF If had help to go around inside in last month'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

  VALUE dbedsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 Did by self in last month/No Difficulty'
    3 = '3 Did by self in last month/Difficulty'
    4 = '4 DKRF Did by self in last month/No Difficulty'
    5 = '5 DKRF Did by self in last month/Difficulty'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
```

```
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dbeddevi
     1 = '1 No use of cane or walker to get out of bed in last month'
     2 = '2 Use of cane or walker to get out of bed in last month'
     3 = '3 DKRF If Used cane or walker to get out of bed in last month'
     4 = '4 DKRF If used cane or walker in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dbedhelp
     1 = '1 No help to get out of bed in last month'
     2 = '2 Had help to get out of bed in last month'
     3 = '3 DKRF If had help to get out of bed in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';


   VALUE dlaunsfd
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     8 = '8 Not done in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';



   VALUE dlaunrea
     1= '1 Health/functioning reason only'
     2= '2 Other reason only'
     3= '3 Both health/functioning and other'
     4= '4 Service/someone from the place SP lives'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dshopsfd
     1 = '1 Did not do by self in last month'
     2 = '2 Did by self in last month/No Difficulty'
     3 = '3 Did by self in last month/Difficulty'
     4 = '4 DKRF Did by self in last month/No Difficulty'
     5 = '5 DKRF Did by self in last month/Difficulty'
     6 = '6 Did by self in last month/DKRF Difficulty'
     7 = '7 DKRF Did by self in last month/DKRF Difficulty'
     8 = '8 Not done in last month'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dshoprea
     1= '1 Health/functioning reason only'
```

```
  2= '2 Other reason only'
  3= '3 Both health/functioning and other'
  4= '4 Service/someone from the place SP lives'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dmealsfd
  1 = '1 Did not do by self in last month'
  2 = '2 Did by self in last month/No Difficulty'
  3 = '3 Did by self in last month/Difficulty'
  4 = '4 DKRF Did by self in last month/No Difficulty'
  5 = '5 DKRF Did by self in last month/Difficulty'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

  VALUE dmealrea
  1= '1 Health/functioning reason only'
  2= '2 Other reason only'
  3= '3 Both health/functioning and other'
  4= '4 Service/someone from the place SP lives'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbanksfd
  1 = '1 Did not do by self in last month'
  2 = '2 Did by self in last month/No Difficulty'
  3 = '3 Did by self in last month/Difficulty'
  4 = '4 DKRF Did by self in last month/No Difficulty'
  5 = '5 DKRF Did by self in last month/Difficulty'
  6 = '6 Did by self in last month/DKRF Difficulty'
  7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  8 = '8 Not done in last month'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dbankrea
  1= '1 Health/functioning reason only'
  2= '2 Other reason only'
  3= '3 Both health/functioning and other'
  4= '4 Service/someone from the place SP lives'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE deatdevi
  1 = '1 No use of adapted utensils in last month'
  2 = '2 Use of adapted utensils in last month'
```

```
    8 = '8 Not done in last month'
    3 = '3 DKRF If used adapted utensils in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE deathelp
    1 = '1 No help eating in last month'
    2 = '2 Had help eating in last month'
    3 = '3 DKRF If had help eating in last month'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE deatsfdf
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using utensils)'
    3 = '3 Difficulty by self (and when using utensils)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
    8 = '8 Not done in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbathdev
    1 = '1 No use of grab bars or bath seats in last month'
    2 = '2 Use of grab bars or bath seats in last month'
    3 = '3 DKRF If use of grab bars or bath seats in last month'
    4 = '4 DKRF If had grab bars or bath seats in last month'
    9 = '9 No bars/seats/shower/tub or washes up other way'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbathhel
    1 = '1 No help bathing in last month'
    2 = '2 Had help bathing in last month'
    3 = '3 DKRF If had help bathing in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dbathsfd
    1 = '1 Did not do by self in last month'
    2 = '2 No Difficulty by self (and when using grab bars or tub seat)'
    3 = '3 Difficulty by self (and when using grab bars or tub seat)'
    6 = '6 Did by self in last month/DKRF Difficulty'
    7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dtoildev
    1 = '1 No use of toileting devices in last month'
    2 = '2 Use of toileting devices in last month'
    3 = '3 DKRF of some and no use of other toileting devices in last month'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE dtoilhel
    1 = '1 No help toileting in last month'
```

```
   2 = '2 Had help toileting in last month'
   3 = '3 DKRF If had help toileting in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dtoilsfd
   1 = '1 Did not do by self in last month'
   2 = '2 No Difficulty by self (and when using toileting devices)'
   3 = '3 Difficulty by self (and when using toileting devices)'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE ddresdev
   8 = '8 Not done in last month'
   9 = '9 DKRF If dressed in last month'
   2 = '2 Use of dressing devices in last month'
   1 = '1 No use of dressing devices in last month'
   3 = '3 DKRF If use of dressing devices in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE ddreshel
   8 = '8 Not done in last month'
   9 = '9 DKRF If dressed in last month'
   1 = '1 No help dressing in last month'
   2 = '2 Had help dressing in last month'
   3 = '3 DKRF If had help dressing in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE ddressfd
   1 = '1 Did not do by self in last month'
   2 = '2 No Difficulty by self (and when using dressing devices)'
   3 = '3 Difficulty by self (and when using dressing devices)'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
VALUE dmedssfd
   1 = '1 Did not do by self in last month'
   2 = '2 Did by self in last month/No Difficulty'
   3 = '3 Did by self in last month/Difficulty'
   4 = '4 DKRF Did by self in last month/No Difficulty'
   5 = '5 DKRF Did by self in last month/Difficulty'
   6 = '6 Did by self in last month/DKRF Difficulty'
   7 = '7 DKRF Did by self in last month/DKRF Difficulty'
   8 = '8 Not done in last month'
   9 = '9 No or DKRF if medications taken in last month'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE dmedsrea
   1 = '1 Health/functioning reason only'
   2 = '2 Other reason only'
```

```
      3 = '3 Both heath/functioning and other'
      4 = '4 Service/someone from the place SP lives'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE dmarstat
     1 = '1 Married'
     2 = '2 Living with a partner'
     3 = '3 Separated'
     4 = '4 Divorced'
     5 = '5 Widowed'
     6 = '6 Never married'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
   VALUE DSPSAGEC
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = " 1 UNDER 50"
      2 = " 2 50-54"
      3 = " 3 55-59"
      4 = " 4 60-64"
      5 = " 5 65-69"
      6 = " 6 70-74"
      7 = " 7 75-79"
      8 = " 8 80-84"
      9 = " 9 85-89"
     10 = "10 90 +"    ;

     VALUE dresid
            -1 = '-1 Inapplicable'
         1 = '1 Community '
         2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
         3 = '3 Residential Care Resident not nursing home (FQ only)'
         4 = '4 Nursing Home Resident';
     VALUE f_dresid
            -1 = '-1 Inapplicable'
         1 = '1 Community '
         2 = '2 Residential care not nursing home (SP interview)'
         3 = '3 Residential care not nursing home (FQ only)'
         4 = '4 Nursing home (SP interview)'
         5 = '5 Nursing home (FQ only)'
         6 = '6 Deceased'
         7 = '7 Residential care not nursing home in R1 and R5 (FQ only)'
         8 = '8 Nursing home in R1 and R5 (FQ only)' ;
     VALUE f2dresid
            -1='-1 Inapplicable'
          1 = '1 Community '
         2 = '2 Residential care not nursing home (SP interview)'
         3 = '3 Residential care not nursing home (FQ only)'
         4 = '4 Nursing home (SP interview)'
```

```
            5 = '5 Nursing home (FQ only)'
            6 = '6 Deceased'
            7 = '7 Residential care not nursing home in R1 and R2 (FQ only)'
            8 = '8 Nursing home in R1 and R2 (FQ only)' ;
      VALUE f3dresid
              -1='-1 Inapplicable'
              1 = '1 Community '
          2 = '2 Residential care not nursing home (SP interview)'
          3 = '3 Residential care not nursing home (FQ only)'
          4 = '4 Nursing home (SP interview)'
          5 = '5 Nursing home (FQ only)'
          6 = '6 Deceased'
          7 = '7 Residential care not nursing home in R1 and R3 (FQ only)'
          8 = '8 Nursing home in R1 and R3 (FQ only)' ;
      VALUE f4dresid
              -1='-1 Inapplicable'
              1 = '1 Community '
          2 = '2 Residential care not nursing home (SP interview)'
          3 = '3 Residential care not nursing home (FQ only)'
          4 = '4 Nursing home (SP interview)'
          5 = '5 Nursing home (FQ only)'
          6 = '6 Deceased'
          7 = '7 Residential care not nursing home in R1 and R4 (FQ only)'
          8 = '8 Nursing home in R1 and R4 (FQ only)' ;


VALUE QUARTILE
-9="-9 Missing"
-1="-1 Inapplicable";

VALUE SPPB
-9="-9 Missing"
-1="-1 Inapplicable";

      VALUE DCLCKSC
        0 = "0 Not recognizable as a clock"
        1 = "1 Severely distorted depiction of a clock"
        2 = "2 Moderately distorted depiction of a clock"
        3 = "3 Mildly distorted depiction of a clock"
        4 = "4 Reasonably accurate depiction of a clock"
        5 = "5 Accurate depiction of a clock (circular or square)"
      -7 = "-7 SP refused to draw clock"
      -8 = "-8 DK"
      -1 = "-1 Inapplicable"
      -2 = "-2 Proxy says cannot ask SP"
      -3 = "-3 Proxy says can ask SP but SP unable to answer"
      -4 = "-4 SP did not attempt to draw clock"
      -9 = "-9 Missing";

      VALUE DCLCKCL
        1 = '1 Very clear'
        2 = '2 Somewhat clear'
        3 = '3 Somewhat unclear'
        4 = '4 Very unclear'
        5 = '5 Blank'
      -7 = '-7 SP refused to draw clock'
      -8 = '-8 DK'
```

# SAS ALGORITHM FOR DEMENTIA

```
   -1 = '-1 Inapplicable'
   -2 = '-2 Proxy says cannot ask SP'
   -3 = '-3 Proxy says can ask SP but SP unable to answer'
   -4 = '-4 SP did not attempt to draw clock'
   -9 = '-9 Missing';

VALUE RESULT
   -9='-9: MISSING'
   1='1: COMPLETED W RESULTS'
   2='2: COMPLETED MISSING RESULTS'
   3='3: ATTEMPTED W RESULTS'
   4='4: ATTEMPTED MISSING RESULTS'
   5='5: NOT ATTEMPTED SAFETY'
   6='6: NOT ATTEMPTED NOT SAFETY REASON'
   7='7: NO CHAIR/NO SPACE'
   9='9: NOT ATTEMPTED/MISSING';

   VALUE RESULT_SCH
   -9='-9: MISSING'
   1='1: COMPLETED W/OUT ARMS'
   2='2: COMPLETED W ARMS'
   3='3: ATTEMPTED W RESULTS'
   4='4: ATTEMPTED MISSING RESULTS'
   5='5: NOT ATTEMPTED SAFETY'
   6='6: NOT ATTEMPTED NOT SAFETY REASON'
   7='7: NO CHAIR/SAFETY REASON'
   8='8: NO CHAIR/NOT SAFETY REAS'
   9='9: NOT ATTEMPTED/MISSING'
   10='10: CH4=1 SINGLE CHAIR NOT COMPL';

   VALUE RESULT_RCH
   -9='-9: MISSING'
   1='1: COMPLETED W/OUT ARMS'
   2='2: COMPLETED MISSING RESULTS'
   3='3: ATTEMPTED W RESULTS'
   4='4: ATTEMPTED MISSING RESULTS'
   5='5: NOT ATTEMPTED SAFETY'
   6='6: NOT ATTEMPTED NOT SAFETY REASON'
   9='9: NO CHAIR OR NOT ATTEMPTED/MISSING';

   VALUE ZEROSCORE
   1="1: NOT ELIGIBLE DUE TO EXCLUSION CRITERIA"
   2="2: NOT ATTEMPTED FOR SAFETY REASON"
   3="3: ATTEMPTED CHAIR STANDS/NOT ATTEMPTED FOR SAFETY"
   4="4: ATTEMPTED"
   5="5: NEW WALKING EXCLUSION"
   9="9: NOT ASSIGNED A ZERO SCORE";

   VALUE D_LMLLOC
   1 = '1 Community'
   2 = '2 Residential Care'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

     VALUE D_LOCSP
       -7 = '-7 RF'
       -8 = '-8 DK'
```

SAS ALGORITHM FOR DEMENTIA

```
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 Independent Living/Housing/Retirement"
       2 = "2 Assisted Living/Personal Care"
       3 = "3 Special Care, Memory or Alzheimer's Unit"
       4 = "4 Nursing Home"
       8 = "8 Not Reported" ;

      VALUE PA25FMT
  -1 = '-1 Inapplicable'
    -8 = '-8 DK'
  -9 = '-9 Missing'
 111= '111 Sleeping Napping'
 131= '131 Eating'
 132= '132 Going out to eat'
 199= '199 Other self care activities'
 211= '211 Work and work-related activities'
 221= '221 Other income generating activities'
 241= '241 Volunteering'
 299= '299 Other productive activities'
 321= '321 Shopping for non-durable goods'
 399= '399 Other shopping'
 411= '411 Food and drink preparation'
 434= '434 Outdoor Maintenance'
 439= '439 Household chores (cannot tell if indoor/outdoor)'
 441= '441 Animal and pet care'
 442= '442 Walking and exercising pets'
 449= '449 Other animal and pet care'
 451= '451 Vehicle maintenance and repair'
 471= '471 Financial management'
 499= '499 Other household activities'
 511= '511 Physical care and assistance to others'
 599= '599 Other physical care'
 611= '611 Socializing with others in person'
 612= '612 Socializing with others on the phone'
 616= '616 Socializing and communicating on the computer'
 621= '621 Watching TV and movies'
 631= '631 Doing puzzles or games not on computer or online'
 632= '632 Gambling not online or at a casino'
 636= '636 Doing puzzles or games on a computer or online'
 641= '641 Arts and crafts or hobbies'
 642= '642 Reading'
 643= '643 Writing'
 644= '644 Listening to music'
 646= '646 Computer or online leisure activities'
 651= '651 Smoking or other tobacco use'
 652= '652 Drinking alcohol'
 661= '661 Doing nothing/relaxing'
 669= '669 No activity'
 699= '699 Other non active leisure'
 711= '711 Playing sports'
 712= '712 Walking or jogging'
 713= '713 Other outdoor recreating activities'
 714= '714 Attending sporting events'
 715= '715 Other physical activity, exercise, yoga, swimming, working out,
dancing'
 718= '718 Watching sporting events'
```

```
721= '721 Attending arts  including plays and concerts'
723= '723 Attending movies'
724= '724 Attending casinos'
737= '737 Travel for leisure'
799= '799 Other active leisure'
811= '811 Attending religious activities'
812= '812 Other religious and spirtual activities'
821= '821 Attending meetings or events'
899= '899 Other organizational activity'
991= '991 Other miscellaneous'
992= '992 No favorite activity'
997= '997 Refused'
998= '998 Dont Know'
999= '999 Not Codeable';

        VALUE OCC_CODE
1   ='1 Management Occupations: 0010-0430'
2   ='2 Business and Financial Operations Occupations:  0500-0950'
3   ='3 Computer and mathematical occupations:  1000-1240'
4   ='4 Architecture and Engineering Occupations:   1300-1560'
5   ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6   ='6 Community and Social Service Occupations:   2000-2060'
7   ='7 Legal Occupations:  2100-2160'
8   ='8 Education, Training, and Library Occupations:   2200-2550'
9   ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10  ='10 Healthcare Practitioners and Technical Occupations:    3000-3540'
11  ='11 Healthcare Support Occupations:    3600-3655'
12  ='12 Protective Service Occupations:    3700-3955'
13  ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14  ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15  ='15 Personal Care and Service Occupations: 4300-4650'
16  ='16 Sales and Related Occupations: 4700-4965'
17  ='17 Office and Administrative Support Occupations: 5000-5940'
18  ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19  ='19 Construction and Extraction Occupations:   6200-6940'
20  ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21  ='21 Production Occupations:    7700-8965'
22  ='22 Transportation and Material Moving Occupations:    9000-9750'
23  ='23 Military Specific Occupations: 9800-9830'
24  ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';

    Value fl_Dfac
1 = '1 Should have routed as facility but did not'
2 = '2 Routed as facility but determined not facility resident'
-1 = '-1 Inapplicable';
```

# SAS ALGORITHM FOR DEMENTIA

```
VALUE PE_RSLT
    -9='-9 Missing'
    -1 = '-1 Inapplicable'
    1='1 Completed'
    2='2 Attempted'
    3='3 Not attempted' ;
VALUE dosfacd /* FOR FQ2dosfacd  */
      -9= "-9 Missing"
      -8 = "-8 DK"
      -1 = "-1 INAPPLICABLE"
       1 = " 1 FREE STANDING NURSING HOME"
       2 = " 2 FREE STANDING ASSISTED LIVING FACILITY / RESIDENTIAL CARE
FACILITY"
       3 = " 3 NURSING HOME AND ASSISTED LIVING FACILITY"
       4 = " 4 CONTINUING CARE RETIREMENT COMMUNITY (CCRC)"
       5 = " 5 ADULT FAMILY CARE HOME"
       6 = " 6 GROUP HOME"
       7 = " 7 BOARD AND CARE HOME / PERSONAL CARE HOME"
       8 = " 8 RETIREMENT COMMUNITY OR SENIOR HOUSING (NOT CCRC)"
       9 = " 9 INDEPENDENT LIVING"
      10 = " 10 ASSISTED AND INDEPENDENT/RETIREMENT (NO NURSING HOME)"
      11 = " 11 HOUSING (APT, CONDO, ETC.)";
        ;
    VALUE dosfaca /* FOR FQ2dosfaca */
      -9= "-9 Missing"
      -8 = "-8 DK"
      -1 = "-1 INAPPLICABLE"
       1 = " 1 INDEPENDENT LIVING / HOUSING / RETIREMENT "
       2 = " 2 ASSISTED LIVING / PERSONAL CARE"
       3 = " 3 SPECIAL CARE, MEMORY CARE, OR ALZHEIMER'S UNIT"
       4 = " 4 NURSING HOME"    ;

VALUE INAP_YN
     1 = ' 1 Yes'
     2 = ' 2 No'
    -1 = '-1 Inapplicable' ;
VALUE CENDIV /* RE1DCENSDIV - Updated for R2 - Re-Release */
    1 =  '1 Northeast Region: New England Division (ME, NH, VT, MA, RI, CT)'
    2 =  '2 Northeast Region: Middle Atlantic Division (NY, NJ, PA)'
    3 =  '3 Midwest Region: East North Central Division (OH, IN, IL, MI, WI)'
    4 =  '4 Midwest Region: West North Central Division (MN, IA, MO, ND, SD,
NE, KS)'
    5 =  '5 South Region: South Atlantic Division (DE, MD, DC, VA, WV, NC,
SC, GA, FL)'
    6 =  '6 South Region: East South Central Division (KY, TN, AL, MS)'
    7 =  '7 South Region: West South Central Division (AR, LA, OK, TX)'
    8 =  '8 West Region: Mountain Division (MT, ID, WY, CO, NM, AZ, UT, NV)'
    9 =  '9 West Region: Pacific Division (WA, OR, CA, AK, HI)'
    -9 = '-9 Missing';

    VALUE W000002W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 MALE"
       2 = "2 FEMALE"  ;
```

```
    VALUE W000005W
     1 = ' 1 Yes'
     2 = ' 2 No'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    VALUE R1DRESID
     -1 = '-1 Inapplicable'
     1 = '1 Community '
     2 = '2 Residential Care Resident not nursing home (SP interview
complete)'
     3 = '3 Residential Care Resident not nursing home (FQ only)'
     4 = '4 Nursing Home Resident';

  VALUE W200016W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MEDICAID"
    2 = "2 MEDICARE"
    3 = "3 STATE PROGRAM"
   91 = "91 OTHER (SPECIFY)"   ;

    VALUE W200012W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 REGULAR"
    2 = "2 VARIED"  ;

  VALUE W200061W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SEPARATION OR DIVORCE"
    2 = "2 DECEASED"
    3 = "3 MOVED ELSEWHERE"
    5 = "5 LAST INTERVIEW INFORMATION INCORRECT"
    8 = "8 OTHER REASON"   ;

  VALUE d2hrsmth
    -13= '-13 Deceased '
    -12= '-12 Zero days/wk'
    -11= '-11 Hours missing'
    -10= '-10 Days missing'
    -9 = ' -9 Days and hrs missing'
    -1 = ' -1 Inapplicable'
    -7 = ' -7 RF'
    -8 = ' -8 DK'
     0-<1  ='<1'
     1-<10 =' 1-<10'
```

```
    10-<20 ='10-<20'
    20-<30 ='20-<30'
    30-<40 ='30-<40'
    40-<60 ='40-<60'
    60-<120 ='60-<120'
    120-<180='120-<180'
    180-744='180-744 (24/7)'
     9999='9999 Not codeable, <1 hour/day' ;

  VALUE dhrsmth
    -11= '-11:hours missing'
    -10= '-10:days missing'
    -9 = '-9:days and hrs missing'
    -1 = '-1 Inapplicable'
    -7 = '-7 RF'
    -8 = '-8 DK'
     0-<1  ='<1'
     1-<10 =' 1-<10'
    10-<20 ='10-<20'
    20-<30 ='20-<30'
    30-<40 ='30-<40'
    40-<60 ='40-<60'
    60-<120 ='60-<120'
    120-<180='120-<180'
    180-744='180-744 (24/7)'
     9999='9999 Not codeable, <1 hour/day' ;

 Value dmissadd
-1='-1 Inapplicable'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section';

Value d2mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
```

## SAS ALGORITHM FOR DEMENTIA

```
14='14 no flags and added at IS section';

Value dopage3c
 -9='-9 Missing'
 -8='-8 RF'
 -7='-7 DK'
 -1='-1 Inapplicable'
  1='1 UNDER 30'
  2='2 30-39'
  3='3 40-49'
  4='4 50-59'
  5='5 60-69'
  6='6 70-79'
  7='7 80-89'
  8='8 90 +';

 Value dopagect
-9='-9 Missing'
-8='-8 DK'
-7='-7 RF'
-1='-1 Inapplicable'
 1='1 UNDER 20'
 2='2 20-24'
 3='3 25-29'
 4='4 30-34'
 5='5 35-39'
 6='6 40-44'
 7='7 45-49'
 8='8 50-54'
 9='9 55-59'
10='10 60-64'
11='11 65-69'
12='12 70-74'
13='13 75-79'
14='14 80-84'
15='15 85-89'
16='16 90 +';


   VALUE W200008W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 UNDER 20"
     2 = "2 20-24"
     3 = "3 25-29"
     4 = "4 30-34"
     5 = "5 35-39"
     6 = "6 40-44"
     7 = "7 45-49"
     8 = "8 50-54"
     9 = "9 55-59"
    10 = "10 60-65"
    11 = "11 66-69"
    12 = "12 70-74"
    13 = "13 75-79"
```

```
      14 = "14 80-85"
      15 = "15 86-89"
      16 = "16 90-94"
      17 = "17 95-99"
      18 = "18 100 +"
  ;
      VALUE NumCigs
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
     999 = '999 SP smokes less than 1 cigarette / day';


   VALUE dlmlint
     1 = '1 Last month of life interview'
    -1 = '-1 Inapplicable'      ;

   VALUE d2intvra
      1 = '1 65 to 69'
      2 = '2 70 to 74'
      3 = '3 75 to 79'
      4 = '4 80 to 84'
      5 = '5 85 to 89'
      6 = '6 90+'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'       ;

   VALUE dad8dem
     1 = '1 DEMENTIA RESPONSE TO ANY AD8 ITEMS IN PRIOR ROUNDS'
    -1 = '-1 Inapplicable'    ;

   VALUE dwrdinon
  1 = '1 No words remembered'
   -1 = '-1 Inapplicable'
     -9 = '-9 Missing'       ;

   VALUE dwrdirre
     1 = '1 Refused word recall task'
    -1 = '-1 Inapplicable'
       -9 = '-9 Missing'      ;

  VALUE A0001AB
      1 = "1 AM"
      2 = "2 PM"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

  VALUE A0002WA
      1 = "1 Yes, there is space to set up the walking course"
      2 = "2 No, there is not space to set up the walking course"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

   VALUE A0004WA
```

```
      1 = "1 None"
      2 = "2 Cane"
      3 = "3 Walker or rollator"
      9 = "9 Other, specify"
     -1 = '-1 Inapplicable'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -9 = '-9 Missing';

 VALUE A0004CH
      1 = "1 No, chair stand not completed"
      2 = "2 Yes, chair stand completed"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0008CH
      1 = "1 With arms"
      2 = "2 Without arms"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

 VALUE A0014CH
      1 = "1 1 Chair stand completed"
      2 = "2 2 Chair stands completed"
      3 = "3 3 Chair stands completed"
      4 = "4 4 Chair stands completed"
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

VALUE BA1SS
     1 = '1 Eligible and recorded result for SxS Balance'
     2 = '2 Eligible and no recorded result for SxS Balance'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1STAN
     1 = '1 Eligible and recorded result for Semi Tandem Balance'
     2 = '2 Eligible and no recorded result for Semi Tandem Balance'
     3 = '3 Not administered because did not complete prior balance test'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1TAN
     1 = '1 Eligible and recorded result for full tandem balance'
     2 = '2 Eligible and no recorded result for full tandem balance'
     3 = '3 Not administered because did not complete prior balance tests'
     4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1OP
     1 = '1 Eligible and recorded result for one leg eyes open balance'
     2 = '2 Eligible and no recorded result for one leg eyes open balance'
     3 = '3 Not administered because did not complete prior balance tests'
     4 = '4 Not Eligible due to exclusion criteria'
```

SAS ALGORITHM FOR DEMENTIA

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE BA1CL
    1 = '1 Eligible and recorded result for one leg eyes closed balance'
    2 = '2 Eligible and no recorded result for one leg eyes closed balance'
    3 = '3 Not administered because did not complete prior balance tests'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE WA1WLK
    1 = '1 Eligible and recorded result for walking course'
    2 = '2 Eligible and no recorded result for walking course'
    4 = '4 Not Eligible due to exclusion criteria'
    5 = '5 Not Eligible on exclusion criteria but recorded result (SP changed
mind)'
    -1 = '-1 Inapplicable '
    -9 = '-9 Missing';

VALUE CH1SCH
    1 = '1 Eligible and recorded result for single chair stand'
    2 = '2 Eligible and no recorded result for single chair stand'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE CH1RSH
    1 = '1 Eligible and recorded result for repeated chair stand'
    2 = '2 Eligible and no recorded result for repeated chair stand'
    3 = '3 Not administered because did not complete single chair stand w/o
arms'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE GR1GRIP
    1 = '1 Eligible and recorded result for grip strength'
    2 = '2 Eligible and no recorded result for grip strength'
    4 = '4 Not Eligible due to exclusion criteria'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE WC1WAIST
    1 = '1 Eligible and recorded result for waist circumference'
    2 = '2 Eligible and no recorded result for waist circumference'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

VALUE PK1PEAK
    1 = '1 Eligible and recorded result for peak air flow'
    2 = '2 Eligible and no recorded result for peak air flow'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE RGT_LFT
    1 = '1 Right'
```

```
   2 = '2 Left'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

 VALUE PERSON
    1 = '1 Interviewer'
    2 = '2 Sample person'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';

 VALUE STAND
     1 = '1 Standing'
     2 = '2 Sitting'
     3 = '3 Lying down'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

 VALUE EFFORT
      1 = '1 Full effort'
      2 = '2 Less effort for health reason'
      3 = '3 Less effort for other reason'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
    VALUE WORDREC
        1 = ' 1 LIST 1'
        2 = ' 2 LIST 2'
        3 = ' 3 LIST 3'
       -1 = '-1 Inapplicable '
       -9 = '-9 Missing';
    VALUE WORDRE_N
        -1 = '-1 Inapplicable'
        -2 = '-2 Proxy says cannot ask SP'
        -3 = '-3 Proxy says can ask SP but SP unable to answer'
        -7 = '-7 SP refused activity'
        -9 = '-9 Missing';


           VALUE SP30051W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 EXCELLENT"
   2 = "2 VERY GOOD"
   3 = "3 GOOD"
   4 = "4 FAIR"
   5 = "5 POOR"
   6 = "6 DOES NOT APPLY/NO CARE IN LAST MONTH OF LIFE"
 ;
   VALUE SP3019aW
      -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 JANUARY"
   2 = "2 FEBRUARY"
   3 = "3 MARCH"
```

```
      4 = "4 APRIL"
      5 = "5 MAY"
      6 = "6 JUNE"
      7 = "7 JULY"
      8 = "8 AUGUST"
      9 = "9 SEPTEMBER"
     10 = "10 OCTOBER"
     11 = "11 NOVEMBER"
     12 = "12 DECEMBER"
     90 = "90 LAST INTERVIEW INFORMATION INCORRECT"
   ;
  VALUE RACEHISP
        1 = ' 1 White, non-hispanic'
        2 = ' 2 Black, non-hispanic'
        3 = ' 3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic'
        4 = ' 4 Hispanic'
        5 = ' 5 More than one DKRF primary'
        6 = ' 6 DKRF'
       -9 = '-9 Missing';

    VALUE SPPB_MIS
       -7 = '-7 RF'
   -8 = '-8 DK'
   -9 = '-9 Missing'
   -1="-1 Inapplicable"
   1="1 Proxy interview"
   2="2 Missing walk and repeat chair and balance"
   3="3 Missing walk and repeat chair"
   4="4 Missing walk and balance"
   5="5 Missing repeat chair and balance"
   6="6 Missing walk"
   7="7 Missing repeat chair"
   8="8 Missing balance"
   9="9 No space"
   10="10 No chair"
   11="11 No space walk and no chair"
   12="12 No space walk and non-safety missing"
   13="13 No chair and non-safety missing"
   14="14 Non-safety walk"
   15="15 Non-safety chair"
   16="16 Non-safety balance"
   17="17 Non-safety walk and chair"
   18="18 Non-safety walk and balance"
   19="19 Non-safety chair and balance"
   20="20 Non-safety walk and chair and balance";

    VALUE QUARTILES
-9="-9 Missing"
-1="-1 Inapplicable"
;
  VALUE SP30025W
       -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 FREE-STANDING (DETACHED) SINGLE HOUSE"
```

```
    2 = "2 SINGLE HOUSE BUT ATTACHED TO OTHERS (ROW HOUSE, TOWNHOUSE, DUPLEX,
TRIPLEX, OR TRIPLE DECKER)"
    3 = "3 MOBILE HOME OR TRAILER"
    4 = "4 MULTI-UNIT (2+) BUILDING"
    91 = "91 OTHER (SPECIFY)"
  ;
   VALUE SP30046W
      -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
    1 = "1 AT SP'S HOME"
    2 = "2 IN A HOSPITAL"
    3 = "3 IN A NURSING HOME"
    4 = "4 IN A HOSPICE RESIDENCE"
    5 = "5 AT SOMEONE ELSE'S HOME"
    91 = "91 SOMEWHERE ELSE (SPECIFY)"
  ;
   VALUE SP30076W
      -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"
    7 = "7 YES, DOESNT KNOW HOW TO USE"
  ;
   VALUE W300151W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1 = "1 VERY GOOD"
    2 = "2 GOOD"
    3 = "3 FAIR"
    4 = "4 POOR"
    5 = "5 VERY POOR"  ;

   VALUE SP30076H
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
   95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM DAY TO DAY"  ;
   VALUE SP30076G
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
   95 = "95 NO USUAL TIME OR DIFFERENT FROM DAY TO DAY"  ;
        VALUE SP30076I
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
       95 = "95 NO USUAL NUMBER OF HOURS OR DIFFERENT FROM NIGHT TO NIGHT"
;
```

```
        VALUE SP30076J
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
         95 = "95 NO USUAL TIME OR DIFFERENT FROM NIGHT TO NIGHT"  ;
        VALUE SP30076K
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
           0 = "0 LESS THAN AN HOUR"
         90 = "90 FELL ASLEEP RIGHT AWAY"
         95 = "95 NO USUAL AMOUNT OF TIME TO FALL ASLEEP OR DIFFERENT FROM
NIGHT TO NIGHT"  ;
        VALUE SP30155W
          -7 = '-7 RF'
          -8 = '-8 DK'
          -1 = '-1 Inapplicable'
          -9 = '-9 Missing'
           1 = "1 NAPS PLANNED"
           2 = "2 FELL ASLEEP WITHOUT MEANING TO"
           3 = "3 BOTH (SOME PLANNED/SOME NOT)"  ;
   VALUE SP30120W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 OFTEN"
      2 = "2 SOMETIMES"
      3 = "3 RARELY"
      4 = "4 NEVER"  ;
Value HOURSF
 -13='-13 SP deceased/section not administered'
 -12='-12 Valid skip/staff'
 -11='-11 Hours missing'
 -10='-10 Days missing'
  -9='-9 Days and hrs missing'
  -1='-1 Inapplicable'
  0-  1='0-<1'
 1.01- 10='1-<10'
10.01- 20='10-<20'
20.01- 30='20-<30'
30.01-40='30-<40'
40.01-60='40-<60'
60.01-120='60-<120'
120.01-180='120-<180'
180.01-744='180-744 (24/7)'
9999='9999 Not codeable, <1 hour/day';
   VALUE SP30120W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 OFTEN"
      2 = "2 SOMETIMES"
      3 = "3 RARELY"
```

```
      4 = "4 NEVER"
   ;
   VALUE SP30118W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 A LOT"
     2 = "2 SOME"
     3 = "3 A LITTLE"
     4 = "4 NOT AT ALL"  ;
   VALUE SP30141W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "less than $27,600,"
     2 = "$27,600-$41,999,"
     3 = "$42,000-$63,999,"
     4 = "$64,000-$107,999, or"
     5 = "$108,000 or more?"  ;
   VALUE SP30142W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "less than $14,000,"
     2 = "$14,000-$21,999,"
     3 = "$22,000-$35,999,"
     4 = "$36,000-$48,999, or"
     5 = "$49,000 or more?"  ;
   VALUE INVENT
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
          104="104-Arthritis"
          107="107-Lung Disease"
          109="109-Dementia or Alzheimer's disease"
          110="110-Cancer"
          113="113-Other serious disease, illness, health problem"
          114="114-Knee surgery/problem"
          115="115-Hip repair or replacement/problem"
          117="117-Back or Spine Surgery/problem"
          121="121-Sleep Problems"
          201="201-Hearing problems"
          202="202-Sight problems"
          205="205-Pain"
          301="301-Breathing problems"
          302="302-Upper body strength movement"
          303="303-Lower body strength movement"
          304="304-Low energy"
          305="305-Balance or coordination problems"
          306="306-Walking distances"
          307="307-Climbing stairs"
          308="308-Lifting and carrying items"
          309="309-Kneeling"
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           310="310-Bending"
           311="311-Reaching"
           312="312-Opening Jars"
           313="313-Grasping"
           401="401-Memory"
           501="501-Getting out of bed"
           502="502-Getting around inside"
           503="503-Getting outside"
           504="504-Travel/transportation"
           601="601-Eating"
           602="602-Washing"
           603="603-Toileting"
           604="604-Dressing"
           605="605-Grooming"
           701="701-Laundry"
           702="702-Shopping"
           703="703-Cooking"
           705="705-Money matters"
           706="706-Indoor cleaning and maintenance"
           707="707-Outdoor cleaning and maintenance"
           801="801-Medications"
           802="802-Doctor visits"
           804="804-Other medical self-care"
           1211="1211-Working"
           1442="1442-Walking/exercising pets"
           1451="1451-Vehicle repair and maintenance"
           1461="1461-Appliance tool, and toy use, set-up, repair, &
maintenance"
           1462="1462-Computer use, set-up, repair, maintenance, and
education"
           1473="1473-Household organization"
           1512="1512-Looking after someone else"
           1611="1611-Socializing and communicating with others-in person"
           1612="1612-Socializing and communication with others by talking
on telephone"
           1613="1613-Attending or hosting party, wedding or social
occasions"
           1614="1614-Reading and sorting through the mail"
           1621="1621-Watch television and movies"
           1631="1631-Games & puzzles"
           1641="1641-Arts and crafts, collecting, and hobbies, making
music"
           1642="1642-Reading"
           1643="1642-Writing (personal, not on computer)"
           1644="1644-Listening to recorded music or radio"
           1711="1711-Playing/practicing sports or taking physical activity
class/lessons"
           1712="1712-Walking/jogging for exercise or pleasure or working
out"
           1713="1713-Other outdoor recreation activities"
           1813="1813-Religious & spiritual volunteer activities"
           1901="1901-Other, no existing code"
           1998="1998-Don't know"
           1999="1999-Refused/blank";
VALUE W500058W
    -7 = '-7 RF'
    -8 = '-8 DK'
```

```
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 MONTHS"
       2 = "2 YEARS"   ;
VALUE W500103W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 YES, A YEAR OR MORE"
       2 = "2 NO, LESS THAN A YEAR"  ;
  VALUE W500105W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 MONTH AND YEAR"
       2 = "2 NUMBER OF MONTHS AGO"
       3 = "3 NUMBER OF YEARS AGO"
       4 = "4 AGE WHEN LAST DROVE"
       7 = "7 NEVER DROVE"  ;
VALUE W500123W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 STILL FAVORITE ACTIVITY"
       2 = "2 HAS A NEW FAVORITE ACTIVITY"
      95 = "95 NO FAVORITE ACTIVITY"    ;
VALUE W500124W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 LESS THAN 1 MONTH"
       2 = "2 1 TO 3 MONTHS"
       3 = "3 4 TO 5 MONTHS"
       4 = "4 6 OR MORE MONTHS" ;
  VALUE W500125W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 LESS THAN 1 WEEK"
       2 = "2 1 TO 2 WEEKS"
       3 = "3 3 TO 4 WEEKS"  ;
  VALUE W500126W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 A FRACTURE, SPRAIN, OR INJURY"
       2 = "2 A HIP, KNEE, OR OTHER JOINT REPLACEMENT"
       3 = "3 ANOTHER MUSCULOSKELETAL CONDITION"
       4 = "4 A STROKE OR TIA"
       5 = "5 A HEART ATTACK"
       6 = "6 ANOTHER HEART CONDITION OR VASCULAR DISEASE"
```

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     7 = "7 A BREATHING CONDITION"
     8 = "8 A NEUROLOGICAL CONDITION LIKE MS OR PARKINSONS"
     9 = "9 CANCER"
    94 = "94 ANOTHER CONDITION (SPECIFY)"
    95 = "95 NO MEDICAL CONDITION (IF VOLUNTEERED)" ;
  VALUE W500128W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 DIFFICULTY CHEWING OR SWALLOWING"
     2 = "2 DIFFICULTY SPEAKING OR BEING UNDERSTOOD"
     3 = "3 PAIN LEVEL"
     4 = "4 PROBLEM WITH BREATHING"
     5 = "5 PROBLEM WITH STRENGTH (MUSCLE WEAKNESS)"
     6 = "6 PROBLEM WITH MOVEMENT (RANGE OF MOTION)"
     7 = "7 LOW ENERGY LEVEL"
     8 = "8 PROBLEM WITH BALANCE OR COORDINATION"
     9 = "9 PROBLEM WITH FALLS"
    10 = "10 PROBLEM WITH MEMORY"
    95 = "95 NONE OF THESE PROBLEMS"  ;
  VALUE W500131W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 AS AN OVERNIGHT PATIENT IN A HOSPITAL, NURSING HOME OR REHAD
FACILITY"
     2 = "2 AT AN OUTPATIENT CENTER, CLINIC, DRs OR THERAPISTs OFFICE"
     3 = "3 HOME"
     4 = "4 SOMEWHERE ELSE"  ;
  VALUE W500132W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
     1 = "1 IMPROVED"
     2 = "2 GOT WORSE"
     3 = "3 STAYED ABOUT THE SAME"
     4 = "4 VARIED/UP AND DOWN (IF VOLUNTEERED)"  ;
 VALUE W500133W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 A LOT"
    2 = "2 SOMEWHAT"
    3 = "3 A LITTLE"  ;

  VALUE W500137W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 WELL OFF"
    2 = "2 ABOVE AVERAGE"
    3 = "3 AVERAGE"
```

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    4 = "4 BELOW AVERAGE"
    5 = "5 POOR"  ;
VALUE W500010W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MOTHER ONLY"
    2 = "2 FATHER ONLY"
    3 = "3 ANOTHER RELATIVE"
    4 = "4 NON-RELATIVES"
    5 = "5 VARIED/MOVED AROUND"  ;
  VALUE W500142W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 VERY WELL"
    2 = "2 WELL"
    3 = "3 NOT WELL"
    4 = "4 NOT AT ALL"  ;
  VALUE W500147W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 NUMBER OF YEARS"
    2 = "2 AGE"  ;
  VALUE W500150W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 ENTER PAYCHECK AMOUNT"
    2 = "2 ENTER PAY PER HOUR"
    3 = "3 ENTER PAY PER DAY"  ;
  VALUE W500151W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 ENTER OCCUPATION"
    2 = "2 NEVER WORKED ENTIRE LIFE"
    3 = "3 HOMEMAKER/RAISED CHILDREN/WORKED IN THE HOME"  ;
  VALUE W500152W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 SAME KIND OF WORK"
    2 = "2 SOMETHING DIFFERENT"  ;
  VALUE W500160W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 MAIL"
```

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       2 = "2 DIRECT DEPOSIT"
       3 = "3 PREPAID CARD"  ;
     VALUE W500165W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 ENTER COMBINED AMOUNT"
       2 = "2 ENTER SP AND SPOUSE/PARTNER AMOUNTS SEPARATELY"  ;
     VALUE W500166W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 LESS THAN $1,300"
       2 = "2 $1,300 TO LESS THAN $1,700"
       3 = "3 $1,700 TO LESS THAN $2,200"
       4 = "4 $2,200 TO LESS THAN $2,600"
       5 = "5 $2,600 OR MORE"  ;
     VALUE W500167W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 LESS THAN $700"
       2 = "2 $700 TO LESS THAN $1,000"
       3 = "3 $1,000 TO LESS THAN $1,300"
       4 = "4 $1,300 TO LESS THAN $1,600"
       5 = "5 $1,600 OR MORE"  ;
     VALUE W500168W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 LESS THAN $300"
       2 = "2 $300 TO LESS THAN $700"
       3 = "3 $700 TO LESS THAN $1,000"
       4 = "4 $1,000 OR MORE"   ;
     VALUE W500169W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 LESS THAN $100"
       2 = "2 $100 TO LESS THAN $200"
       3 = "3 $200 TO LESS THAN $400"
       4 = "4 $400 TO LESS THAN $700"
       5 = "5 $700 OR MORE"  ;
     VALUE W500170W
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
       1 = "1 LESS THAN $1,000"
       2 = "2 $1,000 TO LESS THAN $1,400"
       3 = "3 $1,400 TO LESS THAN $1,800"
       4 = "4 $1,800 TO LESS THAN $2,200"
```

```
    5 = "5 $2,200 OR MORE"  ;
  VALUE W500171W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $500"
    2 = "2 $500 TO LESS THAN $700"
    3 = "3 $700 TO LESS THAN $900"
    4 = "4 $900 TO LESS THAN $1,100"
    5 = "5 $1,100 OR MORE"  ;
  VALUE W500172W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $600"
    2 = "2 $600 TO LESS THAN $1,300"
    3 = "3 $1,300 TO LESS THAN $2,100"
    4 = "4 $2,100 TO LESS THAN $5,900"
    5 = "5 $5,900 OR MORE"  ;
  VALUE W500173W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $400"
    2 = "2 $400 TO LESS THAN $900"
    3 = "3 $900 TO LESS THAN $1,600"
    4 = "4 $1,600 TO LESS THAN $3,800"
    5 = "5 $3,800 OR MORE"  ;
  VALUE W500174W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $34,000"
    2 = "2 $34,000 TO LESS THAN $82,000"
    3 = "3 $82,000 TO LESS THAN $175,000"
    4 = "4 $175,000 TO LESS THAN $413,000"
    5 = "5 $413,000 OR MORE"   ;
  VALUE W500175W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $20,000"
    2 = "2 $20,000 TO LESS THAN $47,000"
    3 = "3 $47,000 TO LESS THAN $92,000"
    4 = "4 $92,000 TO LESS THAN $218,000"
    5 = "5 $218,000 OR MORE"   ;
  VALUE W500176W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $200"
```

```
    2 = "2 $200 TO LESS THAN $500"
    3 = "3 $500 TO LESS THAN $1,000"
    4 = "4 $1,000 TO LESS THAN $2,500"
    5 = "5 $2,500 OR MORE"   ;
  VALUE W500177W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $100"
    2 = "2 $100 TO LESS THAN $300"
    3 = "3 $300 TO LESS THAN $700"
    4 = "4 $700 TO LESS THAN $1,700"
    5 = "5 $1,700 OR MORE"   ;
  VALUE W500178W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $2,400"
    2 = "2 $2,400 TO LESS THAN $6,000"
    3 = "3 $6,000 TO LESS THAN $12,000"
    4 = "4 $12,000 TO LESS THAN $30,000"
    5 = "5 $30,000 OR MORE"   ;
  VALUE W500179W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $1,200"
    2 = "2 $1,200 TO LESS THAN $3,600"
    3 = "3 $3,600 TO LESS THAN $8,400"
    4 = "4 $8,400 TO LESS THAN $20,400"
    5 = "5 $20,400 OR MORE"   ;
  VALUE W500180W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $9,000"
    2 = "2 $9,000 TO LESS THAN $18,000"
    3 = "3 $18,000 TO LESS THAN $93,000"
    4 = "4 $93,000 TO LESS THAN $350,000"
    5 = "5 $350,000 OR MORE"   ;
  VALUE W500181W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $600"
    2 = "2 $600 TO LESS THAN $5,000"
    3 = "3 $5,000 TO LESS THAN $16,000"
    4 = "4 $16,000 TO LESS THAN $62,000"
    5 = "5 $62,000 OR MORE"   ;
  VALUE W500182W
   -7 = '-7 RF'
   -8 = '-8 DK'
```

SAS ALGORITHM FOR DEMENTIA

```
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $8,000"
    2 = "2 $8,000 TO LESS THAN $62,000"
    3 = "3 $62,000 TO LESS THAN $192,000"
    4 = "4 $192,000 TO LESS THAN $213,000"
    5 = "5 $213,000 OR MORE"   ;
VALUE W500183W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $300"
    2 = "2 $300 TO LESS THAN $2,500"
    3 = "3 $2,500 TO LESS THAN $8,000"
    4 = "4 $8,000 TO LESS THAN $37,000"
    5 = "5 $37,000 OR MORE"   ;
VALUE W500184W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $11,000"
    2 = "2 $11,000 TO LESS THAN $25,000"
    3 = "3 $25,000 TO LESS THAN $50,000"
    4 = "4 $50,000 TO LESS THAN $108,000"
    5 = "5 $108,000 OR MORE"   ;
VALUE W500185W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $2,000"
    2 = "2 $2,000 TO LESS THAN $7,000"
    3 = "3 $7,000 TO LESS THAN $17,000"
    4 = "4 $17,000 TO LESS THAN $57,000"
    5 = "5 $57,000 OR MORE"   ;
VALUE W500186W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $8,000"
    2 = "2 $8,000 TO LESS THAN $13,000"
    3 = "3 $13,000 TO LESS THAN $28,000"
    4 = "4 $28,000 TO LESS THAN $54,000"
    5 = "5 $54,000 OR MORE"   ;
VALUE W500187W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 LESS THAN $500"
    2 = "2 $500 TO LESS THAN $1,900"
    3 = "3 $1,900 TO LESS THAN $5,000"
    4 = "4 $5,000 TO LESS THAN $20,000"
    5 = "5 $20,000 OR MORE"   ;
```

SAS ALGORITHM FOR DEMENTIA

```
VALUE W500188W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $200"
  2 = "2 $200 TO LESS THAN $1,000"
  3 = "3 $1,000 TO LESS THAN $4,000"
  4 = "4 $4,000 TO LESS THAN $16,000"
  5 = "5 $16,000 OR MORE"  ;
VALUE W500189W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $400"
  2 = "2 $400 TO LESS THAN $1,000"
  3 = "3 $1,000 TO LESS THAN $2,000"
  4 = "4 $2,000 TO LESS THAN $11,000"
  5 = "5 $11,000 OR MORE"  ;
VALUE W500190W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $30,000"
  2 = "2 $30,000 TO LESS THAN $101,000"
  3 = "3 $101,000 TO LESS THAN $247,000"
  4 = "4 $247,000 TO LESS THAN $703,000"
  5 = "5 $703,000 OR MORE"  ;
VALUE W500191W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $18,000"
  2 = "2 $18,000 TO LESS THAN $68,000"
  3 = "3 $68,000 TO LESS THAN $122,000"
  4 = "4 $122,000 TO LESS THAN $293,000"
  5 = "5 $293,000 OR MORE"  ;
VALUE W500192W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $3,600"
  2 = "2 $3,600 TO LESS THAN $12,000"
  3 = "3 $12,000 TO LESS THAN $25,000"
  4 = "4 $25,000 TO LESS THAN $64,000"
  5 = "5 $64,000 OR MORE"  ;
VALUE W500193W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $3,600"
  2 = "2 $3,600 TO LESS THAN $7,200"
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   3 = "3 $7,200 TO LESS THAN $14,000"
   4 = "4 $14,000 TO LESS THAN $38,000"
   5 = "5 $38,000 OR MORE"   ;
 VALUE W500194W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $30,000"
  2 = "2 $30,000 TO LESS THAN $43,000"
  3 = "3 $43,000 TO LESS THAN $66,000"
  4 = "4 $66,000 TO LESS THAN $109,000"
  5 = "5 $109,000 OR MORE"   ;
 VALUE W500195W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $18,000"
  2 = "2 $18,000 TO LESS THAN $22,000"
  3 = "3 $22,000 TO LESS THAN $36,000"
  4 = "4 $36,000 TO LESS THAN $56,000"
  5 = "5 $56,000 OR MORE" ;
 VALUE W500209W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 YES"
  2 = "2 NO"
  3 = "3 CANT DO - DONT DO"  ;
 VALUE W500196W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 LESS THAN $2,500"
  2 = "2 $2,500 TO LESS THAN $5,000"
  3 = "3 $5,000 TO LESS THAN $10,000"
  4 = "4 $10,000 TO LESS THAN $20,000"
  5 = "5 $20,000 TO LESS THAN $50,000"
  6 = "6 $50,000 OR MORE"   ;
 VALUE dage2us
    0 = "0 Less than age 1"
    997 = "997 Born in US"
 -8 = "-8 DK"
 -7 = "-7 RF"
 -1 = "-1 Inapplicable";
 VALUE locsp
  -9 ="-9 MISSING"
  -8 ="-8 DK"
  -7 ="-7 RF"
  -1 ="-1 Inapplicable"
  1 = "1 Independent Living"
  2 = "2 Assisted Living"
  3 = "3 Special Care Unit"
  4 = "4 Nursing Home"
```

```
  8 = "8 Not Reported" ;

  VALUE resid
 -9 = '-9 Missing'
      -8 = "-8 DK"
      -7 = "-7 RF"
      -1 = "-1 Inapplicable"
      1 = "Community"
      2 = "Residential care not nursing home (SP interview)"
      3 = "Residential care not nursing home (FQ only)"
      4 = "Nursing home (SP interview)"
      5 = "Nursing home (FQ only)"
      6 = "Deceased"
      7 = "Residential care not nursing home in R1 and R2 (FQ only)"
      8 = "Nursing home in R1 and R2 (FQ only)";

  VALUE  residlml
      1 = "1 Community"
      2 = "2 Residential care"
      -1 = "-1 Inapplicable"
 -9 = '-9 Missing';

 VALUE SP50139W
   1 = "1 White/Caucasian"
   2 = "2 Black/African American"
   3 = "3 Other"
     -7 = '-7 RF'
     -8 = '-8 DK'
  -9 = '-9 Missing';

 VALUE Locat15w
      1= "1 Lives in same City and State as at age 15"
      2= "2 Lives in same state but different City (or DKRF city) as age
15"
      3= "3 Does not live in same State as age 15"
     -1= "-1 Inapplicable"
     -7 = '-7 RF'
     -8 = '-8 DK'
      -9 = '-9 Missing';
 Value  dresnew
      1 = "1 same residence as last int"
      2 = "2 new residence since last int"
     -1= "-1 Inapplicable"
   -7 = '-7 RF'
   -8 = '-8 DK'
   -9 = '-9 Missing';

  Value dcontnew
      1 = "1 Continuing sample from R1"
      2 = "2 New sample in R5"
     -1= "-1 Inapplicable"
   -7 = '-7 RF'
   -8 = '-8 DK'
   -9 = '-9 Missing';

   VALUE DMDDEVYR
    1 = ' 1 No Mobility device use in last year/since last interview'
```

```
   2 = ' 2 Mobility device use in last year/since last interview'
  -1 = '-1 Inapplicable '
  -7  = '-7 RF'
  -8  = '-8 DK'
  -9 = '-9 Missing';

VALUE DMDEVST
  0 = '0 less than 1 month of mobility device use'
  1 = '1 month of mobility device use'
  2 = '2 months of mobility device use'
  3 = '3 months of mobility device use'
  4 = '4 months of mobility device use'
  5 = '5 months of mobility device use'
  6 = '6 months of mobility device use'
  7 = '7 months of mobility device use'
  8 = '8 months of mobility device use'
  9 = '9 months of mobility device use'
 10 = '10 months of mobility device use'
 11 = '11 months of mobility device use'
 -7 = '-7 used last month but RF number of months of use in year'
 -8 = '-8 used last month but DK number of months of use in year'
 -1 = '-1 Inapplicable '
 -2 = '-2 Not asked of continuing sample';

VALUE DMDEVEND
   0 = '0 Between 11 and 12 months since device use ended'
  1 = '1 month since mobility device use ended'
  2 = '2 months since mobility device use ended'
  3 = '3 months since mobility device use ended'
  4 = '4 months since mobility device use ended'
  5 = '5 months since mobility device use ended'
  6 = '6 months since mobility device use ended'
  7 = '7 months since mobility device use ended'
  8 = '8 months since mobility device use ended'
  9 = '9 months since mobility device use ended'
 10 = '10 months since mobility device use ended'
 11 = '11 months since mobility device use ended'
 -7 = '-7 no use last month and RF number of months since device use
ended'
 -8 = '-8 no use last month and DK number of months since device use
ended'
 -1 = '-1 Inapplicable '
  -2 = '-2 Not asked of continuing sample' ;
VALUE DMDHLPYR
 1 = " 1 No mobility help in last year/since last interview"
 2 = " 2 Mobility help in last year/since last interview"
-7 = " -7 RF"
-8 = " -8 DK"
-1 = " -1 Inapplicable "
        -2 = '-2 Not asked of continuing sample' ;

VALUE DMDHLPST
  0 = '0 less than 1 month of help'
  1 = '1 month of help'
  2 = '2 months of help'
  3 = '3 months of help'
  4 = '4 months of help'
```

```
    5 = '5 months of help'
    6 = '6 months of help'
    7 = '7 months of help'
    8 = '8 months of help'
    9 = '9 months of help'
   10 = '10 months of help'
   11 = '11 months of help'
   -7 = '-7 help last month but RF number of months of help in year'
   -8 = '-8 help last month but DK number of months of help in year'
  -1 = " -1 Inapplicable "
  -2 = " -2 Not asked of continuing sample ";
   VALUE DMDHLPEN
    0 = '0 less than 1 month since help ended'
    1 = '1 month since help ended'
    2 = '2 months since help ended'
    3 = '3 months since help ended'
    4 = '4 months since help ended'
    5 = '5 months since help ended'
    6 = '6 months since help ended'
    7 = '7 months since help ended'
    8 = '8 months since help ended'
    9 = '9 months since help ended'
   10 = '10 months since help ended'
   11 = '11 months since help ended'
   -7 = '-7 no help last month and RF number of months since help ended'
   -8 = '-8 no help last month and DK number of months since help ended'
   -1 = '-1 Inapplicable '
  -2 = '-2 Not asked of continuing sample';
  VALUE DMHLPYRS
   0   = '0 none or less than 1 year'
   997 = '997 since birth'
   -7  = '-7 RF'
   -8  = '-8 DK'
   -1  = '-1 Inapplicable '
   -2 = '-2 Not asked of continuing sample'
  -9  = '-9 Missing';
  VALUE DSDHLPYR
  1 = ' 1 No self care help in last year/since last interview'
  2 = ' 2 Self care help in last year/since last interview'
 -1 = '-1 Inapplicable'
 -7 = '-7 DK'
 -8 = '-8 RF'
 -9 = '-9 Missing';
  VALUE DSHLPND
          0 = ' 0 Between 11 and 12 months since self care help ended'
          1 = '1 Month since self care help ended'
          2 = '2 Months since self care help ended'
          3 = '3 Months since self care help ended'
          4 = '4 Months since self care help ended'
          5 = '5 Months since self care help ended'
          6 = '6 Months since self care help ended'
          7 = '7 Months since self care help ended'
          8 = '8 Months since self care help ended'
          9 = '9 Months since self care help ended'
          10 = '10 Months since self care help ended'
          11 = '11 Months since self care help ended'
       -7 = '-7 No help last month and RF number of months since help ended'
```

```
    -8 = '-8 No help last month and DK number of months since help ended'
    -1 = '-1 Inapplicable'
        -2 = '-2 Not asked of continuing sample'
    -9 = '-9 Missing'    ;


VALUE DSHLPYRS
     0 = ' 0 None or less than 1 year of self care help'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
        -2 = '-2 Not asked of continuing sample'
    -9 = '-9 Missing'
       997 = '997 since birth';
   VALUE SP5RH7W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
        1 = "1 As an overnight patient in a hospital, nursing home, or
rehab facility"
        2 = "2 At an outpatient center, clinic, or doctors office or
therapists office"
    3 = "3 At home"
    4 = "4 Somewhere else"  ;
   VALUE SP5LF5W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
   997 = "997 Number of hours vary each week"  ;


VALUE  DMH_GRP
        1 = "1 Help started"
        2 = "2 Help ended"
        3 = "3 Help both interviews with gap"
        4 = "4 Help both interviews with no gap"
        5 = "5 Help between interviews only"
        6 = "6 No help either interview or between"
       11 = "11 Help started (month started missing)"
       21 = "21 Help ended (month ended missing)"
       41 = "41 Help both interviews (DK whether gap)"
       61 = "61 No help either interview (DK whether help between)"
       -9 = "-9 Missing"
       -1 = "-1 Inapplicable"
          -3 ="-3 Not asked of new sample"
     -999 = "-999 Not determined" ;

    VALUE  DMU_GRP
        1 = "1 Use started"
        2 = "2 Use ended"
        3 = "3 Use both interviews with gap"
        4 = "4 Use both interviews with no gap"
        5 = "5 Use between interviews only "
        6 = "6 No use either interview or between"
       11 = "11 Use started (month started missing)"
       21 = "21 Use ended (month ended missing)"
       41 = "41 Use both interviews (DK whether gap)"
```

```
        61 = "61 No use either interview (DK whether use between)"
        -9 = "-9 Missing"
        -1 = "-1 Inapplicable"
          -3 = "-3 Not asked of new sample"
      -999 = "-999 Not determined" ;


        VALUE   DMDS5FLG
        -1 = "-1 Inapplicable"
             -3 = "-3 Not asked of new sample"
         0 = "0 No current SP interview"
         1 = "1 No SP interview last round"
         2 = "2 Died and month death missing"
         3 = "3 Died <=1 month after last interview"
         4 = "4 Died 12-13 months after last interview"
         7 = "7 Skipped 1 or more help questions" ;
        VALUE   DS_GRP
         1 = "1 Help started"
         2 = "2 Help ended"
         3 = "3 Help both interviews with gap"
         4 = "4 Help both interviews with no gap"
         5 = "5 Help between interviews only"
         6 = "6 No help either interview or between"
        11 = "11 Help started (month started missing)"
        21 = "21 Help ended (month ended missing)"
        41 = "41 Help both interviews (DK whether gap)"
        61 = "61 No help either interview (DK whether help between)"
        -9 = "-9 Missing"
        -1 = "-1 Inapplicable"
          -3 = "-3 Not asked of new sample"
      -999 = "-999 Not determined" ;



        value groupmo 1 = "1 Started"
            2 = "2 Ended"
             3 = "3 Both times with gap"
             4 = "4 Both times no gap"
                5 = "5 Between only (end missing)"
             6 = "6 Neither time AND not between"
            11 = "11 Started (start missing)"
            21 = "21 Ended (end missing)"
            41 = "41 Both times (gap missing)"
            61 = "61 Neither time (between missing)"
                -1= "-1 Inapplicable"
                    -3="-3 Not asked of new sample"
              -7= "-7 RF"
              -8= "-8 DK"
              -9= "-9 Missing"
          -999 = "-999 Not determined"
           -99 = "-99 Partial" ;


           VALUE nw_mths  0 = "0 Less than 1 month"
        1 ="1 month"
        2 ="2 months"
        3 ="3 months"
        4 ="4 months"
        5 ="5 months"
        6 ="6 months"
```

```
                7 ="7 months"
                8 ="8 months"
                9 ="9 months"
                10= "10 months"
                11= "11 months"
                12= "12 months"
                13= "13 months"
                14= "14 months"
                15= "15 months"
                16= "16 months"
                17= "17 months"
                18= "18 months"
                19= "19 months"
                20= "20 months"
                90= "90 Last round disputed"
                999= "999 No months"
                -1= "-1 Inapplicable"
                    -3="-3 Not asked of new sample"
                -7= "-7 RF"
                -8= "-8 DK"
                -9= "-9 Missing"
                -10= "-10 Not ascertained"
                -12= "-12 Outside of range (greater than months between
interviews)"
                -13= "-13 None"
                -999= "-999 Not determined"
                -99= "-99 Partial";
                    VALUE chntinhh
                1 ="1 Yes, not in household"
                -1= "-1 Inapplicable"
                -7= "-7 RF"
                -8= "-8 DK"
                -9= "-9 Missing";
                Value d4mssadd
-1='-1 Inapplicable'
 0='0 no flags and added at undetermined section'
 1='1 no flags and added at CL section'
 2='2 no flags and added at DT section'
 3='3 no flags and added at EW section'
 4='4 no flags and added at HA section'
 5='5 no flags and added at HO section'
 6='6 no flags and added at MC section'
 7='7 no flags and added at MO section'
 8='8 no flags and added at PA section'
 9='9 no flags and added at PE section'
10='10 no flags and added at SC section'
11='11 no flags and added at SN section'
12='12 no flags and added at CS section'
13='13 no flags and added at HH section'
14='14 no flags and added at IS section'
15='15 no flags and added at HL section'
16='16 no flags and added at SL section';
                VALUE HA5DWHL
                    1 = "1 Meals on wheels last month"
                    -1 = "-1 Inapplicable";
                VALUE HA5DTKO
                    1 = "1 Restaurant or take out last month"
```

```
                        -1 = "-1 Inapplicable";
                VALUE RE5BLDG
                  -7 = '-7 RF'
                  -8 = '-8 DK'
                  -1 = '-1 Inapplicable'
                  -9 = '-9 Missing'
                   1 = "1 Building has one floor"
                   2 = "2 Building has multiple floors"    ;
VALUE S000163W
     1 = "1 PRIVACY MORE IMPORTANT"
     2 = "2 SOCIALIZE MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
               -1= "-1 Inapplicable"
               -7= "-7 RF"
               -8= "-8 DK"
               -9= "-9 Missing";

   VALUE S000164W
     1 = "1 SOCIALIZE MORE IMPORTANT"
     2 = "2 PRIVACY MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
               -1= "-1 Inapplicable"
               -7= "-7 RF"
               -8= "-8 DK"
               -9= "-9 Missing";

   VALUE S000165W
     1 = "1 BEING SAFE MORE IMPORTANT"
     2 = "2 HAVING CHOICES MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
    -1= "-1 Inapplicable"
    -7= "-7 RF"
    -8= "-8 DK"
    -9= "-9 Missing"  ;

   VALUE S000166W
     1 = "1 HAVING CHOICES MORE IMPORTANT"
     2 = "2 BEING SAFE MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
    -1= "-1 Inapplicable"
    -7= "-7 RF"
    -8= "-8 DK"
    -9= "-9 Missing"  ;

   VALUE S000167W
     1 = "1 PRIVACY MORE IMPORTANT"
     2 = "2 BEING SAFE MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
    -1= "-1 Inapplicable"
    -7= "-7 RF"
    -8= "-8 DK"
    -9= "-9 Missing" ;

   VALUE S000168W
     1 = "1 BEING SAFE MORE IMPORTANT"
     2 = "2 PRIVACY MORE IMPORTANT"
     3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
```

```
  -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing" ;

VALUE S000169W
  1 = "1 SOCIALIZING MORE IMPORTANT"
  2 = "2 HAVING CHOICES MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing"  ;

VALUE S000170W
  1 = "1 HAVING CHOICES MORE IMPORTANT"
  2 = "2 SOCIALIZING MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing"  ;

VALUE S000171W
  1 = "1 PRIVACY MORE IMPORTANT"
  2 = "2 HAVING CHOICES MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
  -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing" ;

VALUE S000172W
  1 = "1 HAVING CHOICES MORE IMPORTANT"
  2 = "2 PRIVACY MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
  -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing" ;

VALUE S000173W
  1 = "1 SOCIALIZING MORE IMPORTANT"
  2 = "2 BEING SAFE MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
 -9= "-9 Missing"  ;

VALUE S000174W
  1 = "1 BEING SAFE MORE IMPORTANT"
  2 = "2 SOCIALIZING MORE IMPORTANT"
  3 = "3 BOTH IMPORTANT/CANT CHOOSE/DONT KNOW"
 -1= "-1 Inapplicable"
 -7= "-7 RF"
 -8= "-8 DK"
```

```
    -9= "-9 Missing" ;

  VALUE S000175W
    1 = "1 LESS THAN 1 HOUR"
    2 = "2 MORE THAN 1 HOUR"
    3 = "3 ABOUT 1 HOUR"
   -1= "-1 Inapplicable"
   -7= "-7 RF"
   -8= "-8 DK"
   -9= "-9 Missing"  ;

  VALUE S000176W
    1 = "1 LESS THAN 15 MINUTES"
    2 = "2 15 MINUTES"
    3 = "3 BETWEEN 15 AND 30 MINUTES"
    4 = "4 30 MINUTES"
    5 = "5 BETWEEN 30 AND 45 MINUTES"
    6 = "6 45 MINUTES"
    7 = "7 BETWEEN 45 AND 60 MINUTES"
   -1= "-1 Inapplicable"
   -7= "-7 RF"
   -8= "-8 DK"
   -9= "-9 Missing" ;

  VALUE S000177W
    1 = "1 ABOUT 1  HOURS"
    2 = "2 ABOUT 2 HOURS"
    3 = "3 ABOUT 3 HOURS"
    4 = "4 ABOUT 4 HOURS"
    5 = "5 ABOUT 5 HOURS"
    6 = "6 6 OR MORE HOURS"
   -1= "-1 Inapplicable"
   -7= "-7 RF"
   -8= "-8 DK"
   -9= "-9 Missing" ;

    VALUE W600001W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    1 = "1 STRONGLY AGREE"
    2 = "2 AGREE"
    3 = "3 DISAGREE"
      4 = "4 STRONGLY DISAGREE";
    VALUE W600002W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
    0 = "0 NONE"
    1 = "1 1-2"
    2 = "2 3-5"
    3 = "3 6-10"
    4 = "4 11-15"
    5 = "5 16-20"
    6 = "6 MORE THAN 20";
```

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```
    VALUE W600003W
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 A (picture showing 4 pills)"
 2 = "2 B (picture showing 8 pills)"
 3 = "3 C (picture showing 12 pills)"
 4 = "4 D (picture showing 16 pills)"
 5 = "5 E (picture showing 20 pills)"
 6 = "6 F (picture showing 24 pills)";

     VALUE YNF
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
 1 = "1 Yes"
 2 = "2 No";
     VALUE FQ6DLOCA
  1 = "1 Independent Living"
 2 = "2 Assisted Living"
 3 = "3 Special Care Unit"
 4 = "4 Nursing home"
  -8 = "-8 Not reported"
  -1 = "-1 Inapplicable";
     VALUE R6DRES1A
1 = '1 Community'
2 = '2 Residential Care'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';
             VALUE SP30023W
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = "1 Building has one floor"
         2 = "2 Building has multiple floors"   ;
             VALUE RE5BLDG
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
         1 = "1 Building has one floor"
         2 = "2 Building has multiple floors"   ;
   VALUE WORDRECC
    -1 = '-1 Inapplicable'
    -2 = '-2 Proxy says cannot ask SP'
    -3 = '-3 Proxy says can ask SP but SP unable to answer'
    -7 = '-7 SP refused activity'
    -9 = '-9 Missing';
     VALUE OLDMTHS
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';
     VALUE MONTHS
```

```
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
              VALUE  FLAGS
         -1 = "-1 Inapplicable"
             -3 = "-3 Not asked of new sample"
          0 = "0 No current SP interview"
          1 = "1 No SP interview last round"
          2 = "2 Died and month death missing"
          3 = "3 Died <=1 month after last interview"
          4 = "4 Died 12-13 months after last interview"
          7 = "7 Skipped 1 or more help questions" ;
   VALUE DMDEVUSE
    0   = '0 none or less than 1 year'
    997 = '997 since birth'
    -7  = '-7 RF'
    -8  = '-8 DK'
    -1  = '-1 Inapplicable '
    -2 = '-2 Not asked of continuing sample'
    -9  = '-9 Missing';
   VALUE SPPB_MISSING
      -7 = '-7 RF'
  -8 = '-8 DK'
  -9 = '-9 Missing'
   -1="-1 Inapplicable"
   1="1 Proxy interview"
   2="2 Missing walk and repeat chair and balance"
   3="3 Missing walk and repeat chair"
   4="4 Missing walk and balance"
   5="5 Missing repeat chair and balance"
   6="6 Missing walk"
   7="7 Missing repeat chair"
   8="8 Missing balance"
   9="9 No space"
   10="10 No chair"
   11="11 No space walk and no chair"
   12="12 No space walk and non-safety missing"
   13="13 No chair and non-safety missing"
   14="14 Non-safety walk"
   15="15 Non-safety chair"
   16="16 Non-safety balance"
   17="17 Non-safety walk and chair"
   18="18 Non-safety walk and balance"
   19="19 Non-safety chair and balance"
   20="20 Non-safety walk and chair and balance";
 VALUE W700BC2W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Ineligible'
  -9 = '-9 Missing'
  1 = "1 Eligible and consented"
  2 = "2 Eligible and did not consent"
  3 = "3 Ineligible, proxy respondent";
    Value LMLHELPR
    1 = '1 Yes'
    2 = '2 No'
```

```
      -8 = '-8 DK'
      -7 = '-7 RF'
      -2 = '-2 Helper is relative'
      -1 = '-1 Inapplicable';
  VALUE W000RUCC
       -1 = '-1 Inapplicable'
          1 = '1 Metro - Counties in metro areas of 1 million population or
more'
          2 = '2 Metro - Counties in metro areas of 250,000 to 1 million
population'
          3 = '3 Metro - Counties in metro areas of fewer than 250,000
population'
          4 = '4 Nonmetro - Urban population of 20,000 or more, adjacent to
a metro area'
          5 = '5 Nonmetro - Urban population of 20,000 or more, not
adjacent to a metro area'
          6 = '6 Nonmetro - Urban population of 2,500 to 19,999, adjacent
to a metro area'
          7 = '7 Nonmetro - Urban population of 2,500 to 19,999, not
adjacent to a metro area'
          8 = '8 Nonmetro - Completely rural or less than 2,500 urban
population';
   VALUE W00metro
       -1 = '-1 Inapplicable'
          1 = '1 Metropolitan'
          2 = '2 Non-metropolitan';
run;

/* Run NHATS R1 OP Sen Dem format  */

PROC FORMAT ;

   VALUE W000073W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = " 1 JANUARY"
     2 = " 2 FEBRUARY"
     3 = " 3 MARCH"
     4 = " 4 APRIL"
     5 = " 5 MAY"
     6 = " 6 JUNE"
     7 = " 7 JULY"
     8 = " 8 AUGUST"
     9 = " 9 SEPTEMBER"
    10 = "10 OCTOBER"
    11 = "11 NOVEMBER"
    12 = "12 DECEMBER"    ;
   VALUE DOPAGE4C
      1 = " 1 - UNDER 20"
      2 = " 2 - 20-24"
      3 = " 3 - 25-29"
      4 = " 4 - 30-34"
      5 = " 5 - 35-39"
      6 = " 6 - 40-44"
      7 = " 7 - 45-49"
```

```
          8 = " 8 - 50-54"
          9 = " 9 - 55-59"
         10 = "10 - 60-65"
         11 = "11 - 66-69"
         12 = "12 - 70-74"
         13 = "13 - 75-79"
         14 = "14 - 80-85"
         15 = "15 - 86-89"
         16 = "16 - 90-94"
         17 = "17 - 95-99"
         18 = "18 - 100 +"
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing';


      VALUE RFDK_F
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';

RUN;



/* Import NHAT data sets */

%LET filepath1=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\NHATS
Public Use Files\Round 1\SAS;
%LET filepath2=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\NHATS
Public Use Files\Round 2\SAS;
%LET filepath3=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\NHATS
Public Use Files\Round 3\SAS;
%LET filepath4=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\NHATS
Public Use Files\Round 4\SAS;
%LET filepath5=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\NHATS
Public Use Files\Round 5\SAS;
%LET filepath6=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\NHATS
Public Use Files\Round 6\SAS;
%LET filepath7=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\NHATS
Public Use Files\Round 7\SAS;
%LET filepath8=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\NHATS
Public Use Files\Round 8\SAS;
%LET filepath9=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\NHATS
Public Use Files\Round 9\SAS;

%LET filepath19=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 1\NHATS Round 1 OP Sensitive Demographic File\SAS;
%LET filepath20=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 2\NHATS Round 2 OP Sensitive Demographic File\SAS;
%LET filepath21=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 3\NHATS Round 3 OP Sensitive Demographic File\SAS;
%LET filepath22=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 4\NHATS Round 4 OP Sensitive Demographic File\SAS;
%LET filepath23=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 5\NHATS Round 5 OP Sensitive Demographic File\SAS;
```

SAS ALGORITHM FOR DEMENTIA

```sas
%LET filepath24=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 6\NHATS Round 6 OP Sensitive Demographic File\SAS;
%LET filepath25=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 7\NHATS Round 7 OP Sensitive Demographic File\SAS;
%LET filepath26=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 8\NHATS Round 8 OP Sensitive Demographic File\SAS;
%LET filepath27=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 9\NHATS Round 9 OP Sensitive Demographic File\SAS;


DATA NHATSR1_OP;
 SET "&filepath1\NHATS_Round_1_OP_File_v2";
 RUN;


DATA NHATSR1_SP;
 SET "&filepath1\NHATS_Round_1_SP_File";
 RUN;


DATA NHATSR2_OP;
 SET "&filepath2\NHATS_Round_2_OP_File_v2";
 RUN;

DATA NHATSR2_SP;
 SET "&filepath2\NHATS_Round_2_SP_File_v2";
 RUN;


DATA NHATSR3_OP;
 SET "&filepath3\NHATS_Round_3_OP_File";
 RUN;

DATA NHATSR3_SP;
 SET "&filepath3\NHATS_Round_3_SP_File";
 RUN;


DATA NHATSR4_OP;
 SET "&filepath4\NHATS_Round_4_OP_File";
 RUN;

DATA NHATSR4_SP;
 SET "&filepath4\NHATS_Round_4_SP_File";
 RUN;


DATA NHATSR5_OP;
 SET "&filepath5\NHATS_Round_5_OP_File_V2";
 RUN;

DATA NHATSR5_SP;
 SET "&filepath5\NHATS_Round_5_SP_File_v2";
 RUN;
```

SAS ALGORITHM FOR DEMENTIA

```
DATA NHATSR6_OP;
 SET "&filepath6\NHATS_Round_6_OP_File_V2";
 RUN;

DATA NHATSR6_SP;
 SET "&filepath6\NHATS_Round_6_SP_File_V2";
 RUN;


DATA NHATSR7_OP;
 SET "&filepath7\NHATS_Round_7_OP_File";
 RUN;

DATA NHATSR7_SP;
 SET "&filepath7\NHATS_Round_7_SP_File";
 RUN;



DATA NHATSR8_OP;
 SET "&filepath8\NHATS_Round_8_OP_File";
 RUN;

DATA NHATSR8_SP;
 SET "&filepath8\NHATS_Round_8_SP_File";
 RUN;



DATA NHATSR9_OP;
 SET "&filepath9\NHATS_Round_9_OP_File";
 RUN;

DATA NHATSR9_SP;
 SET "&filepath9\NHATS_Round_9_SP_File";
 RUN;



 /*Generate dementia classification */

*=====================================================================;

** NOTE: The input file to run this code is the NHATS_Round_1_File**

** FORMATS FOR CONSTRUCTED VARIABLES **;

proc format;
value r1demclas
1="1:Probable"
2="2:Possible"
3="3:No Impairment"
-1="-1:NH resident"
-9="-9:Missing"
;

value ad8dem
```

```
1="1:Probable"
2="2:Possible"
;

value clockf
0-1="0-1:Impaired"
2-5="2-5:Not impaired"
;
value wordrecf
0-3="0-3: Impaired "
4-20="4-20: Not impaired "
;
value dateprf
0-3="0-3: Impaired "
4-8="4-8: Not impaired "
;
RUN;


** DATE STEP CODE FOR CREATING DEMENTIA CLASSIFICATION VARIABLE **;

DATA NHATSR1_SP;
 SET NHATSR1_SP;
length r1demclas
ad8_dem ad8_1-ad8_8 ad8miss_1-ad8miss_8 ad8_score ad8_miss
date_mon date_day date_yr date_dow date_sum date_sumr
preslast presfirst vplast vpfirst presvp presvpr date_prvp
clock_scorer irecall drecall wordrecall0_20
clock65 word65 datena65 domain65
3;
label r1demclas="R1 NHATS Dementia Classification 65+";
RUN;



** 1) SET MISSING (RESIDENTIAL CARE FQ ONLY) AND N.A. (NURSING HOME
RESIDENTS) **;

DATA NHATSR1_SP;
 SET NHATSR1_SP;
   if r1dresid=3 then r1demclas=-9 ;
   if r1dresid=4 then r1demclas=-1 ;
RUN;



TITLE;
PROC FREQ DATA = NHATSR1_SP;
 FORMAT r1demclas r1demclas.;
 TABLES r1dresid*r1demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;



** 2) CODE PROBABLE IF DEMENTIA DIAGNOSIS REPORTED BY SELF OR PROXY **;

DATA NHATSR1_SP;
 SET NHATSR1_SP;
   if hc1disescn9=1 and is1resptype in (1,2) then r1demclas=1 ;
RUN;
```

```
TITLE;
PROC FREQ DATA = NHATSR1_SP;
 FORMAT r1demclas r1demclas.;
 TABLES r1dresid*r1demclas/LIST MISSING NOCOL NOROW NOPERCENT;
 TABLES r1dresid*hc1disescn9*is1resptype*r1demclas/LIST MISSING NOCOL NOROW
NOPERCENT;
RUN;


** 3a) CODE AD8_SCORE **;

DATA NHATSR1_SP (drop=i);
 SET NHATSR1_SP;
array think {*} cp1chgthink1-cp1chgthink8; ** QUESTIONNAIRE ITEMS **;
array ad8item {*} ad8_1-ad8_8;
array ad8miss {*} ad8miss_1-ad8miss_8;
ad8_score =-1;
ad8_miss =-1;

do i=1 to dim(ad8item);
** INITIALIZE COUNTS TO NOT APPLICABLE**;
ad8item{i}=-1;
ad8miss{i}=-1;
** ASSIGN VALUES TO AD8 ITEMS IF PROXY AND DEMENTIA CLASS NOT ALREADY
ASSIGNED BY REPORTED DIAGNOSIS **;
if is1resptype=2 and r1demclas=. then do;
ad8item{i}=.;
if think{i} in (1,3) then ad8item{i}=1; ** PROXY REPORTS A CHANGE OR
ALZ/DEMENTIA **;
else if think{i}=2 then ad8item{i}=0; ** PROXY REPORTS NO CHANGE **;
ad8_score=sum(of ad8item{*}); ** COUNT AD8 ITEMS **;

if ad8item{i} in (0,1) then ad8miss{i}=0;
else if ad8item{i}=. then ad8miss{i}=1;
ad8_miss=sum(of ad8miss{*}); ** COUNT MISSING AD8 ITEMS **;
end;
end;
RUN;



TITLE;
PROC PRINT DATA = NHATSR1_SP (OBS=50);
 WHERE ad8_score > 0;
 VAR SPID  ad8_1-ad8_8  ad8_score  ad8miss_1-ad8miss_8 ad8_miss;
RUN;

** 3b) CODE AD8 DEMENTIA CLASS **;

DATA NHATSR1_SP;
 SET NHATSR1_SP;
 if ad8_score>=2 then ad8_dem=1 ; ** IF SCORE >=2 THEN MEETS AD8 CRITERION
**;
 if ad8_score in (0,1) or ad8_miss=8 then ad8_dem=2; ** IF SCORE IS 0 OR 1 OR
ALL ITEMS MISSING THEN DOES NOT MEET AD8 CRITERION **;
RUN;
```

```sas
TITLE;
PROC PRINT DATA = NHATSR1_SP (OBS=50);
 FORMAT ad8_dem ad8dem.  ;
 WHERE ad8_score >= 2;
 VAR SPID ad8_score ad8_miss  ad8_dem;
RUN;


** 4) UPDATE DEMENTIA CLASSIFICATION VARIABLE WITH AD8 CLASS **;

DATA NHATSR1_SP;
 SET NHATSR1_SP;
  if r1demclas=. then do;
  if ad8_dem=1 then r1demclas=1; ** PROBABLE BASED ON AD8 SCORE **;
  if ad8_dem=2 and cg1speaktosp=2 then r1demclas=3; ** NO DIAGNOSIS, DOES NOT
MEET AD8 CRITERION, AND PROXY SAYS CANNOT ASK SP COGNITIVE ITEMS **;
  end;
 RUN;


TITLE;
PROC FREQ DATA = NHATSR1_SP;
 FORMAT ad8_dem ad8dem. r1demclas r1demclas.;
 TABLES ad8_dem*cg1speaktosp*r1demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 5) CODE DATE ITEMS AND COUNT **;

DATA NHATSR1_SP (drop=i);
 SET NHATSR1_SP;
  array cg1date {*} cg1todaydat1-cg1todaydat4;
  array date_item {*} date_mon date_day date_yr date_dow;
  do i=1 to dim(date_item);
if cg1date{i} > 0 then date_item{i}=cg1date{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg1date{i} in (-7,2) then date_item{i}=0; ** 2:NO/DK OR -7:REFUSED RECODED
TO 0:NO/DK/RF **;
date_sum=sum(of date_item{*}); ** COUNT CORRECT DATE ITEMS **;
end;

if date_sum=. then do;
if cg1speaktosp=2 then date_sum=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg1speaktosp=1 and max(of cg1date{*})=-1 then date_sum=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;

date_sumr=date_sum;
if date_sum=-2 then date_sumr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP
**;
else if date_sum=-3 then date_sumr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 6) PRESIDENT AND VICE PRESIDENT NAME ITEMS AND COUNT **;
```

SAS ALGORITHM FOR DEMENTIA

```
DATA NHATSR1_SP (drop=i);
 SET NHATSR1_SP;
array cg1pres {*} cg1presidna1 cg1presidna3 cg1vpname1 cg1vpname3;
array pres_item {*} preslast presfirst vplast vpfirst;

do i=1 to dim(pres_item);
if cg1pres{i} > 0 then pres_item{i}=cg1pres{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg1pres{i} in (-7,2) then pres_item{i}=0; ** 2:NO/DK OR -7:REFUSED RECODED
TO 0:NO/DK/RF **;
presvp=sum(of pres_item{*}); ** COUNT CORRECT PRESIDENT/VEEP NAME ITEMS **;
end;

if presvp=. then do;
if cg1speaktosp=2 then presvp=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg1speaktosp=1 and max(of cg1pres{*})=-1 then presvp=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;

presvpr=presvp;
if presvp=-2 then presvpr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP **;
else if presvp=-3 then presvpr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 7) ORIENTATION DOMAIN: SUM OF DATE RECALL AND PRESIDENT NAMING **;

DATA NHATSR1_SP;
 SET NHATSR1_SP;
 date_prvp=sum(date_sumr,presvpr);
RUN;


TITLE;
PROC PRINT DATA = NHATSR1_SP (OBS=50);
 VAR  date_sumr presvpr  date_prvp;
RUN;


** 8) EXECUTIVE FUNCTION DOMAIN: CLOCK DRAWING SCORE **;

DATA NHATSR1_SP;
 SET NHATSR1_SP;
 clock_scorer=cg1dclkdraw;

if cg1dclkdraw in (-2,-9) then clock_scorer=.;
if cg1dclkdraw in (-3,-4,-7) then clock_scorer=0;

** IMPUTE MEAN SCORE TO PERSONS MISSING A CLOCK **;
if cg1dclkdraw=-9 and cg1speaktosp=1 then clock_scorer=2; ** IF PROXY SAID
CAN ASK SP **;
if cg1dclkdraw=-9 and cg1speaktosp=-1 then clock_scorer=3; ** IF SELF
RESPONDENT **;
RUN;


TITLE;
```

```
PROC PRINT DATA = NHATSR1_SP (OBS=50);
 VAR cg1dclkdraw  cg1speaktosp   clock_scorer;
RUN;


** 9) MEMORY DOMAIN: IMMEDIATE AND DELAYED WORD RECALL **;

DATA NHATSR1_SP (drop=i);
 SET NHATSR1_SP;
array cg1recall {*} cg1dwrdimmrc cg1dwrddlyrc;
array word_recall {*} irecall drecall;

do i=1 to dim(word_recall);
word_recall{i}=cg1recall{i};
if cg1recall{i} in (-2,-1) then word_recall{i}=.;
if cg1recall{i} in (-7,-3) then word_recall{i}=0;
wordrecall0_20=sum(of word_recall{*});
end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR1_SP (OBS = 50);
 VAR cg1dwrdimmrc cg1dwrddlyrc irecall drecall wordrecall0_20;
RUN;



** 10) CREATE COGNITIVE DOMAINS FOR ALL ELIGIBLE **;
** I.E. PROXY BUT PROXY SAYS CAN ASK SP, NOT FQ ONLY, NOT NH **;

DATA NHATSR1_SP;
 SET NHATSR1_SP;
if 1 < clock_scorer <=5 then clock65=0;
if 0 <=clock_scorer <=1 then clock65=1;

if 3 < wordrecall0_20 <=20 then word65=0;
if 0 <= wordrecall0_20 <=3 then word65=1;

if 3 < date_prvp <= 8 then datena65=0;
if 0 <= date_prvp <= 3 then datena65=1;
RUN;


TITLE;
PROC PRINT DATA = NHATSR1_SP (OBS=50);
 VAR clock_scorer clock65  wordrecall0_20 word65  date_prvp  datena65;
RUN;


** 10) CREATE COGNITIVE DOMAIN SCORE **;

DATA NHATSR1_SP (drop=i);
 SET NHATSR1_SP;
 array domains {*} clock65 word65 datena65;

 do i=1 to dim(domains);
```

```
  domain65=sum(of domains{*});
  end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR1_SP (OBS=50);
 VAR clock65 word65 datena65 domain65;
RUN;


** 11) UPDATE COGNITIVE CLASSIFICATION **;

DATA NHATSR1_SP;
 SET NHATSR1_SP;
 if r1demclas=. and cg1speaktosp in (-1,1) then do;
 if 2 <= domain65 <=3 then r1demclas=1; ** PROBABLE DEMENTIA **;
 if domain65 =1 then r1demclas=2; ** POSSIBLE DEMENTIA **;
 if domain65 =0 then r1demclas=3; ** NO DEMENTIA **;
  end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR1_SP (OBS=50);
 FORMAT r1demclas r1demclas.;
 VAR SPID cg1speaktosp  domain65 r1demclas;
RUN;


TITLE;
PROC PRINT DATA = NHATSR1_SP (OBS=50);
 FORMAT r1demclas r1demclas.;
 VAR SPID r1demclas r1dresid;
RUN;


Data NHATSR1_SP;
 SET NHATSR1_SP;
DROP ad8_dem ad8_1-ad8_8 ad8miss_1-ad8miss_8 ad8_score ad8_miss
date_mon date_day date_yr date_dow date_sum date_sumr
preslast presfirst vplast vpfirst presvp presvpr date_prvp
clock_scorer irecall drecall wordrecall0_20
clock65 word65 datena65 domain65;
RUN;


/*
SAS Programming Statements for Rounds 2
Subsequent rounds can be programmed by replacing all round 2 variables with
the appropriate round.
*/

** NOTE: The input file to run this code is the NHATS_Round_2_SP_File**
```

SAS ALGORITHM FOR DEMENTIA

```
** FORMATS FOR CONSTRUCTED VARIABLES **;

proc format;
value r2demclas
1="1:Probable dementia"
2="2:Possible dementia"
3="3:No dementia"
-1="-1:Deceased or nursing home resident"
-9="-9:Missing"
;
value r2ad8dem
1="1:Meets dementia criteria"
2="2:Does not meet dementia criteria"
;
value r2clockf
0-1="0-1:Impaired"
2-5="2-5:Not impaired"
;
value r2wordrecf
0-3="0-3: Impaired "
4-20="4-20: Not impaired "
;
value r2dateprf
0-3="0-3: Impaired "
4-8="4-8: Not impaired "
;
RUN;


** DATE STEP CODE FOR CREATING DEMENTIA CLASSIFICATION VARIABLE **;

DATA NHATSR2_SP;
 SET NHATSR2_SP;
 length r2demclas
 r2ad8_dem r2ad8_1-r2ad8_8 r2ad8miss_1-r2ad8miss_8 r2ad8_score r2ad8_miss
 r2date_mon r2date_day r2date_yr r2date_dow r2date_sum r2date_sumr
 r2preslast r2presfirst r2vplast r2vpfirst r2presvp r2presvpr r2date_prvp
 r2clock_scorer r2irecall r2drecall r2wordrecall0_20
 r2clock65 r2word65 r2datena65 r2domain65
3;
label r2demclas="R2 NHATS Dementia Classification 65+";

if cg2dwrdimmrc = 10 and cg2dwrddlyrc = -3 then cg2dwrdimmrc = -3; **USE THIS
LINE TO FIX A CODING ERROR IN ROUND 2 ONLY**;
RUN;


** 1) SET MISSING (RESIDENTIAL CARE FQ ONLY) AND N.A. (NURSING HOME
RESIDENTS, DECEASED) **;

DATA NHATSR2_SP;
 SET NHATSR2_SP;
if r2dresid in (3,5,7) then r2demclas=-9;
if r2dresid in (6,8) then r2demclas=-1;
RUN;
```

## SAS ALGORITHM FOR DEMENTIA

```
TITLE;
PROC FREQ DATA = NHATSR2_SP;
 FORMAT r2demclas r2demclas.;
 TABLES r2dresid*r2demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 2) CODE PROBABLE IF DEMENTIA DIAGNOSIS REPORTED BY SELF OR PROXY **;

DATA NHATSR2_SP;
 SET NHATSR2_SP;
if hc2disescn9 in (1,7) and is2resptype in (1,2) then r2demclas=1;
RUN;



TITLE;
PROC FREQ DATA = NHATSR2_SP;
 FORMAT r2demclas r2demclas.;
 TABLES r2dresid*r2demclas/LIST MISSING NOCOL NOROW NOPERCENT;
 TABLES r2dresid*hc2disescn9*is2resptype*r2demclas/LIST MISSING NOCOL NOROW
NOPERCENT;
RUN;



** 3a) CODE AD8_SCORE **;

DATA NHATSR2_SP (drop=i);
 SET NHATSR2_SP;
array r2think {*} cp2chgthink1-cp2chgthink8; ** QUESTIONNAIRE ITEMS **;
array r2ad8item {*} r2ad8_1-r2ad8_8;
array r2ad8miss {*} r2ad8miss_1-r2ad8miss_8;
r2ad8_score =-1;
r2ad8_miss =-1;

do i=1 to dim(r2ad8item);
** INITIALIZE COUNTS TO NOT APPLICABLE**;
r2ad8item{i}=-1;
r2ad8miss{i}=-1;
** ASSIGN VALUES TO AD8 ITEMS IF PROXY AND DEMENTIA CLASS NOT ALREADY
ASSIGNED BY REPORTED DIAGNOSIS **;
if is2resptype=2 and r2demclas=. then do;
r2ad8item{i}=.;
if r2think{i} in (1,3) then r2ad8item{i}=1; ** PROXY REPORTS A CHANGE OR
ALZ/DEMENTIA **;
else if r2think{i}=2 then r2ad8item{i}=0; ** PROXY REPORTS NO CHANGE **;
r2ad8_score=sum(of r2ad8item{*}); ** COUNT AD8 ITEMS **;

if r2ad8item{i} in (0,1) then r2ad8miss{i}=0;
else if r2ad8item{i}=. then r2ad8miss{i}=1;
r2ad8_miss=sum(of r2ad8miss{*}); ** COUNT MISSING AD8 ITEMS **;
end;
end;

RUN;


TITLE;
```

SAS ALGORITHM FOR DEMENTIA

```
PROC PRINT DATA = NHATSR2_SP (OBS=50);
 WHERE r2ad8_score > 0;
 VAR SPID r2ad8_1-r2ad8_8 r2ad8_score  r2ad8miss_1-r2ad8miss_8  r2ad8_miss;
RUN;


** 3b) CODE AD8 DEMENTIA CLASS **;

DATA NHATSR2_SP;
 SET NHATSR2_SP;
 if cp2dad8dem=1 and is2resptype=2 and r2demclas=. then r2ad8_score=8;
 if r2ad8_score>=2 then r2ad8_dem=1 ; ** IF SCORE >=2 THEN MEETS AD8
CRITERION **;
 if r2ad8_score in (0,1) or (r2ad8_miss=8 and r2ad8_dem=.) then r2ad8_dem=2;
** IF SCORE IS 0 OR 1 OR ALL ITEMS MISSING THEN DOES NOT MEET AD8 CRITERION
**;
RUN;


TITLE;
PROC PRINT DATA = NHATSR2_SP (OBS=50);
 FORMAT r2ad8_dem r2ad8dem.  ;
 WHERE r2ad8_score >= 2;
 VAR SPID r2ad8_score r2ad8_miss  r2ad8_dem;
RUN;


** 4) UPDATE DEMENTIA CLASSIFICATION VARIABLE WITH AD8 CLASS **;

DATA NHATSR2_SP;
 SET NHATSR2_SP;
if r2demclas=. then do;
if r2ad8_dem=1 then r2demclas=1; ** PROBABLE BASED ON AD8 SCORE **;
if r2ad8_dem=2 and cg2speaktosp=2 then r2demclas=3; ** NO DIAGNOSIS, DOES NOT
MEET AD8 CRITERION, AND PROXY SAYS CANNOT ASK SP COGNITIVE ITEMS **;
end;
RUN;


TITLE;
PROC FREQ DATA = NHATSR2_SP (OBS = 50);
 FORMAT r2ad8_dem  r2ad8dem.     r2demclas r2demclas.;
  TABLES r2ad8_dem*cg2speaktosp*r2demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 5) CODE DATE ITEMS AND COUNT **;

DATA NHATSR2_SP (drop=i);
 SET NHATSR2_SP;
 array cg2date {*} cg2todaydat1-cg2todaydat4; **USE THIS LINE FOR ROUNDS 1-3,
5 and forward**;
 *array cg4date {*} cg4todaydat1 cg4todaydat2 cg4todaydat3 cg4todaydat5;
**USE THIS LINE FOR ROUND 4**;
 array r2date_item {*} r2date_mon r2date_day r2date_yr r2date_dow;

do i=1 to dim(r2date_item);
```

```sas
if cg2date{i} > 0 then r2date_item{i}=cg2date{i}; *** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg2date{i} in (-7,2) then r2date_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF**;
r2date_sum=sum(of r2date_item{*}); ** COUNT CORRECT DATE ITEMS**;
end;

if r2date_sum=. then do;
if cg2speaktosp=2 then r2date_sum=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg2speaktosp=1 and max(of cg2date{*})=-1 then r2date_sum=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r2date_sumr=r2date_sum;
if r2date_sum=-2 then r2date_sumr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO
SP**;
else if r2date_sum=-3 then r2date_sumr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 6) PRESIDENT AND VICE PRESIDENT NAME ITEMS AND COUNT **;

DATA NHATSR2_SP (drop=i);
 SET NHATSR2_SP;
 array cg2pres {*} cg2presidna1 cg2presidna3 cg2vpname1 cg2vpname3;
 array r2pres_item {*} r2preslast r2presfirst r2vplast r2vpfirst;

do i=1 to dim(r2pres_item);
if cg2pres{i} > 0 then r2pres_item{i}=cg2pres{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg2pres{i} in (-7,2) then r2pres_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF **;
r2presvp=sum(of r2pres_item{*}); ** COUNT CORRECT PRESIDENT/VEEP NAME ITEMS
**;
end;
if r2presvp=. then do;
if cg2speaktosp=2 then r2presvp=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg2speaktosp=1 and max(of cg2pres{*})=-1 then r2presvp=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r2presvpr=r2presvp;
if r2presvp=-2 then r2presvpr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP
**;
else if r2presvp=-3 then r2presvpr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 7) ORIENTATION DOMAIN: SUM OF DATE RECALL AND PRESIDENT NAMING **;

DATA NHATSR2_SP;
 SET NHATSR2_SP;
  r2date_prvp=sum(r2date_sumr,r2presvpr);
 RUN;


TITLE;
PROC PRINT DATA = NHATSR2_SP (OBS=50);
 VAR  r2date_sumr r2presvpr  r2date_prvp;
```

```sas
RUN;


** 8) EXECUTIVE FUNCTION DOMAIN: CLOCK DRAWING SCORE **;

DATA NHATSR2_SP;
 SET NHATSR2_SP;
 r2clock_scorer=cg2dclkdraw;
if cg2dclkdraw in (-2,-9) then r2clock_scorer=.;
if cg2dclkdraw in (-3,-4,-7) then r2clock_scorer=0;
** IMPUTE MEAN SCORE TO PERSONS MISSING A CLOCK **;
if cg2dclkdraw=-9 and cg2speaktosp=1 then r2clock_scorer=2; ** IF PROXY SAID
CAN ASK SP **;
if cg2dclkdraw=-9 and cg2speaktosp=-1 then r2clock_scorer=3; ** IF SELF
RESPONDENT **;
RUN;


TITLE;
PROC PRINT DATA = NHATSR2_SP (OBS=50);
 VAR cg2dclkdraw  cg2speaktosp   r2clock_scorer;
RUN;


** 9) MEMORY DOMAIN: IMMEDIATE AND DELAYED WORD RECALL **;

DATA NHATSR2_SP (drop=i);
 SET NHATSR2_SP;
 array cg2recall {*} cg2dwrdimmrc cg2dwrddlyrc;
 array r2word_recall {*} r2irecall r2drecall;
do i=1 to dim(r2word_recall);
r2word_recall{i}=cg2recall{i};
if cg2recall{i} in (-2,-1) then r2word_recall{i}=.;
if cg2recall{i} in (-7,-3) then r2word_recall{i}=0;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
 *if cg5dwrdimmrc=-9 then r5word_recall{i}=.;
r2wordrecall0_20=sum(of r2word_recall{*});
end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR2_SP (OBS = 50);
 VAR cg2dwrdimmrc cg2dwrddlyrc r2irecall r2drecall r2wordrecall0_20;
RUN;


** 10) CREATE COGNITIVE DOMAINS FOR ALL ELIGIBLE **;
** I.E. PROXY BUT PROXY SAYS CAN ASK SP, NOT FQ ONLY, NOT NH **;

DATA NHATSR2_SP;
 SET NHATSR2_SP;
 if 1 < r2clock_scorer <=5 then r2clock65=0;
 if 0 <= r2clock_scorer <=1 then r2clock65=1;
 if 3 < r2wordrecall0_20 <=20 then r2word65=0;
 if 0 <= r2wordrecall0_20 <=3 then r2word65=1;
```

```
 if 3 < r2date_prvp <= 8 then r2datena65=0;
 if 0 <= r2date_prvp <= 3 then r2datena65=1;
RUN;


TITLE;
PROC PRINT DATA = NHATSR2_SP (OBS=50);
 VAR r2clock_scorer r2clock65  r2wordrecall0_20 r2word65  r2date_prvp
r2datena65;
RUN;


** 10) CREATE COGNITIVE DOMAIN SCORE **;

DATA NHATSR2_SP (drop=i);
 SET NHATSR2_SP;
array r2domains {*} r2clock65 r2word65 r2datena65;
do i=1 to dim(r2domains);
r2domain65=sum(of r2domains{*});
end;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
*if cg5dwrdlstnm=-9 and r5demclas=. then r5demclas=-9;

RUN;


TITLE;
PROC PRINT DATA = NHATSR2_SP (OBS=50);
 VAR r2clock65 r2word65 r2datena65 r2domain65;
RUN;


** 11) UPDATE COGNITIVE CLASSIFICATION **;

DATA NHATSR2_SP;
 SET NHATSR2_SP;
 if r2demclas=. and cg2speaktosp in (-1,1) then do;
 if 2 <= r2domain65 <=3 then r2demclas=1; ** PROBABLE DEMENTIA **;
 if r2domain65 =1 then r2demclas=2; ** POSSIBLE DEMENTIA **;
 if r2domain65 =0 then r2demclas=3; ** NO DEMENTIA **;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR2_SP (OBS=50);
 FORMAT r2demclas r2demclas.;
 VAR SPID  cg2dwrdimmrc cg2dwrddlyrc cg2dwrdimmrc  r2dresid hc2disescn9
is2resptype  cg2speaktosp  r2domain65 r2demclas;
RUN;


TITLE;
PROC PRINT DATA = NHATSR2_SP (OBS=50);
 FORMAT r2demclas r2demclas.;
```

# SAS ALGORITHM FOR DEMENTIA

```sas
  VAR SPID  r2demclas r2dresid r2dlmlint;
RUN;


TITLE;
PROC FREQ DATA = NHATSR2_SP ;
 TABLES r2dresid*r2dlmlint/LIST MISSING;
RUN;


TITLE;
PROC PRINT DATA = NHATSR2_SP;
 FORMAT r2demclas r2demclas.;
 WHERE r2dresid = 6 OR r2dlmlint = 1;
 VAR SPID  r2demclas r2dresid r2dlmlint;
RUN;



DATA NHATSR2_SP;
 SET NHATSR2_SP;
 DROP r2ad8_dem r2ad8_1-r2ad8_8 r2ad8miss_1-r2ad8miss_8 r2ad8_score
r2ad8_miss
 r2date_mon r2date_day r2date_yr r2date_dow r2date_sum r2date_sumr
 r2preslast r2presfirst r2vplast r2vpfirst r2presvp r2presvpr r2date_prvp
 r2clock_scorer r2irecall r2drecall r2wordrecall0_20
 r2clock65 r2word65 r2datena65 r2domain65;
 RUN;




** NOTE: The input file to run this code is the NHATS_Round_3_SP_File**
** FORMATS FOR CONSTRUCTED VARIABLES **;

proc format;
value r3demclas
1="1:Probable dementia"
2="2:Possible dementia"
3="3:No dementia"
-1="-1:Deceased or nursing home resident"
-9="-9:Missing"
;
value r3ad8dem
1="1:Meets dementia criteria"
2="2:Does not meet dementia criteria"
;
value r3clockf
0-1="0-1:Impaired"
2-5="2-5:Not impaired"
;
value r3wordrecf
0-3="0-3: Impaired "
4-20="4-20: Not impaired "
;
value r3dateprf
```

```
0-3="0-3: Impaired "
4-8="4-8: Not impaired "
;
RUN;


** DATE STEP CODE FOR CREATING DEMENTIA CLASSIFICATION VARIABLE **;

DATA NHATSR3_SP;
 SET NHATSR3_SP;
 length r3demclas
 r3ad8_dem r3ad8_1-r3ad8_8 r3ad8miss_1-r3ad8miss_8 r3ad8_score r3ad8_miss
 r3date_mon r3date_day r3date_yr r3date_dow r3date_sum r3date_sumr
 r3preslast r3presfirst r3vplast r3vpfirst r3presvp r3presvpr r3date_prvp
 r3clock_scorer r3irecall r3drecall r3wordrecall0_20
 r3clock65 r3word65 r3datena65 r3domain65
3;
label r3demclas="R3 NHATS Dementia Classification 65+";

*if cg2dwrdimmrc = 10 and cg2dwrddlyrc = -3 then cg2dwrdimmrc = -3; **USE
THIS LINE TO FIX A CODING ERROR IN ROUND 2 ONLY**;
RUN;


** 1) SET MISSING (RESIDENTIAL CARE FQ ONLY) AND N.A. (NURSING HOME
RESIDENTS, DECEASED) **;

DATA NHATSR3_SP;
 SET NHATSR3_SP;
if r3dresid in (3,5,7) then r3demclas=-9;
if r3dresid in (6,8) then r3demclas=-1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR3_SP;
 FORMAT r3demclas r3demclas.;
 TABLES r3dresid*r3demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 2) CODE PROBABLE IF DEMENTIA DIAGNOSIS REPORTED BY SELF OR PROXY **;

DATA NHATSR3_SP;
 SET NHATSR3_SP;
if hc3disescn9 in (1,7) and is3resptype in (1,2) then r3demclas=1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR3_SP;
 FORMAT r3demclas r3demclas.;
 TABLES r3dresid*r3demclas/LIST MISSING NOCOL NOROW NOPERCENT;
 TABLES r3dresid*hc3disescn9*is3resptype*r3demclas/LIST MISSING NOCOL NOROW
NOPERCENT;
RUN;
```

SAS ALGORITHM FOR DEMENTIA

```sas
** 3a) CODE AD8_SCORE **;

DATA NHATSR3_SP (drop=i);
 SET NHATSR3_SP;
array r3think {*} cp3chgthink1-cp3chgthink8; ** QUESTIONNAIRE ITEMS **;
array r3ad8item {*} r3ad8_1-r3ad8_8;
array r3ad8miss {*} r3ad8miss_1-r3ad8miss_8;
r3ad8_score =-1;
r3ad8_miss =-1;

do i=1 to dim(r3ad8item);
** INITIALIZE COUNTS TO NOT APPLICABLE**;
r3ad8item{i}=-1;
r3ad8miss{i}=-1;
** ASSIGN VALUES TO AD8 ITEMS IF PROXY AND DEMENTIA CLASS NOT ALREADY
ASSIGNED BY REPORTED DIAGNOSIS **;
if is3resptype=2 and r3demclas=. then do;
r3ad8item{i}=.;
if r3think{i} in (1,3) then r3ad8item{i}=1; ** PROXY REPORTS A CHANGE OR
ALZ/DEMENTIA **;
else if r3think{i}=2 then r3ad8item{i}=0; ** PROXY REPORTS NO CHANGE **;
r3ad8_score=sum(of r3ad8item{*}); ** COUNT AD8 ITEMS **;

if r3ad8item{i} in (0,1) then r3ad8miss{i}=0;
else if r3ad8item{i}=. then r3ad8miss{i}=1;
r3ad8_miss=sum(of r3ad8miss{*}); ** COUNT MISSING AD8 ITEMS **;
end;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR3_SP (OBS=50);
 WHERE r3ad8_score > 0;
 VAR SPID r3ad8_1-r3ad8_8 r3ad8_score  r3ad8miss_1-r3ad8miss_8  r3ad8_miss;
RUN;


** 3b) CODE AD8 DEMENTIA CLASS **;

DATA NHATSR3_SP;
 SET NHATSR3_SP;
 if cp3dad8dem=1 and is3resptype=2 and r3demclas=. then r3ad8_score=8;
 if r3ad8_score>=2 then r3ad8_dem=1 ; ** IF SCORE >=2 THEN MEETS AD8
CRITERION **;
 if r3ad8_score in (0,1) or (r3ad8_miss=8 and r3ad8_dem=.) then r3ad8_dem=2;
** IF SCORE IS 0 OR 1 OR ALL ITEMS MISSING THEN DOES NOT MEET AD8 CRITERION
**;
RUN;


TITLE;
PROC PRINT DATA = NHATSR3_SP (OBS=50);
 FORMAT r3ad8_dem r3ad8dem.  ;
 WHERE r3ad8_score >= 2;
```

```sas
  VAR SPID r3ad8_score r3ad8_miss  r3ad8_dem;
RUN;


** 4) UPDATE DEMENTIA CLASSIFICATION VARIABLE WITH AD8 CLASS **;

DATA NHATSR3_SP;
 SET NHATSR3_SP;
if r3demclas=. then do;
if r3ad8_dem=1 then r3demclas=1; ** PROBABLE BASED ON AD8 SCORE **;
if r3ad8_dem=2 and cg3speaktosp=2 then r3demclas=3; ** NO DIAGNOSIS, DOES NOT
MEET AD8 CRITERION, AND PROXY SAYS CANNOT ASK SP COGNITIVE ITEMS **;
end;
RUN;



TITLE;
PROC FREQ DATA = NHATSR3_SP (OBS = 50);
 FORMAT r3ad8_dem  r3ad8dem.     r3demclas r3demclas.;
   TABLES r3ad8_dem*cg3speaktosp*r3demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 5) CODE DATE ITEMS AND COUNT **;

DATA NHATSR3_SP (drop=i);
 SET NHATSR3_SP;
 array cg3date {*} cg3todaydat1-cg3todaydat4; **USE THIS LINE FOR ROUNDS 1-3,
5 and forward**;
 *array cg4date {*} cg4todaydat1 cg4todaydat2 cg4todaydat3 cg4todaydat5;
**USE THIS LINE FOR ROUND 4**;
 array r3date_item {*} r3date_mon r3date_day r3date_yr r3date_dow;

do i=1 to dim(r3date_item);
if cg3date{i} > 0 then r3date_item{i}=cg3date{i}; *** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg3date{i} in (-7,2) then r3date_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF**;
r3date_sum=sum(of r3date_item{*}); ** COUNT CORRECT DATE ITEMS**;
end;

if r3date_sum=. then do;
if cg3speaktosp=2 then r3date_sum=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg3speaktosp=1 and max(of cg3date{*})=-1 then r3date_sum=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r3date_sumr=r3date_sum;
if r3date_sum=-2 then r3date_sumr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO
SP**;
else if r3date_sum=-3 then r3date_sumr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 6) PRESIDENT AND VICE PRESIDENT NAME ITEMS AND COUNT **;

DATA NHATSR3_SP (drop=i);
 SET NHATSR3_SP;
```

```
 array cg3pres {*} cg3presidna1 cg3presidna3 cg3vpname1 cg3vpname3;
 array r3pres_item {*} r3preslast r3presfirst r3vplast r3vpfirst;

do i=1 to dim(r3pres_item);
if cg3pres{i} > 0 then r3pres_item{i}=cg3pres{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg3pres{i} in (-7,2) then r3pres_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF **;
r3presvp=sum(of r3pres_item{*}); ** COUNT CORRECT PRESIDENT/VEEP NAME ITEMS
**;
end;
if r3presvp=. then do;
if cg3speaktosp=2 then r3presvp=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg3speaktosp=1 and max(of cg3pres{*})=-1 then r3presvp=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r3presvpr=r3presvp;
if r3presvp=-2 then r3presvpr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP
**;
else if r3presvp=-3 then r3presvpr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 7) ORIENTATION DOMAIN: SUM OF DATE RECALL AND PRESIDENT NAMING **;

DATA NHATSR3_SP;
 SET NHATSR3_SP;
  r3date_prvp=sum(r3date_sumr,r3presvpr);
 RUN;


TITLE;
PROC PRINT DATA = NHATSR3_SP (OBS=50);
 VAR  r3date_sumr r3presvpr  r3date_prvp;
RUN;


** 8) EXECUTIVE FUNCTION DOMAIN: CLOCK DRAWING SCORE **;

DATA NHATSR3_SP;
 SET NHATSR3_SP;
 r3clock_scorer=cg3dclkdraw;
if cg3dclkdraw in (-2,-9) then r3clock_scorer=.;
if cg3dclkdraw in (-3,-4,-7) then r3clock_scorer=0;
** IMPUTE MEAN SCORE TO PERSONS MISSING A CLOCK **;
if cg3dclkdraw=-9 and cg3speaktosp=1 then r3clock_scorer=2; ** IF PROXY SAID
CAN ASK SP **;
if cg3dclkdraw=-9 and cg3speaktosp=-1 then r3clock_scorer=3; ** IF SELF
RESPONDENT **;
RUN;


TITLE;
PROC PRINT DATA = NHATSR3_SP (OBS=50);
 VAR cg3dclkdraw  cg3speaktosp   r3clock_scorer;
RUN;
```

```
** 9) MEMORY DOMAIN: IMMEDIATE AND DELAYED WORD RECALL **;

DATA NHATSR3_SP (drop=i);
 SET NHATSR3_SP;
 array cg3recall {*} cg3dwrdimmrc cg3dwrddlyrc;
 array r3word_recall {*} r3irecall r3drecall;
do i=1 to dim(r3word_recall);
r3word_recall{i}=cg3recall{i};
if cg3recall{i} in (-2,-1) then r3word_recall{i}=.;
if cg3recall{i} in (-7,-3) then r3word_recall{i}=0;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
 *if cg5dwrdimmrc=-9 then r5word_recall{i}=.;
r3wordrecall0_20=sum(of r3word_recall{*});
end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR3_SP (OBS = 50);
 VAR cg3dwrdimmrc cg3dwrddlyrc r3irecall r3drecall r3wordrecall0_20;
RUN;


** 10) CREATE COGNITIVE DOMAINS FOR ALL ELIGIBLE **;
** I.E. PROXY BUT PROXY SAYS CAN ASK SP, NOT FQ ONLY, NOT NH **;

DATA NHATSR3_SP;
 SET NHATSR3_SP;
 if 1 < r3clock_scorer <=5 then r3clock65=0;
 if 0 <= r3clock_scorer <=1 then r3clock65=1;
 if 3 < r3wordrecall0_20 <=20 then r3word65=0;
 if 0 <= r3wordrecall0_20 <=3 then r3word65=1;
 if 3 < r3date_prvp <= 8 then r3datena65=0;
 if 0 <= r3date_prvp <= 3 then r3datena65=1;
RUN;


TITLE;
PROC PRINT DATA = NHATSR3_SP (OBS=50);
 VAR r3clock_scorer r3clock65  r3wordrecall0_20 r3word65  r3date_prvp
r3datena65;
RUN;


** 10) CREATE COGNITIVE DOMAIN SCORE **;

DATA NHATSR3_SP (drop=i);
 SET NHATSR3_SP;
array r3domains {*} r3clock65 r3word65 r3datena65;
do i=1 to dim(r3domains);
r3domain65=sum(of r3domains{*});
end;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
*if cg5dwrdlstnm=-9 and r5demclas=. then r5demclas=-9;
```

```
RUN;


TITLE;
PROC PRINT DATA = NHATSR3_SP (OBS=50);
 VAR r3clock65 r3word65 r3datena65 r3domain65;
RUN;


** 11) UPDATE COGNITIVE CLASSIFICATION **;

DATA NHATSR3_SP;
 SET NHATSR3_SP;
 if r3demclas=. and cg3speaktosp in (-1,1) then do;
 if 2 <= r3domain65 <=3 then r3demclas=1; ** PROBABLE DEMENTIA **;
 if r3domain65 =1 then r3demclas=2; ** POSSIBLE DEMENTIA **;
 if r3domain65 =0 then r3demclas=3; ** NO DEMENTIA **;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR3_SP (OBS=50);
 FORMAT r3demclas r3demclas.;
 VAR SPID  cg3dwrdimmrc cg3dwrddlyrc cg3dwrdimmrc  r3dresid hc3disescn9
is3resptype  cg3speaktosp  r3domain65 r3demclas;
RUN;



TITLE;
PROC PRINT DATA = NHATSR3_SP (OBS=50);
 FORMAT r3demclas r3demclas.;
 VAR SPID  r3demclas r3dresid r3dlmlint;
RUN;


TITLE;
PROC FREQ DATA = NHATSR3_SP ;
 TABLES r3dresid*r3dlmlint/LIST MISSING;
RUN;


TITLE;
PROC PRINT DATA = NHATSR3_SP;
 FORMAT r3demclas r3demclas.;
 WHERE r3dresid = 6 OR r3dlmlint = 1;
 VAR SPID  r3demclas r3dresid r3dlmlint;
RUN;




DATA NHATSR3_SP;
 SET NHATSR3_SP;
```

# SAS ALGORITHM FOR DEMENTIA

```
 DROP r3ad8_dem r3ad8_1-r3ad8_8 r3ad8miss_1-r3ad8miss_8 r3ad8_score
r3ad8_miss
 r3date_mon r3date_day r3date_yr r3date_dow r3date_sum r3date_sumr
 r3preslast r3presfirst r3vplast r3vpfirst r3presvp r3presvpr r3date_prvp
 r3clock_scorer r3irecall r3drecall r3wordrecall0_20
 r3clock65 r3word65 r3datena65 r3domain65;
 RUN;




** NOTE: The input file to run this code is the NHATS_Round_4_SP_File**
** FORMATS FOR CONSTRUCTED VARIABLES **;

proc format;
value r4demclas
1="1:Probable dementia"
2="2:Possible dementia"
3="3:No dementia"
-1="-1:Deceased or nursing home resident"
-9="-9:Missing"
;
value r4ad8dem
1="1:Meets dementia criteria"
2="2:Does not meet dementia criteria"
;
value r4clockf
0-1="0-1:Impaired"
2-5="2-5:Not impaired"
;
value r4wordrecf
0-3="0-3: Impaired "
4-20="4-20: Not impaired "
;
value r4dateprf
0-3="0-3: Impaired "
4-8="4-8: Not impaired "
;
RUN;


** DATE STEP CODE FOR CREATING DEMENTIA CLASSIFICATION VARIABLE **;

DATA NHATSR4_SP;
 SET NHATSR4_SP;
 length r4demclas
 r4ad8_dem r4ad8_1-r4ad8_8 r4ad8miss_1-r4ad8miss_8 r4ad8_score r4ad8_miss
 r4date_mon r4date_day r4date_yr r4date_dow r4date_sum r4date_sumr
 r4preslast r4presfirst r4vplast r4vpfirst r4presvp r4presvpr r4date_prvp
 r4clock_scorer r4irecall r4drecall r4wordrecall0_20
 r4clock65 r4word65 r4datena65 r4domain65
3;
label r4demclas="R4 NHATS Dementia Classification 65+";

*if cg2dwrdimmrc = 10 and cg2dwrddlyrc = -3 then cg2dwrdimmrc = -3; **USE
THIS LINE TO FIX A CODING ERROR IN ROUND 2 ONLY**;
RUN;
```

# SAS ALGORITHM FOR DEMENTIA

```sas
** 1) SET MISSING (RESIDENTIAL CARE FQ ONLY) AND N.A. (NURSING HOME
RESIDENTS, DECEASED) **;

DATA NHATSR4_SP;
 SET NHATSR4_SP;
if r4dresid in (3,5,7) then r4demclas=-9;
if r4dresid in (6,8) then r4demclas=-1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR4_SP;
 FORMAT r4demclas r4demclas.;
 TABLES r4dresid*r4demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 2) CODE PROBABLE IF DEMENTIA DIAGNOSIS REPORTED BY SELF OR PROXY **;

DATA NHATSR4_SP;
 SET NHATSR4_SP;
if hc4disescn9 in (1,7) and is4resptype in (1,2) then r4demclas=1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR4_SP;
 FORMAT r4demclas r4demclas.;
 TABLES r4dresid*r4demclas/LIST MISSING NOCOL NOROW NOPERCENT;
 TABLES r4dresid*hc4disescn9*is4resptype*r4demclas/LIST MISSING NOCOL NOROW
NOPERCENT;
RUN;


** 3a) CODE AD8_SCORE **;

DATA NHATSR4_SP (drop=i);
 SET NHATSR4_SP;
array r4think {*} cp4chgthink1-cp4chgthink8; ** QUESTIONNAIRE ITEMS **;
array r4ad8item {*} r4ad8_1-r4ad8_8;
array r4ad8miss {*} r4ad8miss_1-r4ad8miss_8;
r4ad8_score =-1;
r4ad8_miss =-1;

do i=1 to dim(r4ad8item);
** INITIALIZE COUNTS TO NOT APPLICABLE**;
r4ad8item{i}=-1;
r4ad8miss{i}=-1;
** ASSIGN VALUES TO AD8 ITEMS IF PROXY AND DEMENTIA CLASS NOT ALREADY
ASSIGNED BY REPORTED DIAGNOSIS **;
if is4resptype=2 and r4demclas=. then do;
r4ad8item{i}=.;
if r4think{i} in (1,3) then r4ad8item{i}=1; ** PROXY REPORTS A CHANGE OR
ALZ/DEMENTIA **;
else if r4think{i}=2 then r4ad8item{i}=0; ** PROXY REPORTS NO CHANGE **;
```

```sas
r4ad8_score=sum(of r4ad8item{*}); ** COUNT AD8 ITEMS **;

if r4ad8item{i} in (0,1) then r4ad8miss{i}=0;
else if r4ad8item{i}=. then r4ad8miss{i}=1;
r4ad8_miss=sum(of r4ad8miss{*}); ** COUNT MISSING AD8 ITEMS **;
end;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR4_SP (OBS=50);
 WHERE r4ad8_score > 0;
 VAR SPID r4ad8_1-r4ad8_8 r4ad8_score  r4ad8miss_1-r4ad8miss_8  r4ad8_miss;
RUN;


** 3b) CODE AD8 DEMENTIA CLASS **;

DATA NHATSR4_SP;
 SET NHATSR4_SP;
 if cp4dad8dem=1 and is4resptype=2 and r4demclas=. then r4ad8_score=8;
 if r4ad8_score>=2 then r4ad8_dem=1 ; ** IF SCORE >=2 THEN MEETS AD8
CRITERION **;
 if r4ad8_score in (0,1) or (r4ad8_miss=8 and r4ad8_dem=.) then r4ad8_dem=2;
** IF SCORE IS 0 OR 1 OR ALL ITEMS MISSING THEN DOES NOT MEET AD8 CRITERION
**;
RUN;


TITLE;
PROC PRINT DATA = NHATSR4_SP (OBS=50);
 FORMAT r4ad8_dem r4ad8dem.  ;
 WHERE r4ad8_score >= 2;
 VAR SPID r4ad8_score r4ad8_miss  r4ad8_dem;
RUN;


** 4) UPDATE DEMENTIA CLASSIFICATION VARIABLE WITH AD8 CLASS **;

DATA NHATSR4_SP;
 SET NHATSR4_SP;
if r4demclas=. then do;
if r4ad8_dem=1 then r4demclas=1; ** PROBABLE BASED ON AD8 SCORE **;
if r4ad8_dem=2 and cg4speaktosp=2 then r4demclas=3; ** NO DIAGNOSIS, DOES NOT
MEET AD8 CRITERION, AND PROXY SAYS CANNOT ASK SP COGNITIVE ITEMS **;
end;
RUN;


TITLE;
PROC FREQ DATA = NHATSR4_SP (OBS = 50);
 FORMAT r4ad8_dem  r4ad8dem.     r4demclas r4demclas.;
  TABLES r4ad8_dem*cg4speaktosp*r4demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;
```

```
** 5) CODE DATE ITEMS AND COUNT **;

DATA NHATSR4_SP (drop=i);
 SET NHATSR4_SP;
 *array cg3date {*} cg3todaydat1-cg3todaydat4; **USE THIS LINE FOR ROUNDS 1-
3, 5 and forward**;
 array cg4date {*} cg4todaydat1 cg4todaydat2 cg4todaydat3 cg4todaydat5; **USE
THIS LINE FOR ROUND 4**;
 array r4date_item {*} r4date_mon r4date_day r4date_yr r4date_dow;

do i=1 to dim(r4date_item);
if cg4date{i} > 0 then r4date_item{i}=cg4date{i}; *** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg4date{i} in (-7,2) then r4date_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF**;
r4date_sum=sum(of r4date_item{*}); ** COUNT CORRECT DATE ITEMS**;
end;

if r4date_sum=. then do;
if cg4speaktosp=2 then r4date_sum=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg4speaktosp=1 and max(of cg4date{*})=-1 then r4date_sum=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r4date_sumr=r4date_sum;
if r4date_sum=-2 then r4date_sumr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO
SP**;
else if r4date_sum=-3 then r4date_sumr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 6) PRESIDENT AND VICE PRESIDENT NAME ITEMS AND COUNT **;

DATA NHATSR4_SP (drop=i);
 SET NHATSR4_SP;
 array cg4pres {*} cg4presidna1 cg4presidna3 cg4vpname1 cg4vpname3;
 array r4pres_item {*} r4preslast r4presfirst r4vplast r4vpfirst;

do i=1 to dim(r4pres_item);
if cg4pres{i} > 0 then r4pres_item{i}=cg4pres{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg4pres{i} in (-7,2) then r4pres_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF **;
r4presvp=sum(of r4pres_item{*}); ** COUNT CORRECT PRESIDENT/VEEP NAME ITEMS
**;
end;
if r4presvp=. then do;
if cg4speaktosp=2 then r4presvp=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg4speaktosp=1 and max(of cg4pres{*})=-1 then r4presvp=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r4presvpr=r4presvp;
if r4presvp=-2 then r4presvpr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP
**;
else if r4presvp=-3 then r4presvpr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;
```

```
** 7) ORIENTATION DOMAIN: SUM OF DATE RECALL AND PRESIDENT NAMING **;

DATA NHATSR4_SP;
 SET NHATSR4_SP;
  r4date_prvp=sum(r4date_sumr,r4presvpr);
 RUN;


TITLE;
PROC PRINT DATA = NHATSR4_SP (OBS=50);
 VAR  r4date_sumr r4presvpr  r4date_prvp;
RUN;


** 8) EXECUTIVE FUNCTION DOMAIN: CLOCK DRAWING SCORE **;

DATA NHATSR4_SP;
 SET NHATSR4_SP;
 r4clock_scorer=cg4dclkdraw;
if cg4dclkdraw in (-2,-9) then r4clock_scorer=.;
if cg4dclkdraw in (-3,-4,-7) then r4clock_scorer=0;
** IMPUTE MEAN SCORE TO PERSONS MISSING A CLOCK **;
if cg4dclkdraw=-9 and cg4speaktosp=1 then r4clock_scorer=2; ** IF PROXY SAID
CAN ASK SP **;
if cg4dclkdraw=-9 and cg4speaktosp=-1 then r4clock_scorer=3; ** IF SELF
RESPONDENT **;
RUN;


TITLE;
PROC PRINT DATA = NHATSR4_SP (OBS=50);
 VAR cg4dclkdraw  cg4speaktosp   r4clock_scorer;
RUN;


** 9) MEMORY DOMAIN: IMMEDIATE AND DELAYED WORD RECALL **;

DATA NHATSR4_SP (drop=i);
 SET NHATSR4_SP;
 array cg4recall {*} cg4dwrdimmrc cg4dwrddlyrc;
 array r4word_recall {*} r4irecall r4drecall;
do i=1 to dim(r4word_recall);
r4word_recall{i}=cg4recall{i};
if cg4recall{i} in (-2,-1) then r4word_recall{i}=.;
if cg4recall{i} in (-7,-3) then r4word_recall{i}=0;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
 *if cg5dwrdimmrc=-9 then r5word_recall{i}=.;
r4wordrecall0_20=sum(of r4word_recall{*});
end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR4_SP (OBS = 50);
 VAR cg4dwrdimmrc cg4dwrddlyrc r4irecall r4drecall r4wordrecall0_20;
```

```
RUN;


** 10) CREATE COGNITIVE DOMAINS FOR ALL ELIGIBLE **;
** I.E. PROXY BUT PROXY SAYS CAN ASK SP, NOT FQ ONLY, NOT NH **;

DATA NHATSR4_SP;
 SET NHATSR4_SP;
 if 1 < r4clock_scorer <=5 then r4clock65=0;
 if 0 <= r4clock_scorer <=1 then r4clock65=1;
 if 3 < r4wordrecall0_20 <=20 then r4word65=0;
 if 0 <= r4wordrecall0_20 <=3 then r4word65=1;
 if 3 < r4date_prvp <= 8 then r4datena65=0;
 if 0 <= r4date_prvp <= 3 then r4datena65=1;
RUN;


TITLE;
PROC PRINT DATA = NHATSR4_SP (OBS=50);
 VAR r4clock_scorer r4clock65  r4wordrecall0_20 r4word65  r4date_prvp
r4datena65;
RUN;


** 10) CREATE COGNITIVE DOMAIN SCORE **;

DATA NHATSR4_SP (drop=i);
 SET NHATSR4_SP;
array r4domains {*} r4clock65 r4word65 r4datena65;
do i=1 to dim(r4domains);
r4domain65=sum(of r4domains{*});
end;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
*if cg5dwrdlstnm=-9 and r5demclas=. then r5demclas=-9;

RUN;


TITLE;
PROC PRINT DATA = NHATSR4_SP (OBS=50);
 VAR r4clock65 r4word65 r4datena65 r4domain65;
RUN;


** 11) UPDATE COGNITIVE CLASSIFICATION **;

DATA NHATSR4_SP;
 SET NHATSR4_SP;
 if r4demclas=. and cg4speaktosp in (-1,1) then do;
 if 2 <= r4domain65 <=3 then r4demclas=1; ** PROBABLE DEMENTIA **;
 if r4domain65 =1 then r4demclas=2; ** POSSIBLE DEMENTIA **;
 if r4domain65 =0 then r4demclas=3; ** NO DEMENTIA **;
end;

RUN;
```

# SAS ALGORITHM FOR DEMENTIA

```sas
TITLE;
PROC PRINT DATA = NHATSR4_SP (OBS=50);
 FORMAT r4demclas r4demclas.;
 VAR SPID  cg4dwrdimmrc cg4dwrddlyrc cg4dwrdimmrc  r4dresid hc4disescn9
is4resptype  cg4speaktosp  r4domain65 r4demclas;
RUN;




TITLE;
PROC PRINT DATA = NHATSR4_SP (OBS=50);
 FORMAT r4demclas r4demclas.;
 VAR SPID  r4demclas r4dresid r4dlmlint;
RUN;




TITLE;
PROC FREQ DATA = NHATSR4_SP ;
 TABLES r4dresid*r4dlmlint/LIST MISSING;
RUN;




TITLE;
PROC PRINT DATA = NHATSR4_SP;
 FORMAT r4demclas r4demclas.;
 WHERE r4dresid = 6 OR r4dlmlint = 1;
 VAR SPID  r4demclas r4dresid r4dlmlint;
RUN;




DATA NHATSR4_SP;
 SET NHATSR4_SP;
 DROP r4ad8_dem r4ad8_1-r4ad8_8 r4ad8miss_1-r4ad8miss_8 r4ad8_score
r4ad8_miss
 r4date_mon r4date_day r4date_yr r4date_dow r4date_sum r4date_sumr
 r4preslast r4presfirst r4vplast r4vpfirst r4presvp r4presvpr r4date_prvp
 r4clock_scorer r4irecall r4drecall r4wordrecall0_20
 r4clock65 r4word65 r4datena65 r4domain65;
 RUN;




** NOTE: The input file to run this code is the NHATS_Round_5_SP_File**
** FORMATS FOR CONSTRUCTED VARIABLES **;

proc format;
value r5demclas
1="1:Probable dementia"
2="2:Possible dementia"
3="3:No dementia"
-1="-1:Deceased or nursing home resident"
-9="-9:Missing"
;
value r5ad8dem
```

SAS ALGORITHM FOR DEMENTIA

```
1="1:Meets dementia criteria"
2="2:Does not meet dementia criteria"
;
value r5clockf
0-1="0-1:Impaired"
2-5="2-5:Not impaired"
;
value r5wordrecf
0-3="0-3: Impaired "
4-20="4-20: Not impaired "
;
value r5dateprf
0-3="0-3: Impaired "
4-8="4-8: Not impaired "
;
RUN;


** DATE STEP CODE FOR CREATING DEMENTIA CLASSIFICATION VARIABLE **;

DATA NHATSR5_SP;
 SET NHATSR5_SP;
 length r5demclas
 r5ad8_dem r5ad8_1-r5ad8_8 r5ad8miss_1-r5ad8miss_8 r5ad8_score r5ad8_miss
 r5date_mon r5date_day r5date_yr r5date_dow r5date_sum r5date_sumr
 r5preslast r5presfirst r5vplast r5vpfirst r5presvp r5presvpr r5date_prvp
 r5clock_scorer r5irecall r5drecall r5wordrecall0_20
 r5clock65 r5word65 r5datena65 r5domain65
3;
label r5demclas="R5 NHATS Dementia Classification 65+";

*if cg2dwrdimmrc = 10 and cg2dwrddlyrc = -3 then cg2dwrdimmrc = -3; **USE
THIS LINE TO FIX A CODING ERROR IN ROUND 2 ONLY**;
RUN;


** 1) SET MISSING (RESIDENTIAL CARE FQ ONLY) AND N.A. (NURSING HOME
RESIDENTS, DECEASED) **;

DATA NHATSR5_SP;
 SET NHATSR5_SP;
if r5dresid in (3,5,7) then r5demclas=-9;
if r5dresid in (6,8) then r5demclas=-1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR5_SP;
 FORMAT r5demclas r5demclas.;
 TABLES r5dresid*r5demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 2) CODE PROBABLE IF DEMENTIA DIAGNOSIS REPORTED BY SELF OR PROXY **;

DATA NHATSR5_SP;
 SET NHATSR5_SP;
```

```sas
if hc5disescn9 in (1,7) and is5resptype in (1,2) then r5demclas=1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR5_SP;
 FORMAT r5demclas r5demclas.;
 TABLES r5dresid*r5demclas/LIST MISSING NOCOL NOROW NOPERCENT;
 TABLES r5dresid*hc5disescn9*is5resptype*r5demclas/LIST MISSING NOCOL NOROW
NOPERCENT;
RUN;


** 3a) CODE AD8_SCORE **;

DATA NHATSR5_SP (drop=i);
 SET NHATSR5_SP;
array r5think {*} cp5chgthink1-cp5chgthink8; ** QUESTIONNAIRE ITEMS **;
array r5ad8item {*} r5ad8_1-r5ad8_8;
array r5ad8miss {*} r5ad8miss_1-r5ad8miss_8;
r5ad8_score =-1;
r5ad8_miss =-1;

do i=1 to dim(r5ad8item);
** INITIALIZE COUNTS TO NOT APPLICABLE**;
r5ad8item{i}=-1;
r5ad8miss{i}=-1;
** ASSIGN VALUES TO AD8 ITEMS IF PROXY AND DEMENTIA CLASS NOT ALREADY
ASSIGNED BY REPORTED DIAGNOSIS **;
if is5resptype=2 and r5demclas=. then do;
r5ad8item{i}=.;
if r5think{i} in (1,3) then r5ad8item{i}=1; ** PROXY REPORTS A CHANGE OR
ALZ/DEMENTIA **;
else if r5think{i}=2 then r5ad8item{i}=0; ** PROXY REPORTS NO CHANGE **;
r5ad8_score=sum(of r5ad8item{*}); ** COUNT AD8 ITEMS **;

if r5ad8item{i} in (0,1) then r5ad8miss{i}=0;
else if r5ad8item{i}=. then r5ad8miss{i}=1;
r5ad8_miss=sum(of r5ad8miss{*}); ** COUNT MISSING AD8 ITEMS **;
end;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR5_SP (OBS=50);
 WHERE r5ad8_score > 0;
 VAR SPID r5ad8_1-r5ad8_8 r5ad8_score  r5ad8miss_1-r5ad8miss_8  r5ad8_miss;
RUN;


** 3b) CODE AD8 DEMENTIA CLASS **;

DATA NHATSR5_SP;
 SET NHATSR5_SP;
 if cp5dad8dem=1 and is5resptype=2 and r5demclas=. then r5ad8_score=8;
```

```
 if r5ad8_score>=2 then r5ad8_dem=1 ; ** IF SCORE >=2 THEN MEETS AD8
CRITERION **;
 if r5ad8_score in (0,1) or (r5ad8_miss=8 and r5ad8_dem=.) then r5ad8_dem=2;
** IF SCORE IS 0 OR 1 OR ALL ITEMS MISSING THEN DOES NOT MEET AD8 CRITERION
**;
RUN;


TITLE;
PROC PRINT DATA = NHATSR5_SP (OBS=50);
 FORMAT r5ad8_dem r5ad8dem.  ;
 WHERE r5ad8_score >= 2;
 VAR SPID r5ad8_score r5ad8_miss  r5ad8_dem;
RUN;


** 4) UPDATE DEMENTIA CLASSIFICATION VARIABLE WITH AD8 CLASS **;

DATA NHATSR5_SP;
 SET NHATSR5_SP;
if r5demclas=. then do;
if r5ad8_dem=1 then r5demclas=1; ** PROBABLE BASED ON AD8 SCORE **;
if r5ad8_dem=2 and cg5speaktosp=2 then r5demclas=3; ** NO DIAGNOSIS, DOES NOT
MEET AD8 CRITERION, AND PROXY SAYS CANNOT ASK SP COGNITIVE ITEMS **;
end;
RUN;


TITLE;
PROC FREQ DATA = NHATSR5_SP (OBS = 50);
 FORMAT r5ad8_dem  r5ad8dem.     r5demclas r5demclas.;
  TABLES r5ad8_dem*cg5speaktosp*r5demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 5) CODE DATE ITEMS AND COUNT **;

DATA NHATSR5_SP (drop=i);
 SET NHATSR5_SP;
 array cg5date {*} cg5todaydat1-cg5todaydat4; **USE THIS LINE FOR ROUNDS 1-3,
5 and forward**;
 *array cg4date {*} cg4todaydat1 cg4todaydat2 cg4todaydat3 cg4todaydat5;
**USE THIS LINE FOR ROUND 4**;
 array r5date_item {*} r5date_mon r5date_day r5date_yr r5date_dow;

do i=1 to dim(r5date_item);
if cg5date{i} > 0 then r5date_item{i}=cg5date{i}; *** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg5date{i} in (-7,2) then r5date_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF**;
r5date_sum=sum(of r5date_item{*}); ** COUNT CORRECT DATE ITEMS**;
end;

if r5date_sum=. then do;
if cg5speaktosp=2 then r5date_sum=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg5speaktosp=1 and max(of cg5date{*})=-1 then r5date_sum=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
```

```sas
end;
r5date_sumr=r5date_sum;
if r5date_sum=-2 then r5date_sumr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO
SP**;
else if r5date_sum=-3 then r5date_sumr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 6) PRESIDENT AND VICE PRESIDENT NAME ITEMS AND COUNT **;

DATA NHATSR5_SP (drop=i);
 SET NHATSR5_SP;
 array cg5pres {*} cg5presidna1 cg5presidna3 cg5vpname1 cg5vpname3;
 array r5pres_item {*} r5preslast r5presfirst r5vplast r5vpfirst;

do i=1 to dim(r5pres_item);
if cg5pres{i} > 0 then r5pres_item{i}=cg5pres{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg5pres{i} in (-7,2) then r5pres_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF **;
r5presvp=sum(of r5pres_item{*}); ** COUNT CORRECT PRESIDENT/VEEP NAME ITEMS
**;
end;
if r5presvp=. then do;
if cg5speaktosp=2 then r5presvp=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg5speaktosp=1 and max(of cg5pres{*})=-1 then r5presvp=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r5presvpr=r5presvp;
if r5presvp=-2 then r5presvpr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP
**;
else if r5presvp=-3 then r5presvpr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 7) ORIENTATION DOMAIN: SUM OF DATE RECALL AND PRESIDENT NAMING **;

DATA NHATSR5_SP;
 SET NHATSR5_SP;
  r5date_prvp=sum(r5date_sumr,r5presvpr);
 RUN;


TITLE;
PROC PRINT DATA = NHATSR5_SP (OBS=50);
 VAR  r5date_sumr r5presvpr  r5date_prvp;
RUN;


** 8) EXECUTIVE FUNCTION DOMAIN: CLOCK DRAWING SCORE **;

DATA NHATSR5_SP;
 SET NHATSR5_SP;
 r5clock_scorer=cg5dclkdraw;
if cg5dclkdraw in (-2,-9) then r5clock_scorer=.;
if cg5dclkdraw in (-3,-4,-7) then r5clock_scorer=0;
** IMPUTE MEAN SCORE TO PERSONS MISSING A CLOCK **;
```

```
if cg5dclkdraw=-9 and cg5speaktosp=1 then r5clock_scorer=2; ** IF PROXY SAID
CAN ASK SP **;
if cg5dclkdraw=-9 and cg5speaktosp=-1 then r5clock_scorer=3; ** IF SELF
RESPONDENT **;
RUN;


TITLE;
PROC PRINT DATA = NHATSR5_SP (OBS=50);
 VAR cg5dclkdraw  cg5speaktosp   r5clock_scorer;
RUN;


** 9) MEMORY DOMAIN: IMMEDIATE AND DELAYED WORD RECALL **;

DATA NHATSR5_SP (drop=i);
 SET NHATSR5_SP;
 array cg5recall {*} cg5dwrdimmrc cg5dwrddlyrc;
 array r5word_recall {*} r5irecall r5drecall;
do i=1 to dim(r5word_recall);
r5word_recall{i}=cg5recall{i};
*if cg4recall{i} in (-2,-1) then r4word_recall{i}=.;
*if cg4recall{i} in (-7,-3) then r4word_recall{i}=0;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
 if cg5dwrdimmrc=-9 then r5word_recall{i}=.;
 if cg5recall{i} in (-7,-3) then r5word_recall{i}=0;
r5wordrecall0_20=sum(of r5word_recall{*});
end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR5_SP (OBS = 50);
 VAR cg5dwrdimmrc cg5dwrddlyrc r5irecall r5drecall r5wordrecall0_20;
RUN;


** 10) CREATE COGNITIVE DOMAINS FOR ALL ELIGIBLE **;
** I.E. PROXY BUT PROXY SAYS CAN ASK SP, NOT FQ ONLY, NOT NH **;

DATA NHATSR5_SP;
 SET NHATSR5_SP;
 if 1 < r5clock_scorer <=5 then r5clock65=0;
 if 0 <= r5clock_scorer <=1 then r5clock65=1;
 if 3 < r5wordrecall0_20 <=20 then r5word65=0;
 if 0 <= r5wordrecall0_20 <=3 then r5word65=1;
 if 3 < r5date_prvp <= 8 then r5datena65=0;
 if 0 <= r5date_prvp <= 3 then r5datena65=1;
RUN;


TITLE;
PROC PRINT DATA = NHATSR5_SP (OBS=50);
 VAR r5clock_scorer r5clock65  r5wordrecall0_20 r5word65  r5date_prvp
r5datena65;
RUN;
```

```
** 10) CREATE COGNITIVE DOMAIN SCORE **;

DATA NHATSR5_SP (drop=i);
 SET NHATSR5_SP;
array r5domains {*} r5clock65 r5word65 r5datena65;
do i=1 to dim(r5domains);
r5domain65=sum(of r5domains{*});
end;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
if cg5dwrdlstnm=-9 and r5demclas=. then r5demclas=-9;

RUN;


TITLE;
PROC PRINT DATA = NHATSR5_SP (OBS=50);
 VAR r5clock65 r5word65 r5datena65 r5domain65;
RUN;


** 11) UPDATE COGNITIVE CLASSIFICATION **;

DATA NHATSR5_SP;
 SET NHATSR5_SP;
 if r5demclas=. and cg5speaktosp in (-1,1) then do;
 if 2 <= r5domain65 <=3 then r5demclas=1; ** PROBABLE DEMENTIA **;
 if r5domain65 =1 then r5demclas=2; ** POSSIBLE DEMENTIA **;
 if r5domain65 =0 then r5demclas=3; ** NO DEMENTIA **;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR5_SP (OBS=50);
 FORMAT r5demclas r5demclas.;
 VAR SPID  cg5dwrdimmrc cg5dwrddlyrc cg5dwrdimmrc  r5dresid hc5disescn9
is5resptype  cg5speaktosp  r5domain65 r5demclas;
RUN;



TITLE;
PROC PRINT DATA = NHATSR5_SP (OBS=50);
 FORMAT r5demclas r5demclas.;
 VAR SPID  r5demclas r5dresid r5dlmlint;
RUN;


TITLE;
PROC FREQ DATA = NHATSR5_SP ;
 TABLES r5dresid*r5dlmlint/LIST MISSING;
RUN;
```

# SAS ALGORITHM FOR DEMENTIA

```sas
TITLE;
PROC PRINT DATA = NHATSR5_SP;
 FORMAT r5demclas r5demclas.;
 WHERE r5dresid = 6 OR r5dlmlint = 1;
 VAR SPID  r5demclas r5dresid r5dlmlint;
RUN;




DATA NHATSR5_SP;
 SET NHATSR5_SP;
 DROP r5ad8_dem r5ad8_1-r5ad8_8 r5ad8miss_1-r5ad8miss_8 r5ad8_score
r5ad8_miss
 r5date_mon r5date_day r5date_yr r5date_dow r5date_sum r5date_sumr
 r5preslast r5presfirst r5vplast r5vpfirst r5presvp r5presvpr r5date_prvp
 r5clock_scorer r5irecall r5drecall r5wordrecall0_20
 r5clock65 r5word65 r5datena65 r5domain65;
 RUN;




** NOTE: The input file to run this code is the NHATS_Round_6_SP_File**
** FORMATS FOR CONSTRUCTED VARIABLES **;

proc format;
value r6demclas
1="1:Probable dementia"
2="2:Possible dementia"
3="3:No dementia"
-1="-1:Deceased or nursing home resident"
-9="-9:Missing"
;
value r6ad8dem
1="1:Meets dementia criteria"
2="2:Does not meet dementia criteria"
;
value r6clockf
0-1="0-1:Impaired"
2-5="2-5:Not impaired"
;
value r6wordrecf
0-3="0-3: Impaired "
4-20="4-20: Not impaired "
;
value r6dateprf
0-3="0-3: Impaired "
4-8="4-8: Not impaired "
;
RUN;


** DATE STEP CODE FOR CREATING DEMENTIA CLASSIFICATION VARIABLE **;

DATA NHATSR6_SP;
```

```
SET NHATSR6_SP;
length r6demclas
r6ad8_dem r6ad8_1-r6ad8_8 r6ad8miss_1-r6ad8miss_8 r6ad8_score r6ad8_miss
r6date_mon r6date_day r6date_yr r6date_dow r6date_sum r6date_sumr
r6preslast r6presfirst r6vplast r6vpfirst r6presvp r6presvpr r6date_prvp
r6clock_scorer r6irecall r6drecall r6wordrecall0_20
r6clock65 r6word65 r6datena65 r6domain65
3;
label r6demclas="R6 NHATS Dementia Classification 65+";

*if cg2dwrdimmrc = 10 and cg2dwrddlyrc = -3 then cg2dwrdimmrc = -3; **USE
THIS LINE TO FIX A CODING ERROR IN ROUND 2 ONLY**;
RUN;


** 1) SET MISSING (RESIDENTIAL CARE FQ ONLY) AND N.A. (NURSING HOME
RESIDENTS, DECEASED) **;

DATA NHATSR6_SP;
 SET NHATSR6_SP;
if r6dresid in (3,5,7) then r6demclas=-9;
if r6dresid in (6,8) then r6demclas=-1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR6_SP;
 FORMAT r6demclas r6demclas.;
 TABLES r6dresid*r6demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 2) CODE PROBABLE IF DEMENTIA DIAGNOSIS REPORTED BY SELF OR PROXY **;

DATA NHATSR6_SP;
 SET NHATSR6_SP;
if hc6disescn9 in (1,7) and is6resptype in (1,2) then r6demclas=1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR6_SP;
 FORMAT r6demclas r6demclas.;
 TABLES r6dresid*r6demclas/LIST MISSING NOCOL NOROW NOPERCENT;
 TABLES r6dresid*hc6disescn9*is6resptype*r6demclas/LIST MISSING NOCOL NOROW
NOPERCENT;
RUN;


** 3a) CODE AD8_SCORE **;

DATA NHATSR6_SP (drop=i);
 SET NHATSR6_SP;
array r6think {*} cp6chgthink1-cp6chgthink8; ** QUESTIONNAIRE ITEMS **;
array r6ad8item {*} r6ad8_1-r6ad8_8;
array r6ad8miss {*} r6ad8miss_1-r6ad8miss_8;
r6ad8_score =-1;
```

# SAS ALGORITHM FOR DEMENTIA

```
r6ad8_miss =-1;

do i=1 to dim(r6ad8item);
** INITIALIZE COUNTS TO NOT APPLICABLE**;
r6ad8item{i}=-1;
r6ad8miss{i}=-1;
** ASSIGN VALUES TO AD8 ITEMS IF PROXY AND DEMENTIA CLASS NOT ALREADY
ASSIGNED BY REPORTED DIAGNOSIS **;
if is6resptype=2 and r6demclas=. then do;
r6ad8item{i}=.;
if r6think{i} in (1,3) then r6ad8item{i}=1; ** PROXY REPORTS A CHANGE OR
ALZ/DEMENTIA **;
else if r6think{i}=2 then r6ad8item{i}=0; ** PROXY REPORTS NO CHANGE **;
r6ad8_score=sum(of r6ad8item{*}); ** COUNT AD8 ITEMS **;

if r6ad8item{i} in (0,1) then r6ad8miss{i}=0;
else if r6ad8item{i}=. then r6ad8miss{i}=1;
r6ad8_miss=sum(of r6ad8miss{*}); ** COUNT MISSING AD8 ITEMS **;
end;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR6_SP (OBS=50);
 WHERE r6ad8_score > 0;
 VAR SPID r6ad8_1-r6ad8_8 r6ad8_score  r6ad8miss_1-r6ad8miss_8  r6ad8_miss;
RUN;


** 3b) CODE AD8 DEMENTIA CLASS **;

DATA NHATSR6_SP;
 SET NHATSR6_SP;
 if cp6dad8dem=1 and is6resptype=2 and r6demclas=. then r6ad8_score=8;
 if r6ad8_score>=2 then r6ad8_dem=1 ; ** IF SCORE >=2 THEN MEETS AD8
CRITERION **;
 if r6ad8_score in (0,1) or (r6ad8_miss=8 and r6ad8_dem=.) then r6ad8_dem=2;
** IF SCORE IS 0 OR 1 OR ALL ITEMS MISSING THEN DOES NOT MEET AD8 CRITERION
**;
RUN;


TITLE;
PROC PRINT DATA = NHATSR6_SP (OBS=50);
 FORMAT r6ad8_dem r6ad8dem.  ;
 WHERE r6ad8_score >= 2;
 VAR SPID r6ad8_score r6ad8_miss  r6ad8_dem;
RUN;


** 4) UPDATE DEMENTIA CLASSIFICATION VARIABLE WITH AD8 CLASS **;

DATA NHATSR6_SP;
 SET NHATSR6_SP;
if r6demclas=. then do;
```

```
if r6ad8_dem=1 then r6demclas=1; ** PROBABLE BASED ON AD8 SCORE **;
if r6ad8_dem=2 and cg6speaktosp=2 then r6demclas=3; ** NO DIAGNOSIS, DOES NOT
MEET AD8 CRITERION, AND PROXY SAYS CANNOT ASK SP COGNITIVE ITEMS **;
end;
RUN;


TITLE;
PROC FREQ DATA = NHATSR6_SP (OBS = 50);
 FORMAT r6ad8_dem  r6ad8dem.     r6demclas r6demclas.;
   TABLES r6ad8_dem*cg6speaktosp*r6demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 5) CODE DATE ITEMS AND COUNT **;

DATA NHATSR6_SP (drop=i);
 SET NHATSR6_SP;
 array cg6date {*} cg6todaydat1-cg6todaydat4; **USE THIS LINE FOR ROUNDS 1-3,
5 and forward**;
 *array cg4date {*} cg4todaydat1 cg4todaydat2 cg4todaydat3 cg4todaydat5;
**USE THIS LINE FOR ROUND 4**;
 array r6date_item {*} r6date_mon r6date_day r6date_yr r6date_dow;

do i=1 to dim(r6date_item);
if cg6date{i} > 0 then r6date_item{i}=cg6date{i}; *** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg6date{i} in (-7,2) then r6date_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF**;
r6date_sum=sum(of r6date_item{*}); ** COUNT CORRECT DATE ITEMS**;
end;

if r6date_sum=. then do;
if cg6speaktosp=2 then r6date_sum=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg6speaktosp=1 and max(of cg6date{*})=-1 then r6date_sum=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r6date_sumr=r6date_sum;
if r6date_sum=-2 then r6date_sumr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO
SP**;
else if r6date_sum=-3 then r6date_sumr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 6) PRESIDENT AND VICE PRESIDENT NAME ITEMS AND COUNT **;

DATA NHATSR6_SP (drop=i);
 SET NHATSR6_SP;
 array cg6pres {*} cg6presidna1 cg6presidna3 cg6vpname1 cg6vpname3;
 array r6pres_item {*} r6preslast r6presfirst r6vplast r6vpfirst;

do i=1 to dim(r6pres_item);
if cg6pres{i} > 0 then r6pres_item{i}=cg6pres{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg6pres{i} in (-7,2) then r6pres_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF **;
```

```sas
r6presvp=sum(of r6pres_item{*}); ** COUNT CORRECT PRESIDENT/VEEP NAME ITEMS
**;
end;
if r6presvp=. then do;
if cg6speaktosp=2 then r6presvp=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg6speaktosp=1 and max(of cg6pres{*})=-1 then r6presvp=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r6presvpr=r6presvp;
if r6presvp=-2 then r6presvpr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP
**;
else if r6presvp=-3 then r6presvpr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 7) ORIENTATION DOMAIN: SUM OF DATE RECALL AND PRESIDENT NAMING **;

DATA NHATSR6_SP;
 SET NHATSR6_SP;
  r6date_prvp=sum(r6date_sumr,r6presvpr);
 RUN;


TITLE;
PROC PRINT DATA = NHATSR6_SP (OBS=50);
 VAR  r6date_sumr r6presvpr  r6date_prvp;
RUN;


** 8) EXECUTIVE FUNCTION DOMAIN: CLOCK DRAWING SCORE **;

DATA NHATSR6_SP;
 SET NHATSR6_SP;
 r6clock_scorer=cg6dclkdraw;
if cg6dclkdraw in (-2,-9) then r6clock_scorer=.;
if cg6dclkdraw in (-3,-4,-7) then r6clock_scorer=0;
** IMPUTE MEAN SCORE TO PERSONS MISSING A CLOCK **;
if cg6dclkdraw=-9 and cg6speaktosp=1 then r6clock_scorer=2; ** IF PROXY SAID
CAN ASK SP **;
if cg6dclkdraw=-9 and cg6speaktosp=-1 then r6clock_scorer=3; ** IF SELF
RESPONDENT **;
RUN;


TITLE;
PROC PRINT DATA = NHATSR6_SP (OBS=50);
 VAR cg6dclkdraw  cg6speaktosp   r6clock_scorer;
RUN;


** 9) MEMORY DOMAIN: IMMEDIATE AND DELAYED WORD RECALL **;

DATA NHATSR6_SP (drop=i);
 SET NHATSR6_SP;
 array cg6recall {*} cg6dwrdimmrc cg6dwrddlyrc;
 array r6word_recall {*} r6irecall r6drecall;
do i=1 to dim(r6word_recall);
```

```
r6word_recall{i}=cg6recall{i};
if cg6recall{i} in (-2,-1) then r6word_recall{i}=.;
if cg6recall{i} in (-7,-3) then r6word_recall{i}=0;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
 *if cg5dwrdimmrc=-9 then r5word_recall{i}=.;
r6wordrecall0_20=sum(of r6word_recall{*});
end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR6_SP (OBS = 50);
 VAR cg6dwrdimmrc cg6dwrddlyrc r6irecall r6drecall r6wordrecall0_20;
RUN;


** 10) CREATE COGNITIVE DOMAINS FOR ALL ELIGIBLE **;
** I.E. PROXY BUT PROXY SAYS CAN ASK SP, NOT FQ ONLY, NOT NH **;

DATA NHATSR6_SP;
 SET NHATSR6_SP;
 if 1 < r6clock_scorer <=5 then r6clock65=0;
 if 0 <= r6clock_scorer <=1 then r6clock65=1;
 if 3 < r6wordrecall0_20 <=20 then r6word65=0;
 if 0 <= r6wordrecall0_20 <=3 then r6word65=1;
 if 3 < r6date_prvp <= 8 then r6datena65=0;
 if 0 <= r6date_prvp <= 3 then r6datena65=1;
RUN;


TITLE;
PROC PRINT DATA = NHATSR6_SP (OBS=50);
 VAR r6clock_scorer r6clock65  r6wordrecall0_20 r6word65  r6date_prvp
r6datena65;
RUN;


** 10) CREATE COGNITIVE DOMAIN SCORE **;

DATA NHATSR6_SP (drop=i);
 SET NHATSR6_SP;
array r6domains {*} r6clock65 r6word65 r6datena65;
do i=1 to dim(r6domains);
r6domain65=sum(of r6domains{*});
end;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
*if cg5dwrdlstnm=-9 and r5demclas=. then r5demclas=-9;

RUN;


TITLE;
PROC PRINT DATA = NHATSR6_SP (OBS=50);
 VAR r6clock65 r6word65 r6datena65 r6domain65;
RUN;
```

```sas
** 11) UPDATE COGNITIVE CLASSIFICATION **;

DATA NHATSR6_SP;
 SET NHATSR6_SP;
 if r6demclas=. and cg6speaktosp in (-1,1) then do;
 if 2 <= r6domain65 <=3 then r6demclas=1; ** PROBABLE DEMENTIA **;
 if r6domain65 =1 then r6demclas=2; ** POSSIBLE DEMENTIA **;
 if r6domain65 =0 then r6demclas=3; ** NO DEMENTIA **;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR6_SP (OBS=50);
 FORMAT r6demclas r6demclas.;
 VAR SPID  cg6dwrdimmrc cg6dwrddlyrc cg6dwrdimmrc  r6dresid hc6disescn9
is6resptype  cg6speaktosp  r6domain65 r6demclas;
RUN;



TITLE;
PROC PRINT DATA = NHATSR6_SP (OBS=50);
 FORMAT r6demclas r6demclas.;
 VAR SPID  r6demclas r6dresid r6dlmlint;
RUN;


TITLE;
PROC FREQ DATA = NHATSR6_SP ;
 TABLES r6dresid*r6dlmlint/LIST MISSING;
RUN;


TITLE;
PROC PRINT DATA = NHATSR6_SP;
 FORMAT r6demclas r6demclas.;
 WHERE r6dresid = 6 OR r6dlmlint = 1;
 VAR SPID  r6demclas r6dresid r6dlmlint;
RUN;



DATA NHATSR6_SP;
 SET NHATSR6_SP;
 DROP r6ad8_dem r6ad8_1-r6ad8_8 r6ad8miss_1-r6ad8miss_8 r6ad8_score
r6ad8_miss
 r6date_mon r6date_day r6date_yr r6date_dow r6date_sum r6date_sumr
 r6preslast r6presfirst r6vplast r6vpfirst r6presvp r6presvpr r6date_prvp
 r6clock_scorer r6irecall r6drecall r6wordrecall0_20
 r6clock65 r6word65 r6datena65 r6domain65;
 RUN;
```

SAS ALGORITHM FOR DEMENTIA

```
** NOTE: The input file to run this code is the NHATS_Round_7_SP_File**
** FORMATS FOR CONSTRUCTED VARIABLES **;

proc format;
value r7demclas
1="1:Probable dementia"
2="2:Possible dementia"
3="3:No dementia"
-1="-1:Deceased or nursing home resident"
-9="-9:Missing"
;
value r7ad8dem
1="1:Meets dementia criteria"
2="2:Does not meet dementia criteria"
;
value r7clockf
0-1="0-1:Impaired"
2-5="2-5:Not impaired"
;
value r7wordrecf
0-3="0-3: Impaired "
4-20="4-20: Not impaired "
;
value r7dateprf
0-3="0-3: Impaired "
4-8="4-8: Not impaired "
;
RUN;


** DATE STEP CODE FOR CREATING DEMENTIA CLASSIFICATION VARIABLE **;

DATA NHATSR7_SP;
 SET NHATSR7_SP;
 length r7demclas
 r7ad8_dem r7ad8_1-r7ad8_8 r7ad8miss_1-r7ad8miss_8 r7ad8_score r7ad8_miss
 r7date_mon r7date_day r7date_yr r7date_dow r7date_sum r7date_sumr
 r7preslast r7presfirst r7vplast r7vpfirst r7presvp r7presvpr r7date_prvp
 r7clock_scorer r7irecall r7drecall r7wordrecall0_20
 r7clock65 r7word65 r7datena65 r7domain65
3;
label r7demclas="R7 NHATS Dementia Classification 65+";

*if cg2dwrdimmrc = 10 and cg2dwrddlyrc = -3 then cg2dwrdimmrc = -3; **USE
THIS LINE TO FIX A CODING ERROR IN ROUND 2 ONLY**;
RUN;


** 1) SET MISSING (RESIDENTIAL CARE FQ ONLY) AND N.A. (NURSING HOME
RESIDENTS, DECEASED) **;

DATA NHATSR7_SP;
 SET NHATSR7_SP;
if r7dresid in (3,5,7) then r7demclas=-9;
if r7dresid in (6,8) then r7demclas=-1;
RUN;
```

SAS ALGORITHM FOR DEMENTIA

```
TITLE;
PROC FREQ DATA = NHATSR7_SP;
 FORMAT r7demclas r7demclas.;
 TABLES r7dresid*r7demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 2) CODE PROBABLE IF DEMENTIA DIAGNOSIS REPORTED BY SELF OR PROXY **;

DATA NHATSR7_SP;
 SET NHATSR7_SP;
if hc7disescn9 in (1,7) and is7resptype in (1,2) then r7demclas=1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR7_SP;
 FORMAT r7demclas r7demclas.;
 TABLES r7dresid*r7demclas/LIST MISSING NOCOL NOROW NOPERCENT;
 TABLES r7dresid*hc7disescn9*is7resptype*r7demclas/LIST MISSING NOCOL NOROW
NOPERCENT;
RUN;


** 3a) CODE AD8_SCORE **;

DATA NHATSR7_SP (drop=i);
 SET NHATSR7_SP;
array r7think {*} cp7chgthink1-cp7chgthink8; ** QUESTIONNAIRE ITEMS **;
array r7ad8item {*} r7ad8_1-r7ad8_8;
array r7ad8miss {*} r7ad8miss_1-r7ad8miss_8;
r7ad8_score =-1;
r7ad8_miss =-1;

do i=1 to dim(r7ad8item);
** INITIALIZE COUNTS TO NOT APPLICABLE**;
r7ad8item{i}=-1;
r7ad8miss{i}=-1;
** ASSIGN VALUES TO AD8 ITEMS IF PROXY AND DEMENTIA CLASS NOT ALREADY
ASSIGNED BY REPORTED DIAGNOSIS **;
if is7resptype=2 and r7demclas=. then do;
r7ad8item{i}=.;
if r7think{i} in (1,3) then r7ad8item{i}=1; ** PROXY REPORTS A CHANGE OR
ALZ/DEMENTIA **;
else if r7think{i}=2 then r7ad8item{i}=0; ** PROXY REPORTS NO CHANGE **;
r7ad8_score=sum(of r7ad8item{*}); ** COUNT AD8 ITEMS **;

if r7ad8item{i} in (0,1) then r7ad8miss{i}=0;
else if r7ad8item{i}=. then r7ad8miss{i}=1;
r7ad8_miss=sum(of r7ad8miss{*}); ** COUNT MISSING AD8 ITEMS **;
end;
end;

RUN;
```

```sas
TITLE;
PROC PRINT DATA = NHATSR7_SP (OBS=50);
 WHERE r7ad8_score > 0;
 VAR SPID r7ad8_1-r7ad8_8 r7ad8_score  r7ad8miss_1-r7ad8miss_8  r7ad8_miss;
RUN;


** 3b) CODE AD8 DEMENTIA CLASS **;

DATA NHATSR7_SP;
 SET NHATSR7_SP;
 if cp7dad8dem=1 and is7resptype=2 and r7demclas=. then r7ad8_score=8;
 if r7ad8_score>=2 then r7ad8_dem=1 ; ** IF SCORE >=2 THEN MEETS AD8
CRITERION **;
 if r7ad8_score in (0,1) or (r7ad8_miss=8 and r7ad8_dem=.) then r7ad8_dem=2;
** IF SCORE IS 0 OR 1 OR ALL ITEMS MISSING THEN DOES NOT MEET AD8 CRITERION
**;
RUN;


TITLE;
PROC PRINT DATA = NHATSR7_SP (OBS=50);
 FORMAT r7ad8_dem r7ad8dem.  ;
 WHERE r7ad8_score >= 2;
 VAR SPID r7ad8_score r7ad8_miss  r7ad8_dem;
RUN;


** 4) UPDATE DEMENTIA CLASSIFICATION VARIABLE WITH AD8 CLASS **;

DATA NHATSR7_SP;
 SET NHATSR7_SP;
if r7demclas=. then do;
if r7ad8_dem=1 then r7demclas=1; ** PROBABLE BASED ON AD8 SCORE **;
if r7ad8_dem=2 and cg7speaktosp=2 then r7demclas=3; ** NO DIAGNOSIS, DOES NOT
MEET AD8 CRITERION, AND PROXY SAYS CANNOT ASK SP COGNITIVE ITEMS **;
end;
RUN;


TITLE;
PROC FREQ DATA = NHATSR7_SP (OBS = 50);
 FORMAT r7ad8_dem  r7ad8dem.     r7demclas r7demclas.;
  TABLES r7ad8_dem*cg7speaktosp*r7demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 5) CODE DATE ITEMS AND COUNT **;

DATA NHATSR7_SP (drop=i);
 SET NHATSR7_SP;
 array cg7date {*} cg7todaydat1-cg7todaydat4; **USE THIS LINE FOR ROUNDS 1-3,
5 and forward**;
 *array cg4date {*} cg4todaydat1 cg4todaydat2 cg4todaydat3 cg4todaydat5;
**USE THIS LINE FOR ROUND 4**;
 array r7date_item {*} r7date_mon r7date_day r7date_yr r7date_dow;
```

```sas
do i=1 to dim(r7date_item);
if cg7date{i} > 0 then r7date_item{i}=cg7date{i}; *** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg7date{i} in (-7,2) then r7date_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF**;
r7date_sum=sum(of r7date_item{*}); ** COUNT CORRECT DATE ITEMS**;
end;

if r7date_sum=. then do;
if cg7speaktosp=2 then r7date_sum=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg7speaktosp=1 and max(of cg7date{*})=-1 then r7date_sum=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r7date_sumr=r7date_sum;
if r7date_sum=-2 then r7date_sumr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO
SP**;
else if r7date_sum=-3 then r7date_sumr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 6) PRESIDENT AND VICE PRESIDENT NAME ITEMS AND COUNT **;

DATA NHATSR7_SP (drop=i);
 SET NHATSR7_SP;
 array cg7pres {*} cg7presidna1 cg7presidna3 cg7vpname1 cg7vpname3;
 array r7pres_item {*} r7preslast r7presfirst r7vplast r7vpfirst;

do i=1 to dim(r7pres_item);
if cg7pres{i} > 0 then r7pres_item{i}=cg7pres{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg7pres{i} in (-7,2) then r7pres_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF **;
r7presvp=sum(of r7pres_item{*}); ** COUNT CORRECT PRESIDENT/VEEP NAME ITEMS
**;
end;
if r7presvp=. then do;
if cg7speaktosp=2 then r7presvp=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg7speaktosp=1 and max(of cg7pres{*})=-1 then r7presvp=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r7presvpr=r7presvp;
if r7presvp=-2 then r7presvpr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP
**;
else if r7presvp=-3 then r7presvpr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 7) ORIENTATION DOMAIN: SUM OF DATE RECALL AND PRESIDENT NAMING **;

DATA NHATSR7_SP;
 SET NHATSR7_SP;
  r7date_prvp=sum(r7date_sumr,r7presvpr);
 RUN;


TITLE;
```

```sas
PROC PRINT DATA = NHATSR7_SP (OBS=50);
 VAR  r7date_sumr r7presvpr  r7date_prvp;
RUN;


** 8) EXECUTIVE FUNCTION DOMAIN: CLOCK DRAWING SCORE **;

DATA NHATSR7_SP;
 SET NHATSR7_SP;
 r7clock_scorer=cg7dclkdraw;
if cg7dclkdraw in (-2,-9) then r7clock_scorer=.;
if cg7dclkdraw in (-3,-4,-7) then r7clock_scorer=0;
** IMPUTE MEAN SCORE TO PERSONS MISSING A CLOCK **;
if cg7dclkdraw=-9 and cg7speaktosp=1 then r7clock_scorer=2; ** IF PROXY SAID
CAN ASK SP **;
if cg7dclkdraw=-9 and cg7speaktosp=-1 then r7clock_scorer=3; ** IF SELF
RESPONDENT **;
RUN;


TITLE;
PROC PRINT DATA = NHATSR7_SP (OBS=50);
 VAR cg7dclkdraw  cg7speaktosp   r7clock_scorer;
RUN;


** 9) MEMORY DOMAIN: IMMEDIATE AND DELAYED WORD RECALL **;

DATA NHATSR7_SP (drop=i);
 SET NHATSR7_SP;
 array cg7recall {*} cg7dwrdimmrc cg7dwrddlyrc;
 array r7word_recall {*} r7irecall r7drecall;
do i=1 to dim(r7word_recall);
r7word_recall{i}=cg7recall{i};
if cg7recall{i} in (-2,-1) then r7word_recall{i}=.;
if cg7recall{i} in (-7,-3) then r7word_recall{i}=0;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
 *if cg5dwrdimmrc=-9 then r5word_recall{i}=.;
r7wordrecall0_20=sum(of r7word_recall{*});
end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR7_SP (OBS = 50);
 VAR cg7dwrdimmrc cg7dwrddlyrc r7irecall r7drecall r7wordrecall0_20;
RUN;


** 10) CREATE COGNITIVE DOMAINS FOR ALL ELIGIBLE **;
** I.E. PROXY BUT PROXY SAYS CAN ASK SP, NOT FQ ONLY, NOT NH **;

DATA NHATSR7_SP;
 SET NHATSR7_SP;
 if 1 < r7clock_scorer <=5 then r7clock65=0;
 if 0 <= r7clock_scorer <=1 then r7clock65=1;
```

```sas
  if 3 < r7wordrecall0_20 <=20 then r7word65=0;
  if 0 <= r7wordrecall0_20 <=3 then r7word65=1;
  if 3 < r7date_prvp <= 8 then r7datena65=0;
  if 0 <= r7date_prvp <= 3 then r7datena65=1;
RUN;


TITLE;
PROC PRINT DATA = NHATSR7_SP (OBS=50);
 VAR r7clock_scorer r7clock65  r7wordrecall0_20 r7word65  r7date_prvp
r7datena65;
RUN;


** 10) CREATE COGNITIVE DOMAIN SCORE **;

DATA NHATSR7_SP (drop=i);
 SET NHATSR7_SP;
array r7domains {*} r7clock65 r7word65 r7datena65;
do i=1 to dim(r7domains);
r7domain65=sum(of r7domains{*});
end;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
*if cg5dwrdlstnm=-9 and r5demclas=. then r5demclas=-9;

RUN;


TITLE;
PROC PRINT DATA = NHATSR7_SP (OBS=50);
 VAR r7clock65 r7word65 r7datena65 r7domain65;
RUN;


** 11) UPDATE COGNITIVE CLASSIFICATION **;

DATA NHATSR7_SP;
 SET NHATSR7_SP;
 if r7demclas=. and cg7speaktosp in (-1,1) then do;
 if 2 <= r7domain65 <=3 then r7demclas=1; ** PROBABLE DEMENTIA **;
 if r7domain65 =1 then r7demclas=2; ** POSSIBLE DEMENTIA **;
 if r7domain65 =0 then r7demclas=3; ** NO DEMENTIA **;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR7_SP (OBS=50);
 FORMAT r7demclas r7demclas.;
 VAR SPID  cg7dwrdimmrc cg7dwrddlyrc cg7dwrdimmrc  r7dresid hc7disescn9
is7resptype  cg7speaktosp  r7domain65 r7demclas;
RUN;


TITLE;
```

SAS ALGORITHM FOR DEMENTIA

```sas
PROC PRINT DATA = NHATSR7_SP (OBS=50);
 FORMAT r7demclas r7demclas.;
 VAR SPID  r7demclas r7dresid r7dlmlint;
RUN;


TITLE;
PROC FREQ DATA = NHATSR7_SP ;
 TABLES r7dresid*r7dlmlint/LIST MISSING;
RUN;


TITLE;
PROC PRINT DATA = NHATSR7_SP;
 FORMAT r7demclas r7demclas.;
 WHERE r7dresid = 6 OR r7dlmlint = 1;
 VAR SPID  r7demclas r7dresid r7dlmlint;
RUN;



DATA NHATSR7_SP;
 SET NHATSR7_SP;
 DROP r7ad8_dem r7ad8_1-r7ad8_8 r7ad8miss_1-r7ad8miss_8 r7ad8_score
r7ad8_miss
 r7date_mon r7date_day r7date_yr r7date_dow r7date_sum r7date_sumr
 r7preslast r7presfirst r7vplast r7vpfirst r7presvp r7presvpr r7date_prvp
 r7clock_scorer r7irecall r7drecall r7wordrecall0_20
 r7clock65 r7word65 r7datena65 r7domain65;
RUN;



** NOTE: The input file to run this code is the NHATS_Round_8_SP_File**
** FORMATS FOR CONSTRUCTED VARIABLES **;

proc format;
value r8demclas
1="1:Probable dementia"
2="2:Possible dementia"
3="3:No dementia"
-1="-1:Deceased or nursing home resident"
-9="-9:Missing"
;
value r8ad8dem
1="1:Meets dementia criteria"
2="2:Does not meet dementia criteria"
;
value r8clockf
0-1="0-1:Impaired"
2-5="2-5:Not impaired"
;
value r8wordrecf
0-3="0-3: Impaired "
4-20="4-20: Not impaired "
;
```

## SAS ALGORITHM FOR DEMENTIA

```
value r8dateprf
0-3="0-3: Impaired "
4-8="4-8: Not impaired "
;
RUN;


** DATE STEP CODE FOR CREATING DEMENTIA CLASSIFICATION VARIABLE **;

DATA NHATSR8_SP;
 SET NHATSR8_SP;
 length r8demclas
 r8ad8_dem r8ad8_1-r8ad8_8 r8ad8miss_1-r8ad8miss_8 r8ad8_score r8ad8_miss
 r8date_mon r8date_day r8date_yr r8date_dow r8date_sum r8date_sumr
 r8preslast r8presfirst r8vplast r8vpfirst r8presvp r8presvpr r8date_prvp
 r8clock_scorer r8irecall r8drecall r8wordrecall0_20
 r8clock65 r8word65 r8datena65 r8domain65
3;
label r8demclas="R8 NHATS Dementia Classification 65+";

*if cg2dwrdimmrc = 10 and cg2dwrddlyrc = -3 then cg2dwrdimmrc = -3; **USE
THIS LINE TO FIX A CODING ERROR IN ROUND 2 ONLY**;
RUN;


** 1) SET MISSING (RESIDENTIAL CARE FQ ONLY) AND N.A. (NURSING HOME
RESIDENTS, DECEASED) **;

DATA NHATSR8_SP;
 SET NHATSR8_SP;
if r8dresid in (3,5,7) then r8demclas=-9;
if r8dresid in (6,8) then r8demclas=-1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR8_SP;
 FORMAT r8demclas r8demclas.;
 TABLES r8dresid*r8demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 2) CODE PROBABLE IF DEMENTIA DIAGNOSIS REPORTED BY SELF OR PROXY **;

DATA NHATSR8_SP;
 SET NHATSR8_SP;
if hc8disescn9 in (1,7) and is8resptype in (1,2) then r8demclas=1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR8_SP;
 FORMAT r8demclas r8demclas.;
 TABLES r8dresid*r8demclas/LIST MISSING NOCOL NOROW NOPERCENT;
 TABLES r8dresid*hc8disescn9*is8resptype*r8demclas/LIST MISSING NOCOL NOROW
NOPERCENT;
RUN;
```

```
** 3a) CODE AD8_SCORE **;

DATA NHATSR8_SP (drop=i);
 SET NHATSR8_SP;
array r8think {*} cp8chgthink1-cp8chgthink8; ** QUESTIONNAIRE ITEMS **;
array r8ad8item {*} r8ad8_1-r8ad8_8;
array r8ad8miss {*} r8ad8miss_1-r8ad8miss_8;
r8ad8_score =-1;
r8ad8_miss =-1;

do i=1 to dim(r8ad8item);
** INITIALIZE COUNTS TO NOT APPLICABLE**;
r8ad8item{i}=-1;
r8ad8miss{i}=-1;
** ASSIGN VALUES TO AD8 ITEMS IF PROXY AND DEMENTIA CLASS NOT ALREADY
ASSIGNED BY REPORTED DIAGNOSIS **;
if is8resptype=2 and r8demclas=. then do;
r8ad8item{i}=.;
if r8think{i} in (1,3) then r8ad8item{i}=1; ** PROXY REPORTS A CHANGE OR
ALZ/DEMENTIA **;
else if r8think{i}=2 then r8ad8item{i}=0; ** PROXY REPORTS NO CHANGE **;
r8ad8_score=sum(of r8ad8item{*}); ** COUNT AD8 ITEMS **;

if r8ad8item{i} in (0,1) then r8ad8miss{i}=0;
else if r8ad8item{i}=. then r8ad8miss{i}=1;
r8ad8_miss=sum(of r8ad8miss{*}); ** COUNT MISSING AD8 ITEMS **;
end;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR8_SP (OBS=50);
 WHERE r8ad8_score > 0;
 VAR SPID r8ad8_1-r8ad8_8 r8ad8_score  r8ad8miss_1-r8ad8miss_8  r8ad8_miss;
RUN;


** 3b) CODE AD8 DEMENTIA CLASS **;

DATA NHATSR8_SP;
 SET NHATSR8_SP;
 if cp8dad8dem=1 and is8resptype=2 and r8demclas=. then r8ad8_score=8;
 if r8ad8_score>=2 then r8ad8_dem=1 ; ** IF SCORE >=2 THEN MEETS AD8
CRITERION **;
 if r8ad8_score in (0,1) or (r8ad8_miss=8 and r8ad8_dem=.) then r8ad8_dem=2;
** IF SCORE IS 0 OR 1 OR ALL ITEMS MISSING THEN DOES NOT MEET AD8 CRITERION
**;
RUN;


TITLE;
PROC PRINT DATA = NHATSR8_SP (OBS=50);
 FORMAT r8ad8_dem r8ad8dem.  ;
```

```
  WHERE r8ad8_score >= 2;
  VAR SPID r8ad8_score r8ad8_miss  r8ad8_dem;
RUN;


** 4) UPDATE DEMENTIA CLASSIFICATION VARIABLE WITH AD8 CLASS **;

DATA NHATSR8_SP;
 SET NHATSR8_SP;
if r8demclas=. then do;
if r8ad8_dem=1 then r8demclas=1; ** PROBABLE BASED ON AD8 SCORE **;
if r8ad8_dem=2 and cg8speaktosp=2 then r8demclas=3; ** NO DIAGNOSIS, DOES NOT
MEET AD8 CRITERION, AND PROXY SAYS CANNOT ASK SP COGNITIVE ITEMS **;
end;
RUN;


TITLE;
PROC FREQ DATA = NHATSR8_SP (OBS = 50);
 FORMAT r8ad8_dem  r8ad8dem.     r8demclas r8demclas.;
  TABLES r8ad8_dem*cg8speaktosp*r8demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 5) CODE DATE ITEMS AND COUNT **;

DATA NHATSR8_SP (drop=i);
 SET NHATSR8_SP;
 array cg8date {*} cg8todaydat1-cg8todaydat4; **USE THIS LINE FOR ROUNDS 1-3,
5 and forward**;
 *array cg4date {*} cg4todaydat1 cg4todaydat2 cg4todaydat3 cg4todaydat5;
**USE THIS LINE FOR ROUND 4**;
 array r8date_item {*} r8date_mon r8date_day r8date_yr r8date_dow;

do i=1 to dim(r8date_item);
if cg8date{i} > 0 then r8date_item{i}=cg8date{i}; *** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg8date{i} in (-7,2) then r8date_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF**;
r8date_sum=sum(of r8date_item{*}); ** COUNT CORRECT DATE ITEMS**;
end;

if r8date_sum=. then do;
if cg8speaktosp=2 then r8date_sum=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg8speaktosp=1 and max(of cg8date{*})=-1 then r8date_sum=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r8date_sumr=r8date_sum;
if r8date_sum=-2 then r8date_sumr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO
SP**;
else if r8date_sum=-3 then r8date_sumr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 6) PRESIDENT AND VICE PRESIDENT NAME ITEMS AND COUNT **;

DATA NHATSR8_SP (drop=i);
```

```
 SET NHATSR8_SP;
 array cg8pres {*} cg8presidna1 cg8presidna3 cg8vpname1 cg8vpname3;
 array r8pres_item {*} r8preslast r8presfirst r8vplast r8vpfirst;

do i=1 to dim(r8pres_item);
if cg8pres{i} > 0 then r8pres_item{i}=cg8pres{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg8pres{i} in (-7,2) then r8pres_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF **;
r8presvp=sum(of r8pres_item{*}); ** COUNT CORRECT PRESIDENT/VEEP NAME ITEMS
**;
end;
if r8presvp=. then do;
if cg8speaktosp=2 then r8presvp=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg8speaktosp=1 and max(of cg8pres{*})=-1 then r8presvp=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r8presvpr=r8presvp;
if r8presvp=-2 then r8presvpr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP
**;
else if r8presvp=-3 then r8presvpr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;



** 7) ORIENTATION DOMAIN: SUM OF DATE RECALL AND PRESIDENT NAMING **;

DATA NHATSR8_SP;
 SET NHATSR8_SP;
  r8date_prvp=sum(r8date_sumr,r8presvpr);
 RUN;



TITLE;
PROC PRINT DATA = NHATSR8_SP (OBS=50);
 VAR  r8date_sumr r8presvpr  r8date_prvp;
RUN;



** 8) EXECUTIVE FUNCTION DOMAIN: CLOCK DRAWING SCORE **;

DATA NHATSR8_SP;
 SET NHATSR8_SP;
 r8clock_scorer=cg8dclkdraw;
if cg8dclkdraw in (-2,-9) then r8clock_scorer=.;
if cg8dclkdraw in (-3,-4,-7) then r8clock_scorer=0;
** IMPUTE MEAN SCORE TO PERSONS MISSING A CLOCK **;
if cg8dclkdraw=-9 and cg8speaktosp=1 then r8clock_scorer=2; ** IF PROXY SAID
CAN ASK SP **;
if cg8dclkdraw=-9 and cg8speaktosp=-1 then r8clock_scorer=3; ** IF SELF
RESPONDENT **;
RUN;



TITLE;
PROC PRINT DATA = NHATSR8_SP (OBS=50);
 VAR cg8dclkdraw  cg8speaktosp   r8clock_scorer;
RUN;
```

```sas
** 9) MEMORY DOMAIN: IMMEDIATE AND DELAYED WORD RECALL **;

DATA NHATSR8_SP (drop=i);
 SET NHATSR8_SP;
 array cg8recall {*} cg8dwrdimmrc cg8dwrddlyrc;
 array r8word_recall {*} r8irecall r8drecall;
do i=1 to dim(r8word_recall);
r8word_recall{i}=cg8recall{i};
if cg8recall{i} in (-2,-1) then r8word_recall{i}=.;
if cg8recall{i} in (-7,-3) then r8word_recall{i}=0;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
 *if cg5dwrdimmrc=-9 then r5word_recall{i}=.;
r8wordrecall0_20=sum(of r8word_recall{*});
end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR8_SP (OBS = 50);
 VAR cg8dwrdimmrc cg8dwrddlyrc r8irecall r8drecall r8wordrecall0_20;
RUN;


** 10) CREATE COGNITIVE DOMAINS FOR ALL ELIGIBLE **;
** I.E. PROXY BUT PROXY SAYS CAN ASK SP, NOT FQ ONLY, NOT NH **;

DATA NHATSR8_SP;
 SET NHATSR8_SP;
 if 1 < r8clock_scorer <=5 then r8clock65=0;
 if 0 <= r8clock_scorer <=1 then r8clock65=1;
 if 3 < r8wordrecall0_20 <=20 then r8word65=0;
 if 0 <= r8wordrecall0_20 <=3 then r8word65=1;
 if 3 < r8date_prvp <= 8 then r8datena65=0;
 if 0 <= r8date_prvp <= 3 then r8datena65=1;
RUN;


TITLE;
PROC PRINT DATA = NHATSR8_SP (OBS=50);
 VAR r8clock_scorer r8clock65  r8wordrecall0_20 r8word65  r8date_prvp
r8datena65;
RUN;


** 10) CREATE COGNITIVE DOMAIN SCORE **;

DATA NHATSR8_SP (drop=i);
 SET NHATSR8_SP;
array r8domains {*} r8clock65 r8word65 r8datena65;
do i=1 to dim(r8domains);
r8domain65=sum(of r8domains{*});
end;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
```

# SAS ALGORITHM FOR DEMENTIA

```sas
*if cg5dwrdlstnm=-9 and r5demclas=. then r5demclas=-9;

RUN;


TITLE;
PROC PRINT DATA = NHATSR8_SP (OBS=50);
 VAR r8clock65 r8word65 r8datena65 r8domain65;
RUN;


** 11) UPDATE COGNITIVE CLASSIFICATION **;

DATA NHATSR8_SP;
 SET NHATSR8_SP;
 if r8demclas=. and cg8speaktosp in (-1,1) then do;
 if 2 <= r8domain65 <=3 then r8demclas=1; ** PROBABLE DEMENTIA **;
 if r8domain65 =1 then r8demclas=2; ** POSSIBLE DEMENTIA **;
 if r8domain65 =0 then r8demclas=3; ** NO DEMENTIA **;
end;

RUN;


TITLE;
PROC PRINT DATA = NHATSR8_SP (OBS=50);
 FORMAT r8demclas r8demclas.;
 VAR SPID  cg8dwrdimmrc cg8dwrddlyrc cg8dwrdimmrc  r8dresid hc8disescn9
is8resptype  cg8speaktosp  r8domain65 r8demclas;
RUN;



TITLE;
PROC PRINT DATA = NHATSR8_SP (OBS=50);
 FORMAT r8demclas r8demclas.;
 VAR SPID  r8demclas r8dresid r8dlmlint;
RUN;


TITLE;
PROC FREQ DATA = NHATSR8_SP ;
 TABLES r8dresid*r8dlmlint/LIST MISSING;
RUN;


TITLE;
PROC PRINT DATA = NHATSR8_SP;
 FORMAT r8demclas r8demclas.;
 WHERE r8dresid = 6 OR r8dlmlint = 1;
 VAR SPID  r8demclas r8dresid r8dlmlint;
RUN;



DATA NHATSR8_SP;
 SET NHATSR8_SP;
```

SAS ALGORITHM FOR DEMENTIA

```
 DROP r8ad8_dem r8ad8_1-r8ad8_8 r8ad8miss_1-r8ad8miss_8 r8ad8_score
r8ad8_miss
 r8date_mon r8date_day r8date_yr r8date_dow r8date_sum r8date_sumr
 r8preslast r8presfirst r8vplast r8vpfirst r8presvp r8presvpr r8date_prvp
 r8clock_scorer r8irecall r8drecall r8wordrecall0_20
 r8clock65 r8word65 r8datena65 r8domain65;
 RUN;




** NOTE: The input file to run this code is the NHATS_Round_9_SP_File**
** FORMATS FOR CONSTRUCTED VARIABLES **;

proc format;
value r9demclas
1="1:Probable dementia"
2="2:Possible dementia"
3="3:No dementia"
-1="-1:Deceased or nursing home resident"
-9="-9:Missing"
;
value r9ad8dem
1="1:Meets dementia criteria"
2="2:Does not meet dementia criteria"
;
value r9clockf
0-1="0-1:Impaired"
2-5="2-5:Not impaired"
;
value r9wordrecf
0-3="0-3: Impaired "
4-20="4-20: Not impaired "
;
value r9dateprf
0-3="0-3: Impaired "
4-8="4-8: Not impaired "
;
RUN;



** DATE STEP CODE FOR CREATING DEMENTIA CLASSIFICATION VARIABLE **;

DATA NHATSR9_SP;
 SET NHATSR9_SP;
 length r9demclas
 r9ad8_dem r9ad8_1-r9ad8_8 r9ad8miss_1-r9ad8miss_8 r9ad8_score r9ad8_miss
 r9date_mon r9date_day r9date_yr r9date_dow r9date_sum r9date_sumr
 r9preslast r9presfirst r9vplast r9vpfirst r9presvp r9presvpr r9date_prvp
 r9clock_scorer r9irecall r9drecall r9wordrecall0_20
 r9clock65 r9word65 r9datena65 r9domain65
3;
label r9demclas="R9 NHATS Dementia Classification 65+";

*if cg2dwrdimmrc = 10 and cg2dwrddlyrc = -3 then cg2dwrdimmrc = -3; **USE
THIS LINE TO FIX A CODING ERROR IN ROUND 2 ONLY**;
RUN;
```

SAS ALGORITHM FOR DEMENTIA

```
** 1) SET MISSING (RESIDENTIAL CARE FQ ONLY) AND N.A. (NURSING HOME
RESIDENTS, DECEASED) **;

DATA NHATSR9_SP;
 SET NHATSR9_SP;
if r9dresid in (3,5,7) then r9demclas=-9;
if r9dresid in (6,8) then r9demclas=-1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR9_SP;
 FORMAT r9demclas r9demclas.;
 TABLES r9dresid*r9demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;


** 2) CODE PROBABLE IF DEMENTIA DIAGNOSIS REPORTED BY SELF OR PROXY **;

DATA NHATSR9_SP;
 SET NHATSR9_SP;
if hc9disescn9 in (1,7) and is9resptype in (1,2) then r9demclas=1;
RUN;


TITLE;
PROC FREQ DATA = NHATSR9_SP;
 FORMAT r9demclas r9demclas.;
 TABLES r9dresid*r9demclas/LIST MISSING NOCOL NOROW NOPERCENT;
 TABLES r9dresid*hc9disescn9*is9resptype*r9demclas/LIST MISSING NOCOL NOROW
NOPERCENT;
RUN;


** 3a) CODE AD8_SCORE **;

DATA NHATSR9_SP (drop=i);
 SET NHATSR9_SP;
array r9think {*} cp9chgthink1-cp9chgthink8; ** QUESTIONNAIRE ITEMS **;
array r9ad8item {*} r9ad8_1-r9ad8_8;
array r9ad8miss {*} r9ad8miss_1-r9ad8miss_8;
r9ad8_score =-1;
r9ad8_miss =-1;

do i=1 to dim(r9ad8item);
** INITIALIZE COUNTS TO NOT APPLICABLE**;
r9ad8item{i}=-1;
r9ad8miss{i}=-1;
** ASSIGN VALUES TO AD8 ITEMS IF PROXY AND DEMENTIA CLASS NOT ALREADY
ASSIGNED BY REPORTED DIAGNOSIS **;
if is9resptype=2 and r9demclas=. then do;
r9ad8item{i}=.;
if r9think{i} in (1,3) then r9ad8item{i}=1; ** PROXY REPORTS A CHANGE OR
ALZ/DEMENTIA **;
else if r9think{i}=2 then r9ad8item{i}=0; ** PROXY REPORTS NO CHANGE **;
```

```sas
r9ad8_score=sum(of r9ad8item{*}); ** COUNT AD8 ITEMS **;

if r9ad8item{i} in (0,1) then r9ad8miss{i}=0;
else if r9ad8item{i}=. then r9ad8miss{i}=1;
r9ad8_miss=sum(of r9ad8miss{*}); ** COUNT MISSING AD8 ITEMS **;
end;
end;

RUN;



TITLE;
PROC PRINT DATA = NHATSR9_SP (OBS=50);
 WHERE r9ad8_score > 0;
 VAR SPID r9ad8_1-r9ad8_8 r9ad8_score  r9ad8miss_1-r9ad8miss_8  r9ad8_miss;
RUN;



** 3b) CODE AD8 DEMENTIA CLASS **;

DATA NHATSR9_SP;
 SET NHATSR9_SP;
 if cp9dad8dem=1 and is9resptype=2 and r9demclas=. then r9ad8_score=8;
 if r9ad8_score>=2 then r9ad8_dem=1 ; ** IF SCORE >=2 THEN MEETS AD8
CRITERION **;
 if r9ad8_score in (0,1) or (r9ad8_miss=8 and r9ad8_dem=.) then r9ad8_dem=2;
** IF SCORE IS 0 OR 1 OR ALL ITEMS MISSING THEN DOES NOT MEET AD8 CRITERION
**;
RUN;



TITLE;
PROC PRINT DATA = NHATSR9_SP (OBS=50);
 FORMAT r9ad8_dem r9ad8dem.  ;
 WHERE r9ad8_score >= 2;
 VAR SPID r9ad8_score r9ad8_miss  r9ad8_dem;
RUN;



** 4) UPDATE DEMENTIA CLASSIFICATION VARIABLE WITH AD8 CLASS **;

DATA NHATSR9_SP;
 SET NHATSR9_SP;
if r9demclas=. then do;
if r9ad8_dem=1 then r9demclas=1; ** PROBABLE BASED ON AD8 SCORE **;
if r9ad8_dem=2 and cg9speaktosp=2 then r9demclas=3; ** NO DIAGNOSIS, DOES NOT
MEET AD8 CRITERION, AND PROXY SAYS CANNOT ASK SP COGNITIVE ITEMS **;
end;
RUN;



TITLE;
PROC FREQ DATA = NHATSR9_SP (OBS = 50);
 FORMAT r9ad8_dem  r9ad8dem.     r9demclas r9demclas.;
   TABLES r9ad8_dem*cg9speaktosp*r9demclas/LIST MISSING NOCOL NOROW NOPERCENT;
RUN;
```

```
** 5) CODE DATE ITEMS AND COUNT **;

DATA NHATSR9_SP (drop=i);
 SET NHATSR9_SP;
 array cg9date {*} cg9todaydat1-cg9todaydat4; **USE THIS LINE FOR ROUNDS 1-3,
5 and forward**;
 *array cg4date {*} cg4todaydat1 cg4todaydat2 cg4todaydat3 cg4todaydat5;
**USE THIS LINE FOR ROUND 4**;
 array r9date_item {*} r9date_mon r9date_day r9date_yr r9date_dow;

do i=1 to dim(r9date_item);
if cg9date{i} > 0 then r9date_item{i}=cg9date{i}; *** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg9date{i} in (-7,2) then r9date_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF**;
r9date_sum=sum(of r9date_item{*}); ** COUNT CORRECT DATE ITEMS**;
end;

if r9date_sum=. then do;
if cg9speaktosp=2 then r9date_sum=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg9speaktosp=1 and max(of cg9date{*})=-1 then r9date_sum=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r9date_sumr=r9date_sum;
if r9date_sum=-2 then r9date_sumr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO
SP**;
else if r9date_sum=-3 then r9date_sumr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;


** 6) PRESIDENT AND VICE PRESIDENT NAME ITEMS AND COUNT **;

DATA NHATSR9_SP (drop=i);
 SET NHATSR9_SP;
 array cg9pres {*} cg9presidna1 cg9presidna3 cg9vpname1 cg9vpname3;
 array r9pres_item {*} r9preslast r9presfirst r9vplast r9vpfirst;

do i=1 to dim(r9pres_item);
if cg9pres{i} > 0 then r9pres_item{i}=cg9pres{i}; ** CODE ONLY YES/NO
RESPONSES: MISSING/N.A. CODES -1,-9 LEFT MISSING **;
if cg9pres{i} in (-7,2) then r9pres_item{i}=0; ** 2:NO/DK OR -7:REFUSED
RECODED TO 0:NO/DK/RF **;
r9presvp=sum(of r9pres_item{*}); ** COUNT CORRECT PRESIDENT/VEEP NAME ITEMS
**;
end;
if r9presvp=. then do;
if cg9speaktosp=2 then r9presvp=-2; ** PROXY SAYS CAN'T SPEAK TO SP **;
else if cg9speaktosp=1 and max(of cg9pres{*})=-1 then r9presvp=-3; ** PROXY
SAYS CAN SPEAK TO SP BUT SP UNABLE TO ANSWER **;
end;
r9presvpr=r9presvp;
if r9presvp=-2 then r9presvpr=.; ** MISSING IF PROXY SAYS CAN'T SPEAK TO SP
**;
else if r9presvp=-3 then r9presvpr=0; ** 0 IF SP UNABLE TO ANSWER **;
RUN;
```

```
** 7) ORIENTATION DOMAIN: SUM OF DATE RECALL AND PRESIDENT NAMING **;

DATA NHATSR9_SP;
 SET NHATSR9_SP;
  r9date_prvp=sum(r9date_sumr,r9presvpr);
 RUN;


TITLE;
PROC PRINT DATA = NHATSR9_SP (OBS=50);
 VAR  r9date_sumr r9presvpr  r9date_prvp;
RUN;


** 8) EXECUTIVE FUNCTION DOMAIN: CLOCK DRAWING SCORE **;

DATA NHATSR9_SP;
 SET NHATSR9_SP;
 r9clock_scorer=cg9dclkdraw;
if cg9dclkdraw in (-2,-9) then r9clock_scorer=.;
if cg9dclkdraw in (-3,-4,-7) then r9clock_scorer=0;
** IMPUTE MEAN SCORE TO PERSONS MISSING A CLOCK **;
if cg9dclkdraw=-9 and cg9speaktosp=1 then r9clock_scorer=2; ** IF PROXY SAID
CAN ASK SP **;
if cg9dclkdraw=-9 and cg9speaktosp=-1 then r9clock_scorer=3; ** IF SELF
RESPONDENT **;
RUN;


TITLE;
PROC PRINT DATA = NHATSR9_SP (OBS=50);
 VAR cg9dclkdraw  cg9speaktosp   r9clock_scorer;
RUN;


** 9) MEMORY DOMAIN: IMMEDIATE AND DELAYED WORD RECALL **;

DATA NHATSR9_SP (drop=i);
 SET NHATSR9_SP;
 array cg9recall {*} cg9dwrdimmrc cg9dwrddlyrc;
 array r9word_recall {*} r9irecall r9drecall;
do i=1 to dim(r9word_recall);
r9word_recall{i}=cg9recall{i};
if cg9recall{i} in (-2,-1) then r9word_recall{i}=.;
if cg9recall{i} in (-7,-3) then r9word_recall{i}=0;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
 *if cg5dwrdimmrc=-9 then r5word_recall{i}=.;
r9wordrecall0_20=sum(of r9word_recall{*});
end;
RUN;


TITLE;
PROC PRINT DATA = NHATSR9_SP (OBS = 50);
 VAR cg9dwrdimmrc cg9dwrddlyrc r9irecall r9drecall r9wordrecall0_20;
```

```
RUN;


** 10) CREATE COGNITIVE DOMAINS FOR ALL ELIGIBLE **;
** I.E. PROXY BUT PROXY SAYS CAN ASK SP, NOT FQ ONLY, NOT NH **;

DATA NHATSR9_SP;
 SET NHATSR9_SP;
 if 1 < r9clock_scorer <=5 then r9clock65=0;
 if 0 <= r9clock_scorer <=1 then r9clock65=1;
 if 3 < r9wordrecall0_20 <=20 then r9word65=0;
 if 0 <= r9wordrecall0_20 <=3 then r9word65=1;
 if 3 < r9date_prvp <= 8 then r9datena65=0;
 if 0 <= r9date_prvp <= 3 then r9datena65=1;
RUN;


TITLE;
PROC PRINT DATA = NHATSR9_SP (OBS=50);
 VAR r9clock_scorer r9clock65  r9wordrecall0_20 r9word65  r9date_prvp
r9datena65;
RUN;


** 10) CREATE COGNITIVE DOMAIN SCORE **;

DATA NHATSR9_SP (drop=i);
 SET NHATSR9_SP;
array r9domains {*} r9clock65 r9word65 r9datena65;
do i=1 to dim(r9domains);
r9domain65=sum(of r9domains{*});
end;
**SET CASES WITH MISSING WORD LIST AND NOT PREVIOUSLY ASSIGNED TO MISSING
(ROUND 5 ONLY)**;
*if cg5dwrdlstnm=-9 and r5demclas=. then r5demclas=-9;

RUN;


TITLE;
PROC PRINT DATA = NHATSR9_SP (OBS=50);
 VAR r9clock65 r9word65 r9datena65 r9domain65;
RUN;


** 11) UPDATE COGNITIVE CLASSIFICATION **;

DATA NHATSR9_SP;
 SET NHATSR9_SP;
 if r9demclas=. and cg9speaktosp in (-1,1) then do;
 if 2 <= r9domain65 <=3 then r9demclas=1; ** PROBABLE DEMENTIA **;
 if r9domain65 =1 then r9demclas=2; ** POSSIBLE DEMENTIA **;
 if r9domain65 =0 then r9demclas=3; ** NO DEMENTIA **;
end;

RUN;
```

```sas
TITLE;
PROC PRINT DATA = NHATSR9_SP (OBS=50);
 FORMAT r9demclas r9demclas.;
 VAR SPID  cg9dwrdimmrc cg9dwrddlyrc cg9dwrdimmrc  r9dresid hc9disescn9
is9resptype  cg9speaktosp  r9domain65 r9demclas;
RUN;




TITLE;
PROC PRINT DATA = NHATSR9_SP (OBS=50);
 FORMAT r9demclas r9demclas.;
 VAR SPID  r9demclas r9dresid r9dlmlint;
RUN;




TITLE;
PROC FREQ DATA = NHATSR9_SP ;
 TABLES r9dresid*r9dlmlint/LIST MISSING;
RUN;




TITLE;
PROC PRINT DATA = NHATSR9_SP;
 FORMAT r9demclas r9demclas.;
 WHERE r9dresid = 6 OR r9dlmlint = 1;
 VAR SPID  r9demclas r9dresid r9dlmlint;
RUN;




DATA NHATSR9_SP;
 SET NHATSR9_SP;
 DROP r9ad8_dem r9ad8_1-r9ad8_8 r9ad8miss_1-r9ad8miss_8 r9ad8_score
r9ad8_miss
 r9date_mon r9date_day r9date_yr r9date_dow r9date_sum r9date_sumr
 r9preslast r9presfirst r9vplast r9vpfirst r9presvp r9presvpr r9date_prvp
 r9clock_scorer r9irecall r9drecall r9wordrecall0_20
 r9clock65 r9word65 r9datena65 r9domain65;
 RUN;




/* Sort NHATS data sets*/

PROC SORT DATA = NHATSR1_OP;
 BY SPID OPID;
RUN;

PROC SORT DATA = NHATSR1_SP;
 BY SPID;
RUN;
```

SAS ALGORITHM FOR DEMENTIA

```
PROC SORT DATA = NHATSR2_OP;
 BY SPID OPID;
RUN;


PROC SORT DATA = NHATSR2_SP;
 BY SPID;
RUN;


PROC SORT DATA = NHATSR3_OP;
 BY SPID OPID;
RUN;


PROC SORT DATA = NHATSR3_SP;
 BY SPID;
RUN;


PROC SORT DATA = NHATSR4_OP;
 BY SPID OPID;
RUN;


PROC SORT DATA = NHATSR4_SP;
 BY SPID;
RUN;


PROC SORT DATA = NHATSR5_OP;
 BY SPID OPID;
RUN;


PROC SORT DATA = NHATSR5_SP;
 BY SPID;
RUN;


PROC SORT DATA = NHATSR6_OP;
 BY SPID OPID;
RUN;


PROC SORT DATA = NHATSR6_SP;
 BY SPID;
RUN;


PROC SORT DATA = NHATSR7_OP;
 BY SPID OPID;
RUN;


PROC SORT DATA = NHATSR7_SP;
 BY SPID;
```

```sas
RUN;


PROC SORT DATA = NHATSR8_OP;
 BY SPID OPID;
RUN;


PROC SORT DATA = NHATSR8_SP;
 BY SPID;
RUN;


PROC SORT DATA = NHATSR9_OP;
 BY SPID OPID;
RUN;


PROC SORT DATA = NHATSR9_SP;
 BY SPID;
RUN;


/* Merge NHATS R1 - R9 dementia classification data sets */

DATA  NHATS_SP_R1_R9;
 MERGE
  NHATSR1_SP NHATSR2_SP NHATSR3_SP NHATSR4_SP NHATSR5_SP  NHATSR6_SP
NHATSR7_SP NHATSR8_SP NHATSR9_SP
  NHATSR1_OP NHATSR2_OP NHATSR3_OP NHATSR4_OP  NHATSR5_OP NHATSR6_OP
NHATSR7_OP NHATSR8_OP NHATSR9_OP;
 BY SPID;
RUN;


PROC FORMAT;
value FLstatus
 0="0:Alive"
 1="1:Died";
 value LML
 0="0:No"
 1="1:Yes";
RUN;



DATA  NHATS_SP_R1_R9;
 SET  NHATS_SP_R1_R9;
 IF (r1dresid^=6) AND (r2dresid=. AND r2dlmlint=.) AND (r3dresid=. AND
r3dlmlint=.) AND (r4dresid=. AND r4dlmlint=.)
      AND (r5dresid=. AND r5dlmlint=.) AND (r6dresid=. AND r6dlmlint=.) AND
(r7dresid=. AND r7dlmlint=.) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.) THEN FLdemclas = r1demclas;

  IF (r1dresid^=6) AND (r2dresid=6 OR r2dlmlint=1) AND (r3dresid=. AND
r3dlmlint=.) AND (r4dresid=. AND r4dlmlint=.)
```

```
        AND (r5dresid=. AND r5dlmlint=.) AND (r6dresid=. AND r6dlmlint=.) AND
(r7dresid=. AND r7dlmlint=.) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.) THEN FLdemclas = r1demclas;
   IF (r1dresid^=6) AND (r2dresid^=. AND r2dlmlint^=.) AND (r2dresid^=6 AND
r2dlmlint^=1) AND (r3dresid=. AND r3dlmlint=.) AND (r4dresid=. AND
r4dlmlint=.)
        AND (r5dresid=. AND r5dlmlint=.) AND (r6dresid=. AND r6dlmlint=.) AND
(r7dresid=. AND r7dlmlint=.) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.) THEN FLdemclas = r2demclas;

   IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid=6 OR
r3dlmlint=1) AND (r4dresid=. AND r4dlmlint=.)
        AND (r5dresid=. AND r5dlmlint=.) AND (r6dresid=. AND r6dlmlint=.) AND
(r7dresid=. AND r7dlmlint=.) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.) THEN FLdemclas = r2demclas;
   IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=. AND
r3dlmlint^=.) AND (r3dresid^=6 AND r3dlmlint^=1) AND (r4dresid=. AND
r4dlmlint=.)
        AND (r5dresid=. AND r5dlmlint=.) AND (r6dresid=. AND r6dlmlint=.) AND
(r7dresid=. AND r7dlmlint=.) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.) THEN FLdemclas = r3demclas;

 IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid=6 OR r4dlmlint=1)
      AND (r5dresid=. AND r5dlmlint=.) AND (r6dresid=. AND r6dlmlint=.) AND
(r7dresid=. AND r7dlmlint=.) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.) THEN FLdemclas = r3demclas;
 IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=. AND r4dlmlint^=.) AND (r4dresid^=6 AND
r4dlmlint^=1)
      AND (r5dresid=. AND r5dlmlint=.) AND (r6dresid=. AND r6dlmlint=.) AND
(r7dresid=. AND r7dlmlint=.) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.) THEN FLdemclas = r4demclas;

IF (r1dresid^=6) AND  (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
     AND (r5dresid=6 OR r5dlmlint=1) AND (r6dresid=. AND r6dlmlint=.) AND
(r7dresid=. AND r7dlmlint=.) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.)  THEN FLdemclas = r4demclas;
IF (r1dresid^=6) AND  (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
   AND (r5dresid^=. AND r5dlmlint^=.) AND (r5dresid^=6 AND r5dlmlint^=1) AND
(r6dresid=. AND r6dlmlint=.) AND (r7dresid=. AND r7dlmlint=.)
   AND (r8dresid=. AND r8dlmlint=.) AND (r9dresid=. AND r9dlmlint=.)  THEN
FLdemclas = r5demclas;

IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
     AND (r5dresid^=6 AND r5dlmlint^=1) AND (r6dresid=6 OR r6dlmlint=1) AND
(r7dresid=. AND r7dlmlint=.) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.) THEN FLdemclas = r5demclas;
 IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
     AND (r5dresid^=6 AND r5dlmlint^=1) AND (r6dresid^=. AND r6dlmlint^=.)
AND (r6dresid^=6 AND r6dlmlint^=1) AND (r7dresid=. AND r7dlmlint=.)
    AND (r8dresid=. AND r8dlmlint=.) AND (r9dresid=. AND r9dlmlint=.) THEN
FLdemclas = r6demclas;
```

```
IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
    AND (r5dresid^=6 AND r5dlmlint^=1) AND (r6dresid^=6 AND r6dlmlint^=1) AND
(r7dresid=6 OR r7dlmlint=1) AND (r8dresid=. AND r8dlmlint=.)
        AND (r9dresid=. AND r9dlmlint=.) THEN FLdemclas = r6demclas;
IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
    AND (r5dresid^=6 AND r5dlmlint^=1) AND (r6dresid^=6 AND r6dlmlint^=1) AND
(r7dresid^=. AND r7dlmlint^=.) AND (r7dresid^=6 AND r7dlmlint^=1)
    AND (r8dresid=. AND r8dlmlint=.) AND (r9dresid=. AND r9dlmlint=.) THEN
FLdemclas = r7demclas;

IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
   AND (r5dresid^=6 AND r5dlmlint^=1) AND (r6dresid^=6 AND r6dlmlint^=1) AND
(r7dresid^=6 AND r7dlmlint^=1)
   AND (r8dresid=6 OR r8dlmlint=1)  AND (r9dresid=. AND r9dlmlint=.)  THEN
FLdemclas = r7demclas;
IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
    AND (r5dresid^=6 AND r5dlmlint^=1) AND (r6dresid^=6 AND r6dlmlint^=1) AND
(r7dresid^=6 AND r7dlmlint^=1) AND (r8dresid^=. AND r8dlmlint^=.)
   AND (r8dresid^=6 AND r8dlmlint^=1)  AND (r9dresid=. AND r9dlmlint=.)  THEN
FLdemclas = r8demclas;

IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
   AND (r5dresid^=6 AND r5dlmlint^=1) AND (r6dresid^=6 AND r6dlmlint^=1) AND
(r7dresid^=6 AND r7dlmlint^=1) AND (r8dresid^=6 AND r8dlmlint^=1)
    AND (r9dresid=6 OR r9dlmlint=1) THEN FLdemclas = r8demclas;
IF (r1dresid^=6) AND (r2dresid^=6 AND r2dlmlint^=1) AND (r3dresid^=6 AND
r3dlmlint^=1) AND (r4dresid^=6 AND r4dlmlint^=1)
    AND (r5dresid^=6 AND r5dlmlint^=1) AND (r6dresid^=6 AND r6dlmlint^=1) AND
(r7dresid^=6 AND r7dlmlint^=1) AND (r8dresid^=6 AND r8dlmlint^=1)
  AND (r9dresid^=. OR r9dlmlint^=.)  AND (r9dresid^=6 OR r9dlmlint^=1) THEN
FLdemclas = r9demclas;

   FLstatus = 0;
 IF (r1dresid=6) OR (r2dresid=6 OR r2dlmlint=1) OR (r3dresid=6 OR
r3dlmlint=1) OR (r4dresid=6 OR r4dlmlint=1) OR (r5dresid=6 OR r5dlmlint=1)
    OR (r6dresid=6 OR r6dlmlint=1) OR (r7dresid=6 OR r7dlmlint=1) OR
(r8dresid=6 OR r8dlmlint=1) OR (r9dresid=6 OR r9dlmlint=1) THEN
   FLstatus = 1;

   LML = 0;
 IF (r1dresid=6) OR (r2dresid=6 OR r2dlmlint=1) OR (r3dresid=6 OR
r3dlmlint=1) OR (r4dresid=6 OR r4dlmlint=1) OR (r5dresid=6 OR r5dlmlint=1)
    OR (r6dresid=6 OR r6dlmlint=1) OR (r7dresid=6 OR r7dlmlint=1) OR
(r8dresid=6 OR r8dlmlint=1) OR (r9dresid=6 OR r9dlmlint=1) THEN
   LML = 1;
 LABEL FLdemclas="Dementia Class";
 LABEL FLstatus="Alive or Died";
 LABEL LML="Last month of life interview";
 RUN;
```

# SAS ALGORITHM FOR DEMENTIA

```sas
DATA NHATS_SP_R1_R9_Simple_061521;
SET NHATS_SP_R1_R9;
BY SPID;
IF FIRST.SPID;
Cluster = 2;
IF SPID <= 10012411 THEN Cluster = 1;
KEEP SPID OPID r1demclas  r1dresid
          r2demclas r2dresid r2dlmlint
          r3demclas r3dresid r3dlmlint
          r4demclas r4dresid r4dlmlint
          r5demclas r5dresid r5dlmlint
          r6demclas r6dresid r6dlmlint
          r7demclas r7dresid r7dlmlint
          r8demclas r8dresid r8dlmlint
          r9demclas r9dresid r9dlmlint
          FLdemclas FLstatus LML Cluster;
RUN;




/*Run NSOC data format statements */

/*  NSOC_Round_1_Combined_PROC_FORMAT_Statement_V3.sas  */

PROC FORMAT ;
  VALUE NSOC001W
    1 = "1 MALE"
    2 = "2 FEMALE"  ;

  VALUE NSOC002W
    1 = "1 SAMPLE PERSON"
    2 = "2 SPOUSE/PARTNER"
    3 = "3 DAUGHTER"
    4 = "4 SON"
    5 = "5 DAUGHTER-IN-LAW"
    6 = "6 SON-IN-LAW"
    7 = "7 STEPDAUGHTER"
    8 = "8 STEPSON"
    9 = "9 SISTER"
    10 = "10 BROTHER"
    11 = "11 SISTER-IN-LAW"
    12 = "12 BROTHER-IN-LAW"
    13 = "13 MOTHER"
    14 = "14 STEPMOTHER"
    15 = "15 MOTHER-IN-LAW"
    16 = "16 FATHER"
    17 = "17 STEPFATHER"
    18 = "18 FATHER-IN-LAW"
    19 = "19 GRANDDAUGHTER"
    20 = "20 GRANDSON"
    21 = "21 NIECE"
    22 = "22 NEPHEW"
    23 = "23 AUNT"
    24 = "24 UNCLE"
    25 = "25 COUSIN"
    26 = "26 STEPDAUGHTER'S SON/DAUGHTER"
```

```
    27 = "27 STEPSON'S SON/DAUGHTER"
    28 = "28 DAUGHTER-IN-LAW'S SON/DAUGHTER"
    29 = "29 SON-IN-LAW'S SON/DAUGHTER"
    30 = "30 BOARDER/RENTER"
    31 = "31 LIVE-IN HOUSEKEEPER/EMPLOYEE"
    32 = "32 ROOMMATE"
    33 = "33 EX-WIFE/EX-HUSBAND"
    34 = "34 BOYFRIEND/GIRLFIEND"
    35 = "35 NEIGHBOR"
    36 = "36 FRIEND"
    37 = "37 STAFF PERSON AT THE PLACE SP LIVES"
    38 = "38 CO-WORKER"
    39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
    40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
    91 = "91 OTHER RELATIVE"
    92 = "92 OTHER NONRELATIVE"  ;

  VALUE NSOC003W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
    1 = "1 YES"
    2 = "2 NO"  ;
/*
  VALUE NSOC004W
    1 = "Yes"
    2 = "No"  ;

  VALUE NSOC005W
    1 = "Yes"
    2 = "No"  ;

  VALUE NSOC006W
    1 = "Yes"
    2 = "No"  ;

  VALUE NSOC007W
    1 = "Yes"
    2 = "No"  ;*/

  VALUE NSOC008W
    1 = "1 RECORD INTERVIEW"
    2 = "2 DO NOT RECORD INTERVIEW"  ;

  VALUE NSOC009W
    1 = "1 Continue"  ;

  VALUE NSOC010W
     -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
   1 = "1 EVERY DAY"
    2 = "2 MOST DAYS"
    3 = "3 SOME DAYS"
    4 = "4 RARELY"
```

```
      5 = "5 NEVER"  ;

  VALUE NSOC011W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 SP DOES NOT TAKE ANY PRESCRIBED MEDICINES"  ;

  VALUE NSOC012W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 EVERY DAY"
     2 = "2 MOST DAYS"
     3 = "3 SOME DAYS"
     4 = "4 RARELY"  ;

  VALUE NSOC013W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 WALK"
     2 = "2 DRIVE"
     3 = "3 SOMEONE DRIVES ME"
     4 = "4 TAXI"
     5 = "5 BUS"
     6 = "6 SUBWAY/TRAIN/LIGHT RAIL"
     7 = "7 TRAIN"
     8 = "8 AIRPLANE/FLY"
    91 = "91 OTHER (SPECIFY)"  ;

  VALUE NSOC014W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 MINUTES"
     2 = "2 HOURS"  ;

  VALUE NSOC015W
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     1 = "1 JANUARY"
     2 = "2 FEBRUARY"
     3 = "3 MARCH"
     4 = "4 APRIL"
     5 = "5 MAY"
     6 = "6 JUNE"
     7 = "7 JULY"
     8 = "8 AUGUST"
```

```
    9 = "9 SEPTEMBER"
   10 = "10 OCTOBER"
   11 = "11 NOVEMBER"
   12 = "12 DECEMBER"  ;

VALUE NSOC016W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 REGULAR SCHEDULE"
   2 = "2 VARIED"  ;

VALUE NSOC017W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 LESS THAN HALF"
   2 = "2 ABOUT HALF"
   3 = "3 MORE THAN HALF"
   4 = "4 NEARLY ALL"  ;

VALUE NSOC018W
    -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
  1 = "1 NUMBER OF YEARS"
   2 = "2 DATE"  ;

VALUE NSOC019W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 A LOT"
   2 = "2 SOME"
   3 = "3 A LITTLE"
   4 = "4 NOT AT ALL"  ;

VALUE NSOC020W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 VERY MUCH"
   2 = "2 SOMEWHAT"
   3 = "3 NOT SO MUCH"  ;

VALUE NSOC021W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 A LITTLE DIFFICULT"
   2 = "2"
```

```
  3 = "3"
  4 = "4"
  5 = "5 VERY DIFFICULT"  ;

VALUE NSOC022W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 VERY IMPORTANT"
  2 = "2 SOMEWHAT IMPORTANT"
  3 = "3 NOT SO IMPORTANT"  ;

VALUE NSOC023W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 EXCELLENT"
  2 = "2 VERY GOOD"
  3 = "3 GOOD"
  4 = "4 FAIR"
  5 = "5 POOR"  ;

VALUE NSOC024W
  1 = "1 SKIN CANCER"
  2 = "2 BREAST CANCER"
  3 = "3 PROSTATE"
  4 = "4 OTHER TYPE OF CANCER (SPECIFY)"  ;

VALUE NSOC025W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 NOT AT ALL"
  2 = "2 SEVERAL DAYS"
  3 = "3 MORE THAN HALF THE DAYS"
  4 = "4 NEARLY EVERY DAY"  ;

VALUE NSOC026W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 AGREE STRONGLY"
  2 = "2 AGREE SOMEWHAT"
  3 = "3 DISAGREE SOMEWHAT"
  4 = "4 DISAGREE STRONGLY"  ;

VALUE NSOC027W
 -7 = '-7 RF'
 -8 = '-8 DK'
 -1 = '-1 Inapplicable'
 -9 = '-9 Missing'
  1 = "1 MARRIED"
  2 = "2 LIVING WITH A PARTNER"
```

```
   3 = "3 SEPARATED"
   4 = "4 DIVORCED"
   5 = "5 WIDOWED"
   6 = "6 NEVER MARRIED"   ;

 VALUE NSOC028W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 NO SCHOOLING COMPLETED"
   2 = "2 1ST-8TH GRADE"
   3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
   4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
   5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
   6 = "6 SOME COLLEGE BUT NO DEGREE"
   7 = "7 ASSOCIATE'S DEGREE"
   8 = "8 BACHELOR'S DEGREE"
   9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"  ;

 VALUE NSOC029W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 YES"
   2 = "2 NO"
   3 = "3 RETIRED/DON'T WORK ANYMORE"  ;

 VALUE NSOC030W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 YES, LOOKING FOR A JOB"
   2 = "2 YES, ON LAYOFF"
   3 = "3 NO"
   4 = "4 RETIRED/DON'T WORK ANYMORE"  ;

 VALUE NSOC031W
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 DAYTIME"
   2 = "2 SOME OTHER SCHEDULE"  ;

 VALUE NSOC032W
    -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'
   1 = "1 ENTER NUMBER OF HOURS"
   2 = "2 ENTER NUMBER OF DAYS"  ;

 VALUE NSOC033W
```

```
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 8-HOUR DAYS"
      2 = "2 SOMETHING LESS"
      3 = "3 SOMETHING MORE"  ;

  VALUE NSOC034W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 ENTER OCCUPATION"
      2 = "2 CurrentOccupationSame"
     97 = "3 NEVER WORKED ENTIRE LIFE"
     98 = "4 HOMEMAKER/RAISED CHILDREN/WORKED IN THE HOME"  ;

  VALUE NSOC035W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MEDICARE"
      2 = "2 MEDICAID"
      3 = "3 PRIVATE HEALTH INSURANCE"
      4 = "4 TRICARE/CHAMPVA"
     91 = "91 OTHER (SPECIFY)"  ;

  VALUE NSOC036W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 LESS THAN"
      2 = "2 MORE THAN"  ;

  VALUE NSOC037W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MORE THAN $1,000"
      2 = "2 LESS THAN $1,000"  ;

  VALUE NSOC038W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
      1 = "1 MORE THAN $500"
      2 = "2 LESS THAN $500"  ;

  VALUE NSOC039W
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
```

```sas
  -9 = '-9 Missing'
   1 = "1 ENGLISH"
   2 = "2 SPANISH"
  91 = "91 OTHER"  ;

VALUE NSOC040W
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
   1 = "1 Yes"  ;

VALUE RFDK
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable (nursing home resident or residential care no FQ)'
  -9 = '-9 Missing';

  VALUE RF997DK
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing'
 997 = '997 Number of hours vary each week';

VALUE RFDK_F
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE RFDK_Y
   1 = ' 1 Yes'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

VALUE RFDK_YN
   1 = ' 1 Yes'
   2 = ' 2 No'
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';

  value OCC2010F /*with categories for distribution checking*/
   0010-0430 = "0010-0430 Management Occupations"
   0500-0950 = "0500-0950 Business and Financial Operations Occupations"
   1000-1240 = "1000-1240 Computer and Mathematical Occupations"
   1300-1560 = "1300-1560 Architecture and Engineering Occupations"
   1600-1965 = "1600-1965 Life, Physical, and Social Science Occupations"
   2000-2060 = "2000-2060 Community and Social Service Occupations"
   2100-2160 = "2100-2160 Legal Occupations"
   2200-2550 = "2200-2550 Education, Training, and Library Occupations"
   2600-2960 = "2600-2960 Arts, Design, Entertainment, Sports, and Media
Occupations"
```

```
        3000-3540 = "3000-3540 Healthcare Practitioners and Technical
Occupations"
        3600-3655 = "3600-3655 Healthcare Support Occupations"
        3700-3955 = "3700-3955 Protective Service Occupations"
        4000-4160 = "4000-4160 Food Preparation and Serving Related
Occupations"
        4200-4250 = "4200-4250 Building and Grounds Cleaning and Maintenance
Occupations"
        4300-4650 = "4300-4650 Personal Care and Service Occupations"
        4700-4965 = "4700-4965 Sales and Related Occupations"
        5000-5940 = "5000-5940 Office and Administrative Support Occupations"
        6000-6130 = "6000-6130 Farming, Fishing, and Forestry Occupations"
        6200-6940 = "6200-6940 Construction and Extraction Occupations"
        7000-7630 = "7000-7630 Installation, Maintenance, and Repair
Occupations"
        7700-8965 = "7700-8965 Production Occupations"
        9000-9750 = "9000-9750 Transportation and Material Moving Occupations"
        9800-9830 = "9800-9830 Military Specific Occupations"
        9920 = "9920 Unemployed, with no work experience in the last 5 years
or earlier or never worked"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';

      value OCC20_F /*with categories for distribution checking*/
      1 = " 1  0010-0430 Management Occupations"
      2 = " 2  0500-0950 Business and Financial Operations Occupations"
      3 = " 3  1000-1240 Computer and Mathematical Occupations"
      4 = " 4  1300-1560 Architecture and Engineering Occupations"
      5 = " 5  1600-1965 Life, Physical, and Social Science Occupations"
      6 = " 6  2000-2060 Community and Social Service Occupations"
      7 = " 7  2100-2160 Legal Occupations"
      8 = " 8  2200-2550 Education, Training, and Library Occupations"
      9 = " 9  2600-2960 Arts, Design, Entertainment, Sports, and Media
Occupations"
        10 = "10  3000-3540 Healthcare Practitioners and Technical
Occupations"
        11 = "11  3600-3655 Healthcare Support Occupations"
        12 = "12  3700-3955 Protective Service Occupations"
        13 = "13  4000-4160 Food Preparation and Serving Related Occupations"
        14 = "14  4200-4250 Building and Grounds Cleaning and Maintenance
Occupations"
        15 = "15  4300-4650 Personal Care and Service Occupations"
        16 = "16  4700-4965 Sales and Related Occupations"
        17 = "17  5000-5940 Office and Administrative Support Occupations"
        18 = "18  6000-6130 Farming, Fishing, and Forestry Occupations"
        19 = "19  6200-6940 Construction and Extraction Occupations"
        20 = "20  7000-7630 Installation, Maintenance, and Repair Occupations"
        21 = "21  7700-8965 Production Occupations"
        22 = "22  9000-9750 Transportation and Material Moving Occupations"
        23 = "23  9800-9830 Military Specific Occupations"
        24 = "24  9920 Unemployed, with no work experience in the last 5 years
or earlier or never worked"
          25 = "25  Blank field"
          94 = "94  Uncodeable"
          97 = "97  Never worked entire life"
```

```
         98 = "98  Homemaker / raised children"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';

    value $OCCF /*with categories for distribution checking*/
      "0010"-"0430" = "0010-0430 Management Occupations"
      "0500"-"0950" = "0500-0950 Business and Financial Operations
Occupations"
      "1000"-"1240" = "1000-1240 Computer and Mathematical Occupations"
      "1300"-"1560" = "1300-1560 Architecture and Engineering Occupations"
      "1600"-"1965" = "1600-1965 Life, Physical, and Social Science
Occupations"
      "2000"-"2060" = "2000-2060 Community and Social Service Occupations"
      "2100"-"2160" = "2100-2160 Legal Occupations"
      "2200"-"2550" = "2200-2550 Education, Training, and Library
Occupations"
      "2600"-"2960" = "2600-2960 Arts, Design, Entertainment, Sports, and
Media Occupations"
      "3000"-"3540" = "3000-3540 Healthcare Practitioners and Technical
Occupations"
      "3600"-"3655" = "3600-3655 Healthcare Support Occupations"
      "3700"-"3955" = "3700-3955 Protective Service Occupations"
      "4000"-"4160" = "4000-4160 Food Preparation and Serving Related
Occupations"
      "4200"-"4250" = "4200-4250 Building and Grounds Cleaning and
Maintenance Occupations"
      "4300"-"4650" = "4300-4650 Personal Care and Service Occupations"
      "4700"-"4965" = "4700-4965 Sales and Related Occupations"
      "5000"-"5940" = "5000-5940 Office and Administrative Support
Occupations"
      "6000"-"6130" = "6000-6130 Farming, Fishing, and Forestry Occupations"
      "6200"-"6940" = "6200-6940 Construction and Extraction Occupations"
      "7000"-"7630" = "7000-7630 Installation, Maintenance, and Repair
Occupations"
      "7700"-"8965" = "7700-8965 Production Occupations"
      "9000"-"9750" = "9000-9750 Transportation and Material Moving
Occupations"
      "9800"-"9830" = "9800-9830 Military Specific Occupations"
      "9920" = "9920 Unemployed, with no work experience in the last 5 years
or earlier or never worked"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';


    value OCC_SI /*with categories for distribution checking*/
        11    = '11 Agriculture, Forestry, Fishing and Hunting'
        21    = '21 Mining, Quarrying, and Oil and Gas Extraction'
        22    = '22 Utilities'
        23    = '23 Construction'
        31    = '31-33 Manufacturing'
        32    = '31-33 Manufacturing'
        33    = '31-33 Manufacturing'
        42    = '42 Wholesale Trade'
```

```
            44  = '44-45 Retail Trade'
            45  = '44-45 Retail Trade'
            48  = '48-49 Transportation and Warehousing'
            49  = '48-49 Transportation and Warehousing'
            51   = '51 Information'
            52   = '52 Finance and Insurance'
            53   = '53 Real Estate and Rental and Leasing'
            54   = '54 Professional, Scientific, and Technical Services'
            55   = '55 Management of Companies and Enterprises'
            56   = '56 Administrative and Support and Waste Management and
Remediation Services'
            61   = '61 Educational Services'
            62   = '62 Health Care and Social Assistance'
            71   = '71 Arts, Entertainment, and Recreation'
            72   = '72 Accommodation and Food Services'
            81   = '81 Other Services (except Public Administration)'
            92   = '92 Public Administration'
          94 = "94  Uncodeable"
            99   = '99 None'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';


    VALUE dnsoc
1 = '1 Eligible and interviewed'
2 = '2 Eligible and not interviewed phone number provided'
3 = '3 Eligible and not interviewed SP refused'
4 = '4 Eligible and not interviewed other'
5 = '5 Eligible and not fielded for NSOC'
6 = '6 5+ caregivers and not sampled'
7 = '7 Ineligible'
-1 = '-1 Inapplicable';

    VALUE fdnsoc
1 = '1 SP NSOC Eligible'
-1 = '-1 Inapplicable';
    VALUE fdintdys
1 ='1 30 days or less'
2 ='2 31-60 days'
3 ='3 61-90 days'
4 ='4 91-120 days'
5 ='5 121 days or more'
-1 = '-1 Inapplicable';

      VALUE $fdTRCcd
'CO'  =     'CO Complete Interview '
'IE'= 'IE Ineligible Interview'
'I2'= 'I2 Ineligible - error'
'I3'= 'I3 Ineligible - other'
'LH'= 'LH Final Language Problem - Hearing/Speech'
'LP'= 'LP Final Language Problem'
'MC'= 'MC Max Call'
'NA'= 'NA No Answer'
'ND'= 'ND Subject deceased'
'NL'= 'NL Not Locatable'
```

```
'NM'= 'NM No Answer: Answering Machine'
'NP'= 'NP Not available in Field Period'
'NS'= 'NS Subject Sick'
'NX'= 'NX Eligible, not fielded'
'RB'= 'RB Final refusal'
'RF'= 'RF Refusal - preload from SP interview'
'RP'= 'RP Final refusal - inbound call'
'OO'= 'OO Oth Out of scope- SP deceased';

   VALUE inc1imfa
      1= "1 Reported in NSOC I"
      2= "2 Reported in NHATS R1 (Spouse/partner of SP)"
      3= "3 Imputed in NSOC I"
      4= "4 Imputed in NHATS R1 (Spouse/partner of SP)" ;

RUN;


/*================================================================*/

/*  NSOC_Round_5_Combined_PROC_FORMAT_Statement_V4.sas  */

PROC FORMAT;
  VALUE $RFDK_F
     '-7' = '-7 RF'
     '-8' = '-8 DK'
     '-1' = '-1 Inapplicable'
     '-9' = '-9 Missing';
  VALUE RFDK_F
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
  VALUE RFDK_Y
      1 = ' 1 Yes'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
  VALUE W000001W
     1 = "1 MALE"
     2 = "2 FEMALE"
      -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
  VALUE W000002W
     1 = "1 SAMPLE PERSON"
     2 = "2 SPOUSE/PARTNER"
     3 = "3 DAUGHTER"
     4 = "4 SON"
     5 = "5 DAUGHTER-IN-LAW"
     6 = "6 SON-IN-LAW"
     7 = "7 STEPDAUGHTER"
     8 = "8 STEPSON"
     9 = "9 SISTER"
     10 = "10 BROTHER"
```

```
        11 = "11 SISTER-IN-LAW"
        12 = "12 BROTHER-IN-LAW"
        13 = "13 MOTHER"
        14 = "14 STEPMOTHER"
        15 = "15 MOTHER-IN-LAW"
        16 = "16 FATHER"
        17 = "17 STEPFATHER"
        18 = "18 FATHER-IN-LAW"
        19 = "19 GRANDDAUGHTER"
        20 = "20 GRANDSON"
        21 = "21 NIECE"
        22 = "22 NEPHEW"
        23 = "23 AUNT"
        24 = "24 UNCLE"
        25 = "25 COUSIN"
        26 = "26 STEPDAUGHTER'S SON/DAUGHTER"
        27 = "27 STEPSON'S SON/DAUGHTER"
        28 = "28 DAUGHTER-IN-LAW'S SON/DAUGHTER"
        29 = "29 SON-IN-LAW'S SON/DAUGHTER"
        30 = "30 BOARDER/RENTER"
        31 = "31 LIVE-IN HOUSEKEEPER/EMPLOYEE"
        32 = "32 ROOMMATE"
        33 = "33 EX-WIFE/EX-HUSBAND"
        34 = "34 BOYFRIEND/GIRLFIEND"
        35 = "35 NEIGHBOR"
        36 = "36 FRIEND"
        37 = "37 STAFF PERSON AT THE PLACE SP LIVES"
        38 = "38 CO-WORKER"
        39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
        40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
        91 = "91 OTHER RELATIVE"
        92 = "92 OTHER NONRELATIVE"
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';
    VALUE W000003W
        1 = "1 White, non-Hispanic"
        2 = "2 Black, non-Hispanic"
        3 = "3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic"
        4 = "4 Hispanic"
        5 = "5 More than one and DKRF primary"
        6 = "6 DKRF";
    VALUE W000004W
        1 = "1 YES"
        2 = "2 NO"
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';
    VALUE W000006W
        1 = "1 30 days or less"
        2 = "2 31-60 days"
        3 = "3 61-90 days"
        4 = "4 91-120 days"
        5 = "5 121 days or more"
```

```
        -1 = "-1 Inapplicable";
   VALUE W000007W
      1 = "1 WHITE or CAUCASIAN"
      2 = "2 BLACK or AFRICAN AMERICAN"
      3 = "3 AMERICAN INDIAN or ALASKA NATIVE"
      4 = "4 ASIAN"
      5 = "5 NATIVE HAWAIIAN or OTHER PACIFIC ISLANDER"
      /*6 = "6 DO NOT HAVE A PRIMARY RACE"*/
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000008W
      1 = "1 SP NSOC Eligible"
     -1 = '-1 Inapplicable';
   VALUE W000009W
      1 = "1 Eligible and interviewed"
      2 = "2 Eligible and not interviewed phone number provided"
      3 = "3 Eligible and not interviewed SP refused"
      4 = "4 Eligible and not interviewed other"
      5 = "5 Eligible and not fielded for NSOC"
      6 = "5+ caregivers and not sampled"
      7 = "7 Ineligible"
     -1 ="-1 Inapplicable";
   VALUE W000011W
      997 = "997 NUMBER OF HOURS VARY EACH WEEK"
       -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000012W
     1 = "1 EVERY DAY"
     2 = "2 MOST DAYS"
     3 = "3 SOME DAYS"
     4 = "4 RARELY"
     5 = "5 NEVER"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000013W
     1 = "1 YES"
     2 = "2 NO"
     7 = "7 SP DOES NOT TAKE ANY PRESCRIBED MEDICINES"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000014W
     1 = "1 EVERY DAY"
     2 = "2 MOST DAYS"
     3 = "3 SOME DAYS"
     4 = "4 RARELY"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
```

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```
VALUE W000015W
  1 = "1 A LOT"
  2 = "2 SOMEWHAT"
  3 = "3 A LITTLE"
  4 = "4 NOT AT ALL"
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
VALUE W000016W
  1 = "1 WALK"
  2 = "2 DRIVE"
  3 = "3 SOMEONE DRIVES ME"
  4 = "4 TAXI"
  5 = "5 BUS"
  6 = "6 SUBWAY/TRAIN/LIGHT RAIL"
  7 = "7 TRAIN"
  8 = "8 AIRPLANE/FLY"
  91 = "91 OTHER (SPECIFY)"
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
VALUE W000017W
  1 = "1 MINUTES"
  2 = "2 HOURS"
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
VALUE W000018W
  1 = "1 JANUARY"
  2 = "2 FEBRUARY"
  3 = "3 MARCH"
  4 = "4 APRIL"
  5 = "5 MAY"
  6 = "6 JUNE"
  7 = "7 JULY"
  8 = "8 AUGUST"
  9 = "9 SEPTEMBER"
  10 = "10 OCTOBER"
  11 = "11 NOVEMBER"
  12 = "12 DECEMBER"
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
VALUE W000019W
  1 = "1 REGULAR SCHEDULE"
  2 = "2 VARIED"
  -7 = '-7 RF'
  -8 = '-8 DK'
  -1 = '-1 Inapplicable'
  -9 = '-9 Missing';
VALUE W000020W
  1 = "1 LESS THAN HALF"
  2 = "2 ABOUT HALF"
```

```
      3 = "3 MORE THAN HALF"
      4 = "4 NEARLY ALL"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000021W
      1 = "1 NUMBER OF YEARS"
      2 = "2 DATE"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000022W
      1 = "1 A LOT"
      2 = "2 SOME"
      3 = "3 A LITTLE"
      4 = "4 NOT AT ALL"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000023W
      1 = "1 VERY MUCH"
      2 = "2 SOMEWHAT"
      3 = "3 NOT SO MUCH"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000024W
      1 = "1 A LITTLE DIFFICULT"
      2 = "2 "
      3 = "3 "
      4 = "4 "
      5 = "5 VERY DIFFICULT"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000025W
      1 = "1 MORE THAN FAIR SHARE"
      2 = "2 LESS THAN FAIR SHARE"
      3 = "3 FAIR AMOUNT"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000026W
      1 = "1 VERY IMPORTANT"
      2 = "2 SOMEWHAT IMPORTANT"
      3 = "3 NOT SO IMPORTANT"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000027W
```

```
       1 = "1 EXCELLENT"
       2 = "2 VERY GOOD"
       3 = "3 GOOD"
       4 = "4 FAIR"
       5 = "5 POOR"
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';
   VALUE W000028W
       1 = "1 SKIN CANCER"
       2 = "2 BREAST CANCER"
       3 = "3 ^PROSTATE"
       4 = "4 OTHER TYPE OF CANCER (SPECIFY)"
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';
   VALUE W000029W
       1 = "1 EVERY NIGHT"
       2 = "2 MOST NIGHTS"
       3 = "3 SOME NIGHTS"
       4 = "4 RARELY"
       5 = "5 NEVER"
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';
   VALUE W000030W
       1 = "1 NOT AT ALL"
       2 = "2 SEVERAL DAYS"
       3 = "3 MORE THAN HALF THE DAYS"
       4 = "4 NEARLY EVERY DAY"
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';
   VALUE W000031W
       1 = "1 AGREE STRONGLY"
       2 = "2 AGREE SOMEWHAT"
       3 = "3 DISAGREE SOMEWHAT"
       4 = "4 DISAGREE STRONGLY"
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';
   VALUE W000032W
       1 = "1 MARRIED"
       2 = "2 LIVING WITH A PARTNER"
       3 = "3 SEPARATED"
       4 = "4 DIVORCED"
       5 = "5 WIDOWED"
       6 = "6 NEVER MARRIED"
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing';
```

```
   VALUE W000033W
     1 = "1 NO SCHOOLING COMPLETED"
     2 = "2 1ST-8TH GRADE"
     3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
     4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
     5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
     6 = "6 SOME COLLEGE BUT NO DEGREE"
     7 = "7 ASSOCIATE'S DEGREE"
     8 = "8 BACHELOR'S DEGREE"
     9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
   VALUE W000034W
     1 = "1 YES"
     2 = "2 NO"
     3 = "3 RETIRED/DON'T WORK ANYMORE"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
   VALUE W000035W
     1 = "1 YES, LOOKING FOR A JOB"
     2 = "2 YES, ON LAYOFF"
     3 = "3 NO"
     4 = "4 RETIRED/DON'T WORK ANYMORE"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
   VALUE W000036W
     1 = "1 DAYTIME"
     2 = "2 SOME OTHER SCHEDULE"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
   VALUE W000037W
     1 = "1 ENTER NUMBER OF HOURS"
     2 = "2 ENTER NUMBER OF DAYS"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
   VALUE W000038W
     1 = "1 8-HOUR DAYS"
     2 = "2 SOMETHING LESS"
     3 = "3 SOMETHING MORE"
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing';
   VALUE W000039W
     1 = "1 ENTER OCCUPATION"
     2 = "2 ^CurrentOccupationSame"
```

```
     97 = "97 NEVER WORKED ENTIRE LIFE"
     98 = "98 HOMEMAKER/RAISED CHILDREN/WORKED IN THE HOME"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000040W
     1 = "1 MEDICARE"
     2 = "2 MEDICAID"
     3 = "3 PRIVATE HEALTH INSURANCE"
     4 = "4 TRICARE/CHAMPVA"
     91 = "91 OTHER (SPECIFY)"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000041W
     1 = "1 LESS THAN"
     2 = "2 MORE THAN"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000042W
     1 = "1 MORE THAN $1,000"
     2 = "2 LESS THAN $1,000"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE W000043W
     1 = "1 MORE THAN $500"
     2 = "2 LESS THAN $500"
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';
   VALUE OCC_CODE
1    ='1 Management Occupations: 0010-0430'
2    ='2 Business and Financial Operations Occupations:  0500-0950'
3    ='3 Computer and mathematical occupations:  1000-1240'
4    ='4 Architecture and Engineering Occupations:   1300-1560'
5    ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6    ='6 Community and Social Service Occupations:   2000-2060'
7    ='7 Legal Occupations:  2100-2160'
8    ='8 Education, Training, and Library Occupations:   2200-2550'
9    ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10   ='10 Healthcare Practitioners and Technical Occupations:    3000-3540'
11   ='11 Healthcare Support Occupations:    3600-3655'
12   ='12 Protective Service Occupations:    3700-3955'
13   ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14   ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15   ='15 Personal Care and Service Occupations: 4300-4650'
16   ='16 Sales and Related Occupations: 4700-4965'
17   ='17 Office and Administrative Support Occupations: 5000-5940'
```

```
18  ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19  ='19 Construction and Extraction Occupations:   6200-6940'
20  ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21  ='21 Production Occupations:    7700-8965'
22  ='22 Transportation and Material Moving Occupations:    9000-9750'
23  ='23 Military Specific Occupations: 9800-9830'
24  ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing';
     value OCC_SI /*with categories for distribution checking*/
           11    = '11 Agriculture, Forestry, Fishing and Hunting'
           21    = '21 Mining, Quarrying, and Oil and Gas Extraction'
           22    = '22 Utilities'
           23    = '23 Construction'
           31    = '31-33 Manufacturing'
           32    = '31-33 Manufacturing'
           33    = '31-33 Manufacturing'
           42    = '42 Wholesale Trade'
           44  = '44-45 Retail Trade'
           45  = '44-45 Retail Trade'
           48  = '48-49 Transportation and Warehousing'
           49  = '48-49 Transportation and Warehousing'
           51    = '51 Information'
           52    = '52 Finance and Insurance'
           53    = '53 Real Estate and Rental and Leasing'
           54    = '54 Professional, Scientific, and Technical Services'
           55    = '55 Management of Companies and Enterprises'
           56    = '56 Administrative and Support and Waste Management and
Remediation Services'
           61    = '61 Educational Services'
           62    = '62 Health Care and Social Assistance'
           71    = '71 Arts, Entertainment, and Recreation'
           72    = '72 Accommodation and Food Services'
           81    = '81 Other Services (except Public Administration)'
           92    = '92 Public Administration'
         94 = "94  Uncodeable"
           99    = '99 None'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing';
     value Source /* from derived variable specifications...updated 11/30/18
*/
   1 = '1 2017 NSOC'
   2 = '2 2015 NSOC - phone interview'
   3 = '3 2015 NSOC - mailing'
   4 = '4 2015 NHATS'
   5 = '5 No source'
   -7 = '-7 RF'
```

```
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing';


    VALUE inc5imfa
        1 ="1 Reported in NSOC II"
        2 ="2 Reported in NHATS R5 (Spouse/partner of SP)"
        3 ="3 Imputed in NSOC II"
        4 ="4 Imputed in NHATS R5 (Spouse/partner of SP)";

RUN;



/*==================================================================*/

/* NSOC_R7_Crss_Combined_PROC_FORMAT_Statement_V2.sas  */

options extendobscounter=no nofmterr;

PROC FORMAT;
    VALUE $RFDK_F
        '-7' = '-7 RF'
        '-8' = '-8 DK'
        '-1' = '-1 Inapplicable'
        '-9' = '-9 Missing'
;
    VALUE RFDK_F
        -2 = '-2 Helped last month, SP alive'
        -3 = '-3 Helped last month of life, SP deceased'
        -4 = '-4 Did not help last month or in last month of life'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
;
    VALUE RFDK_S
        997 ='997 Hours vary each week'
        -2 = '-2 Helped last month, SP alive'
        -3 = '-3 Helped last month of life, SP deceased'
        -4 = '-4 Did not help last month or in last month of life'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
;
    VALUE RFDK_Y
        1 = ' 1 Yes'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
;


    VALUE W000001W
        1 = "1 YES"
        2 = "2 NO"
```

```
        -2 = '-2 Helped last month, SP alive'
        -3 = '-3 Helped last month of life, SP deceased'
        -4 = '-4 Did not help last month or in last month of life'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
;

    VALUE W000002W
      1 = "1 MALE"
      2 = "2 FEMALE"
        -2 = '-2 Helped last month, SP alive'
        -3 = '-3 Helped last month of life, SP deceased'
        -4 = '-4 Did not help last month or in last month of life'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
;
    VALUE W000003W
      1 = "1 SAMPLE PERSON"
      2 = "2 SPOUSE/PARTNER"
      3 = "3 DAUGHTER"
      4 = "4 SON"
      5 = "5 DAUGHTER-IN-LAW"
      6 = "6 SON-IN-LAW"
      7 = "7 STEPDAUGHTER"
      8 = "8 STEPSON"
      9 = "9 SISTER"
     10 = "10 BROTHER"
     11 = "11 SISTER-IN-LAW"
     12 = "12 BROTHER-IN-LAW"
     13 = "13 MOTHER"
     14 = "14 STEPMOTHER"
     15 = "15 MOTHER-IN-LAW"
     16 = "16 FATHER"
     17 = "17 STEPFATHER"
     18 = "18 FATHER-IN-LAW"
     19 = "19 GRANDDAUGHTER"
     20 = "20 GRANDSON"
     21 = "21 NIECE"
     22 = "22 NEPHEW"
     23 = "23 AUNT"
     24 = "24 UNCLE"
     25 = "25 COUSIN"
     26 = "26 STEPDAUGHTER'S SON/DAUGHTER"
     27 = "27 STEPSON'S SON/DAUGHTER"
     28 = "28 DAUGHTER-IN-LAW'S SON/DAUGHTER"
     29 = "29 SON-IN-LAW'S SON/DAUGHTER"
     30 = "30 BOARDER/RENTER"
     31 = "31 LIVE-IN HOUSEKEEPER/EMPLOYEE"
     32 = "32 ROOMMATE"
     33 = "33 EX-WIFE/EX-HUSBAND"
     34 = "34 BOYFRIEND/GIRLFIEND"
     35 = "35 NEIGHBOR"
     36 = "36 FRIEND"
```

```
        37 = "37 STAFF PERSON AT THE PLACE SP LIVES"
        38 = "38 CO-WORKER"
        39 = "39 MINISTER, PRIEST, OR OTHER CLERGY"
        40 = "40 PSYCHIATRIST, PSYCHOLOGIST, COUNSELOR, OR THERAPIST"
        91 = "91 OTHER RELATIVE"
        92 = "92 OTHER NONRELATIVE"
        -2 = '-2 Helped last month, SP alive'
        -3 = '-3 Helped last month of life, SP deceased'
        -4 = '-4 Did not help last month or in last month of life'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
;


        VALUE W000004W
        1 = "1 White, non-Hispanic"
        2 = "2 Black, non-Hispanic"
        3 = "3 Other (Am Indian/Asian/Native Hawaiian/Pacific Islander/other
specify), non-Hispanic"
        4 = "4 Hispanic"
        5 = "5 More than one and DKRF primary"
        6 = "6 DKRF"
        -2 = '-2 Helped last month, SP alive'
        -3 = '-3 Helped last month of life, SP deceased'
        -4 = '-4 Did not help last month or in last month of life'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
;
 VALUE W000005W
        1='1 Yes - Breakoff'
        -2 = '-2 Helped last month, SP alive'
        -3 = '-3 Helped last month of life, SP deceased'
        -4 = '-4 Did not help last month or in last month of life'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
;
 VALUE W000006W
        1 = '1 30 days or less'
        2 = '2 31-60 days'
        3 = '3 61-90 days'
        4 = '4 91-120 days'
        5 = '5 121 days or more'
        -2 = '-2 Helped last month, SP alive'
        -3 = '-3 Helped last month of life, SP deceased'
        -4 = '-4 Did not help last month or in last month of life'
        -7 = '-7 RF'
        -8 = '-8 DK'
        -1 = '-1 Inapplicable'
        -9 = '-9 Missing'
```

```
;
    VALUE W000013W
      1 = "1 YES"
      2 = "2 NO"
      7 = "7 SP DOES NOT TAKE ANY PRESCRIBED MEDICINES"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
;
    VALUE W000014W
      2 = "2 Helped last month, SP alive"
      3 = "3 Helped last month of life, SP deceased"
      4 = "4 Did not help last month or in last month of life"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
;
    VALUE W000017W
      1 = "1 EVERY DAY"
      2 = "2 MOST DAYS"
      3 = "3 SOME DAYS"
      4 = "4 RARELY"
      5 = "5 NEVER"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
;

    VALUE W000018W
      1 = "1 JANUARY"
      2 = "2 FEBRUARY"
      3 = "3 MARCH"
      4 = "4 APRIL"
      5 = "5 MAY"
      6 = "6 JUNE"
      7 = "7 JULY"
      8 = "8 AUGUST"
      9 = "9 SEPTEMBER"
      10 = "10 OCTOBER"
      11 = "11 NOVEMBER"
      12 = "12 DECEMBER"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
```

```
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing';


  VALUE W000019W
    1 = "1 EVERY DAY"
    2 = "2 MOST DAYS"
    3 = "3 SOME DAYS"
    4 = "4 RARELY"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
     ;
  VALUE W000020W
    1 = "1 YES"
    2 = "2 NO OR NOT ENOUGH"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
  ;


  VALUE W000021W
    1 = "1 REGULAR SCHEDULE"
    2 = "2 VARIED"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
  ;


  VALUE W000022W
    1 = "1 LESS THAN HALF"
    2 = "2 ABOUT HALF"
    3 = "3 MORE THAN HALF"
    4 = "4 NEARLY ALL"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
  ;


  VALUE W000023W
```

```
      1 = "1 NUMBER OF YEARS"
      2 = "2 DATE"
     -2 = '-2 Helped last month, SP alive'
     -3 = '-3 Helped last month of life, SP deceased'
     -4 = '-4 Did not help last month or in last month of life'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
   ;

   VALUE W000024W
      1 = "1 A LOT"
      2 = "2 SOME"
      3 = "3 A LITTLE"
      4 = "4 NOT AT ALL"
     -2 = '-2 Helped last month, SP alive'
     -3 = '-3 Helped last month of life, SP deceased'
     -4 = '-4 Did not help last month or in last month of life'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
   ;


   VALUE W000025W
      1 = "1 VERY MUCH"
      2 = "2 SOMEWHAT"
      3 = "3 NOT SO MUCH"
     -2 = '-2 Helped last month, SP alive'
     -3 = '-3 Helped last month of life, SP deceased'
     -4 = '-4 Did not help last month or in last month of life'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
   ;

   VALUE W000026W
      1 = "1 A LITTLE DIFFICULT"
      2 = "2 "
      3 = "3 "
      4 = "4 "
      5 = "5 VERY DIFFICULT"
     -2 = '-2 Helped last month, SP alive'
     -3 = '-3 Helped last month of life, SP deceased'
     -4 = '-4 Did not help last month or in last month of life'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
;

   VALUE W000027W
      1 = "1 VERY DIFFICULT"
      2 = "2 SOMEWHAT DIFFICULT"
```

```
       3 = "3 A LITTLE DIFFICULT"
       4 = "4 NOT AT ALL DIFFICULT"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
   ;
   VALUE W000028W
      1 = "1 MORE THAN FAIR SHARE"
      2 = "2 LESS THAN FAIR SHARE"
      3 = "3 FAIR AMOUNT"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
   ;
   VALUE W000029W
      1 = "1 YES"
      2 = "2 NO OR NOT ENOUGH"
      3 = "3 DOES NOT APPLY"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
   ;
VALUE W000030W
      1 = "1 ALWAYS"
      2 = "2 USUALLY"
      3 = "3 SOMETIMES"
      4 = "4 NEVER"
      5 = "5 DOES NOT APPLY"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
   ;

   VALUE W000031W
      1 = "1 OFTEN"
      2 = "2 SOMETIMES"
      3 = "3 RARELY"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
```

```
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
   ;

   VALUE W000032W
     1 = "1 A LOT"
     2 = "2 SOMEWHAT"
     3 = "3 A LITTLE"
     4 = "4 NOT AT ALL"
     -2 = '-2 Helped last month, SP alive'
     -3 = '-3 Helped last month of life, SP deceased'
     -4 = '-4 Did not help last month or in last month of life'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'

   ;

   VALUE W000033W
     1 = "1 USUAL PROVIDER "
     2 = "2 SOMEONE ELSE"
     -2 = '-2 Helped last month, SP alive'
     -3 = '-3 Helped last month of life, SP deceased'
     -4 = '-4 Did not help last month or in last month of life'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
   ;

   VALUE W000034W
     1 = "1 ALWAYS"
     2 = "2 USUALLY"
     3 = "3 SOMETIMES"
     4 = "4 NEVER"
     -2 = '-2 Helped last month, SP alive'
     -3 = '-3 Helped last month of life, SP deceased'
     -4 = '-4 Did not help last month or in last month of life'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
   ;

   VALUE W000035W
     1 = "1 SP'S HOME"
     2 = "2 ANOTHER FACILITY"
     3 = "3 RESPONDENT'S HOME"
     91 = "91 ANOTHER PLACE (SPECIFY)"
     -2 = '-2 Helped last month, SP alive'
     -3 = '-3 Helped last month of life, SP deceased'
     -4 = '-4 Did not help last month or in last month of life'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
```

```
      -9 = '-9 Missing'
    ;

    VALUE W000036W
      1 = "1 WALK/WALKED"
      2 = "2 DRIVE/DROVE"
      3 = "3 SOMEONE DRIVES/DROVE ME"
      4 = "4 TAXI/UBER/LYFT"
      5 = "5 BUS"
      6 = "6 SUBWAY/LIGHTRAIL"
      7 = "7 TRAIN"
      8 = "8 AIRPLANE/FLY/FLEW"
      91 = "91 OTHER (SPECIFY)"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
    ;

    VALUE W000037W
      1 = "1 MINUTES"
      2 = "2 HOURS"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
    ;

    VALUE W000038W
      1 = "1 VERY IMPORTANT"
      2 = "2 SOMEWHAT IMPORTANT"
      3 = "3 NOT SO IMPORTANT"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
    ;

    VALUE W000039W
      1 = "1 EXCELLENT"
      2 = "2 VERY GOOD"
      3 = "3 GOOD"
      4 = "4 FAIR"
      5 = "5 POOR"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
```

```
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
  ;

VALUE W000041W
    1 = "1 EVERY NIGHT"
    2 = "2 MOST NIGHTS"
    3 = "3 SOME NIGHTS"
    4 = "4 RARELY"
    5 = "5 NEVER"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'

  ;

  VALUE W000042W
    1 = "1 NOT AT ALL"
    2 = "2 SEVERAL DAYS"
    3 = "3 MORE THAN HALF THE DAYS"
    4 = "4 NEARLY EVERY DAY"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'

  ;

  VALUE W000043W
    1 = "1 AGREE STRONGLY"
    2 = "2 AGREE SOMEWHAT"
    3 = "3 DISAGREE SOMEWHAT"
    4 = "4 DISAGREE STRONGLY"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'

  ;

  VALUE W000044W
    1 = "1 MARRIED"
    2 = "2 LIVING WITH A PARTNER"
    3 = "3 SEPARATED"
    4 = "4 DIVORCED"
    5 = "5 WIDOWED"
```

```
    6 = "6 NEVER MARRIED"
   -2 = '-2 Helped last month, SP alive'
   -3 = '-3 Helped last month of life, SP deceased'
   -4 = '-4 Did not help last month or in last month of life'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'

  ;

  VALUE W000045W
    1 = "1 NO SCHOOLING COMPLETED"
    2 = "2 1ST-8TH GRADE"
    3 = "3 9TH-12TH GRADE (NO DIPLOMA)"
    4 = "4 HIGH SCHOOL GRADUATE (HIGH SCHOOL DIPLOMA OR EQUIVALENT)"
    5 = "5 VOCATIONAL, TECHNICAL, BUSINESS, OR TRADE SCHOOL CERTIFICATE OR
DIPLOMA (BEYOND HIGH SCHOOL LEVEL)"
    6 = "6 SOME COLLEGE BUT NO DEGREE"
    7 = "7 ASSOCIATE'S DEGREE"
    8 = "8 BACHELOR'S DEGREE"
    9 = "9 MASTER'S, PROFESSIONAL, OR DOCTORAL DEGREE"
   -2 = '-2 Helped last month, SP alive'
   -3 = '-3 Helped last month of life, SP deceased'
   -4 = '-4 Did not help last month or in last month of life'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'

  ;

  VALUE W000046W
    1 = "1 WHITE/CAUCASIAN"
    2 = "2 BLACK/AFRICAN AMERICAN"
    3 = "3 AMERICAN INDIAN/ALASKA NATIVE"
    4 = "4 ASIAN"
    5 = "5 NATIVE HAWAIIAN/PACIFIC ISLANDER"
   -2 = '-2 Helped last month, SP alive'
   -3 = '-3 Helped last month of life, SP deceased'
   -4 = '-4 Did not help last month or in last month of life'
   -7 = '-7 RF'
   -8 = '-8 DK'
   -1 = '-1 Inapplicable'
   -9 = '-9 Missing'

  ;

  VALUE W000047W
    1 = "1 YES"
    2 = "2 NO"
    3 = "3 RETIRED/DON'T WORK ANYMORE"
   -2 = '-2 Helped last month, SP alive'
   -3 = '-3 Helped last month of life, SP deceased'
   -4 = '-4 Did not help last month or in last month of life'
   -7 = '-7 RF'
   -8 = '-8 DK'
```

```
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'


  ;


  VALUE W000048W
    1 = "1 YES, LOOKING FOR A JOB"
    2 = "2 YES, ON LAYOFF"
    3 = "3 NO"
    4 = "4 RETIRED/DON'T WORK ANYMORE"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'


  ;


  VALUE W000049W
    1 = "1 DAYTIME"
    2 = "2 SOME OTHER SCHEDULE"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'


  ;


  VALUE W000050W
    1 = "1 ENTER NUMBER OF HOURS"
    2 = "2 ENTER NUMBER OF DAYS"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'


  ;


  VALUE W000051W
    1 = "1 8-HOUR DAYS"
    2 = "2 SOMETHING LESS"
    3 = "3 SOMETHING MORE"
    -2 = '-2 Helped last month, SP alive'
    -3 = '-3 Helped last month of life, SP deceased'
    -4 = '-4 Did not help last month or in last month of life'
    -7 = '-7 RF'
    -8 = '-8 DK'
    -1 = '-1 Inapplicable'
    -9 = '-9 Missing'
```

```
    ;

    VALUE W000052W
      1 = "1 ENTER OCCUPATION"
      2 = "2 CURRENT OCCUPATION SAME"
      97 = "97 NEVER WORKED ENTIRE LIFE"
      98 = "98 HOMEMAKER/RAISED CHILDREN/WORKED IN THE HOME"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'

    ;

    VALUE W000053W
      1 = "1 MEDICARE"
      2 = "2 MEDICAID"
      3 = "3 PRIVATE HEALTH INSURANCE"
      4 = "4 TRICARE/CHAMPVA"
      91 = "91 OTHER (SPECIFY)"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
    ;

    VALUE W000054W
      1 = "1 LESS THAN"
      2 = "2 MORE THAN"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
    ;

    VALUE W000055W
      1 = "1 MORE THAN $1,000"
      2 = "2 LESS THAN $1,000"
      -2 = '-2 Helped last month, SP alive'
      -3 = '-3 Helped last month of life, SP deceased'
      -4 = '-4 Did not help last month or in last month of life'
      -7 = '-7 RF'
      -8 = '-8 DK'
      -1 = '-1 Inapplicable'
      -9 = '-9 Missing'
    ;
```

SAS ALGORITHM FOR DEMENTIA

```
   VALUE W000056W
     1 = "1 MORE THAN $500"
     2 = "2 LESS THAN $500"
     -2 = '-2 Helped last month, SP alive'
     -3 = '-3 Helped last month of life, SP deceased'
     -4 = '-4 Did not help last month or in last month of life'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
   ;



VALUE W000057W
     1 = '1 SP interview at 2017 NHATS & alive at NSOC'
     2 = '2 SP 2016 LML'
     3 = '3 SP 2017 LML'
     4 = '4 SP interview at 2017 & deceased at NSOC'
     5 = '5 SP interview at 2017 & more than 1 caregiver & at least 1
caregiver reports SP deceased at NSOC'
     -7 = '-7 RF'
     -8 = '-8 DK'
     -1 = '-1 Inapplicable'
     -9 = '-9 Missing'
;
VALUE W000059W
         1 = '1 CG eligible for cross-sectional sample '
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
;
VALUE W000058W
         1 = '1 SP has eligible caregiver'
         -7 = '-7 RF'
         -8 = '-8 DK'
         -1 = '-1 Inapplicable'
         -9 = '-9 Missing'
;
VALUE W000060W
1 = '1 Eligible and interviewed'
2 = '2 Eligible and not interviewed phone number provided'
3 = '3 Eligible and not interviewed SP refused'
4 = '4 Eligible and not interviewed other'
5 = '5 eligible and not fielded for NSOC not present in R5 or R7'
6 = '6 >5 caregivers and not sampled'
7 = '7 Named by SP but Ineligible'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
;
VALUE W000061W
1 ='1 Helper eligible for cross-sectional NSOC'
-1 ='-1 Inapplicable'
;
```

SAS ALGORITHM FOR DEMENTIA


```
VALUE W000062W
1 = '1 NSOC Interview Complete'
-1 = '-1 Inapplicable'
;
VALUE W000063W
1 = '1 OP named as helper in NHATS interview'
-1 = '-1 Inapplicable'
;
VALUE W000064W
1 = '1 SP eligible for cross-sectional NSOC'
-1 = '-1 Ineligible'
;
  VALUE OCC_CODE
1   ='1 Management Occupations: 0010-0430'
2   ='2 Business and Financial Operations Occupations:  0500-0950'
3   ='3 Computer and mathematical occupations:  1000-1240'
4   ='4 Architecture and Engineering Occupations:   1300-1560'
5   ='5 Life, Physical, and Social Science Occupations: 1600-1965'
6   ='6 Community and Social Service Occupations:   2000-2060'
7   ='7 Legal Occupations:  2100-2160'
8   ='8 Education, Training, and Library Occupations:   2200-2550'
9   ='9 Arts, Design, Entertainment, Sports, and Media Occupations: 2600-
2960'
10  ='10 Healthcare Practitioners and Technical Occupations:    3000-3540'
11  ='11 Healthcare Support Occupations:    3600-3655'
12  ='12 Protective Service Occupations:    3700-3955'
13  ='13 Food Preparation and Serving Related Occupations:  4000-4160'
14  ='14 Building and Grounds Cleaning and Maintenance Occupations: 4200-
4250'
15  ='15 Personal Care and Service Occupations: 4300-4650'
16  ='16 Sales and Related Occupations: 4700-4965'
17  ='17 Office and Administrative Support Occupations: 5000-5940'
18  ='18 Farming, Fishing, and Forestry Occupations:    6000-6130'
19  ='19 Construction and Extraction Occupations:   6200-6940'
20  ='20 Installation, Maintenance, and Repair Occupations: 7000-7630'
21  ='21 Production Occupations:    7700-8965'
22  ='22 Transportation and Material Moving Occupations:    9000-9750'
23  ='23 Military Specific Occupations: 9800-9830'
24  ='24 No current occ (Unemployed, no work in the last 5 years, never
worked):  9920'
25 = '25 Blank field'
26 = '26 Code did not match'
94 = '94 Uncodable'
95 = '95 Never Worked Entire Life'
96 = '96 Homemaker/Raised Children'
-2 = '-2 Helped last month, SP alive'
-3 = '-3 Helped last month of life, SP deceased'
-4 = '-4 Did not help last month or in last month of life'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing'
;

value OCC_SI /*with categories for distribution checking*/
11  = '11 Agriculture, Forestry, Fishing and Hunting'
21  = '21 Mining, Quarrying, and Oil and Gas Extraction'
```

```
22  = '22 Utilities'
23  = '23 Construction'
31  ='31-33 Manufacturing'
32  ='31-33 Manufacturing'
33  ='31-33 Manufacturing'
42  = '42 Wholesale Trade'
44 = '44-45 Retail Trade'
45 = '44-45 Retail Trade'
48 = '48-49 Transportation and Warehousing'
49 = '48-49 Transportation and Warehousing'
51  = '51 Information'
52  = '52 Finance and Insurance'
53  = '53 Real Estate and Rental and Leasing'
54  = '54 Professional, Scientific, and Technical Services'
55  = '55 Management of Companies and Enterprises'
56  = '56 Administrative and Support and Waste Management and Remediation
Services'
61  = '61 Educational Services'
62  = '62 Health Care and Social Assistance'
71  = '71 Arts, Entertainment, and Recreation'
72  = '72 Accommodation and Food Services'
81  = '81 Other Services (except Public Administration)'
92  = '92 Public Administration'
94 = "94  Uncodeable"
99  = '99 None'
-2 = '-2 Helped last month, SP alive'
-3 = '-3 Helped last month of life, SP deceased'
-4 = '-4 Did not help last month or in last month of life'
-7 = '-7 RF'
-8 = '-8 DK'
-1 = '-1 Inapplicable'
-9 = '-9 Missing' ;
  VALUE inc7imfa
      -4 ="-4 Did not help last month or in last month of life"
      1 ="1 Reported in NSOC III"
      2 ="2 Reported in NHATS R7 (Spouse/partner of SP)"
      3 ="3 Imputed in NSOC III"
      4 ="4 Imputed in NHATS R7 (Spouse/partner of SP)" ;
RUN;


/* Import NSOC data sets*/

%LET filepath10=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 1\NHATS Round 1 NSOC Files\SAS;
%LET filepath11=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 2\NHATS Round 2 NSOC Files\SAS;
%LET filepath12=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 3\NHATS Round 3 NSOC Files\SAS;
%LET filepath13=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 4\NHATS Round 4 NSOC Files\SAS;
%LET filepath14=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 5\NHATS Round 5 NSOC Files\SAS;
%LET filepath15=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 6\NHATS Round 6 NSOC Files\SAS;
%LET filepath16=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 7\NHATS Round 7 NSOC Files\Cross-Sectional File\SAS;
```

SAS ALGORITHM FOR DEMENTIA

```sas
%LET filepath17=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 8\NHATS Round 8 NSOC Files\SAS;
%LET filepath18=C:\UB\Projects\2019\Suzanne Sullivan\NHATS project\Sensitive
Data Files\Round 9\NHATS Round 9 NSOC Files\SAS;


DATA NSOCR1;
 SET "&filepath10\NSOC_Round_1_File_V3";
 RUN;


DATA NSOCR5;
 SET "&filepath14\NSOC_Round_5_File_V4";
 RUN;


DATA NSOCR7;
 SET "&filepath16\NSOC_R7_Crss_File_V2";
 RUN;


 /*Sort data sets   */

PROC SORT DATA = NSOCR1;
 BY SPID OPID;
RUN;

PROC SORT DATA = NSOCR5;
 BY SPID OPID;
RUN;

PROC SORT DATA = NSOCR7;
 BY SPID OPID;
RUN;


DATA NSOCR1;
 SET NSOCR1;
 OPIDR1=OPID;
RUN;


DATA NSOCR5;
 SET NSOCR5;
 OPIDR5=OPID;
RUN;


DATA NSOCR7;
 SET NSOCR7;
 OPIDR7=OPID;
RUN;

DATA NSOC_R1_R5_R7;
 MERGE NSOCR1 NSOCR5 NSOCR7;
 BY SPID OPID;
RUN;
```

```sas
DATA NSOC_R1_R5_R7_simple;
 SET NSOC_R1_R5_R7;
 Cluster = 2;
 IF SPID <= 10012411 THEN Cluster = 1;
 KEEP SPID OPID OPIDR1 OPIDR5 OPIDR7 ;
RUN;


proc export data= NSOC_R1_R5_R7_simple
 outfile= "C:\UB\Projects\2019\Suzanne Sullivan\R03 project\Analysis 6-15-
21\NSOC_R1_R5_R7_simple.sav";
run;


DATA NSOC_R1_R5_R7 (drop=i);;
 SET NSOC_R1_R5_R7;
 array OPID_call{*} OPIDR1 OPIDR5 OPIDR7;
 array OPID_count{*} OPIDR1 OPIDR5 OPIDR7;
 DO i = 1 to dim(OPID_call);
   OPID_count{i} =   OPID_call{i};
  IF OPID_call{i} ^= . THEN OPID_count{i} = 1;  /* meaning interviewed  */
  IF OPID_call{i} = . THEN OPID_count{i} = 0;
  OPID_count_sum = sum(of OPID_count{*});
 END;
  cdchlphrsdy_sum= sum(cdc1hlphrsdy, cdc5hlphrsdy, cdc7hlphrsdy);
  OPID_count_cdchlphrsdy_sum=sum(OPID_count_sum,cdchlphrsdy_sum);
 RUN;


DATA NSOC_R1_R5_R7_simple_1;
 SET NSOC_R1_R5_R7;
 KEEP SPID OPID OPIDR1 OPIDR5 OPIDR7 OPID_count_sum cdc1hlphrsdy cdc5hlphrsdy
cdc7hlphrsdy cdchlphrsdy_sum OPID_count_cdchlphrsdy_sum;
RUN;


proc export data= NSOC_R1_R5_R7_simple_1
 outfile= "C:\UB\Projects\2019\Suzanne Sullivan\R03 project\Analysis 6-15-
21\NSOC_R1_R5_R7_simple_1.sav";
run;


PROC SORT DATA=NSOC_R1_R5_R7  OUT=NSOC_R1_R5_R7;
  BY SPID OPID_count_sum  cdchlphrsdy_sum;
 RUN;


 DATA NSOC_R1_R5_R7_simple_2;
  SET NSOC_R1_R5_R7;
   KEEP SPID OPID OPIDR1 OPIDR5 OPIDR7 OPID_count_sum cdc1hlphrsdy
cdc5hlphrsdy cdc7hlphrsdy cdchlphrsdy_sum OPID_count_cdchlphrsdy_sum;
RUN;
```

SAS ALGORITHM FOR DEMENTIA

```sas
proc export data= NSOC_R1_R5_R7_simple_2
 outfile= "C:\UB\Projects\2019\Suzanne Sullivan\R03 project\Analysis 6-15-
21\NSOC_R1_R5_R7_simple_2.sav";
run;


 DATA NSOC_R1_R5_R7_simple_061521;
  SET NSOC_R1_R5_R7;
   BY SPID;
   IF last.SPID;
   Cluster = 2;
   IF SPID <= 10012411 THEN Cluster = 1;
   OPID_interview = OPID;
   KEEP SPID OPID OPID_interview Cluster;
  RUN;



 DATA NHATSNSOC_simple_061521;
 MERGE NSOC_R1_R5_R7_simple_061521 NHATS_SP_R1_R9_Simple_061521 ;
 BY SPID;
 Cluster = 2;
 IF SPID <= 10012411 THEN Cluster = 1;
 RUN;


proc export data= NHATSNSOC_simple_061521
 outfile= "C:\UB\Projects\2019\Suzanne Sullivan\R03 project\Analysis 6-15-
21\NHATSNSOC_Dementia_Status_and_interview_simple_061521.sav";
run;
```