

```
name: <unnamed>
  log: E:\nhats\nhats_code\NHATS data setup\logs\/1a-help_hours_imputation
  18_Apr_2019.smc1
log type: text
opened on: 18 Apr 2019, 11:12:12
3.
   **********
7 . cd "${work}"
 E:\nhats\data\NHATS working data
 . **User note: This section can be commented out after run one time to set up da
 > tasets
10. *********************
11. //combine op and sp data files
12.
13. forvalues w=1/2{
    2. use "${r`w'raw}NHATS_Round_`w'_OP_File_v2.dta", clear
    3. sort spid opid
14. merge m:1 spid using round_`w'_1.dta //bring in sorted sp ivw dataset 5. keep if merge==3 //drop obs with no OP entries 6. save R`w'_OPSPlinked.dta, replace
                                       # of obs.
     Result
                                          667
     not matched
         from master
                                             Ο
                                                 ( merge==1)
                                           667 (merge==2)
         from using
     matched
                                     38,097 ( merge==3)
  (667 observations deleted)
  file R1 OPSPlinked.dta saved
  (label rldresid already defined)
  (label r2dresid already defined)
     Result
                                      # of obs.
                                          465
     not matched
                                                 (_merge==1)
         from master
                                            465 (_merge==2)
         from using
                                        37,944 (_merge==3)
     matched
      ·
  (465 observations deleted)
  file R2_OPSPlinked.dta saved
16. forvalues w=3/$w{}
    2. use "${r`w'raw}NHATS_Round_`w'_OP_File.dta", clear
    3. sort spid opid
```

```
17. merge m:1 spid using round_`w'_1.dta //bring in sorted sp ivw dataset 5. keep if merge==3 //drop obs with no OP entries 6. save R`w'_OPSPlinked.dta, replace
  (label rldresid already defined)
  (label r2dresid already defined)
  (label r3dresid already defined)
      Result
                                            # of obs.
                                                 317
      not matched
                                                    0 (_merge==1)
        from master
                                                 317 (_merge==2)
           from using
                                               35,745 ( merge==3)
      matched
       _____
  (317 observations deleted)
  file R3 OPSPlinked.dta saved
  (label rldresid already defined)
  (label r2dresid already defined)
  (label r3dresid already defined)
  (label r4dresid already defined)
      Result
                                            # of obs.
       not matched
                                                   0 (_merge==1)
211 (_merge==2)
           from master
           from using
                                              33,016 ( merge==3)
      matched
  (211 observations deleted)
  file R4 OPSPlinked.dta saved
  (label r1dresid already defined) (label r2dresid already defined)
  (label r3dresid already defined)
  (label r4dresid already defined)
(label r5dresid already defined)
  (label r5dcontnew already defined)
      Result
                                           # of obs.
       not matched
                                                   0 (_merge==1)
394 (_merge==2)
           from master
           from using
                                              52,285 ( merge==3)
      matched
  (394 observations deleted)
  file R5 OPSPlinked.dta saved
  (label r1dresid already defined) (label r2dresid already defined)
  (label r3dresid already defined)
  (label r4dresid already defined)
(label r5dresid already defined)
  (label r6dresid already defined)
      Result
                                             # of obs.
                                                  284
       not matched
                                                  0 (_merge==1)
284 (_merge==2)
           from master
           from using
```

```
51,174 ( merge==3)
      matched
  (284 observations deleted)
  file R6 OPSPlinked.dta saved
  (label \overline{r}5dcontnew already defined)
  (label rldresid already defined)
  (label r2dresid already defined) (label r3dresid already defined)
  (label r4dresid already defined)
  (label r5dresid already defined)
  (label r6dresid already defined)
  (label r7dresid already defined)
                                         # of obs.
      Result
      not matched
                                              189
                                                    (_merge==1)
          from master
                                                0
          from using
                                              189
                                                    (merge==2)
                                           49,065
      matched
                                                    ( merge==3)
  (189 observations deleted)
  file R7 OPSPlinked.dta saved
18.
19.
20. //now create limited datasets for each wave with only needed variables
21. forvalues w=1/$w{
              use R`w' OPSPlinked.dta
    2.
    3.
22.
                     if inlist(`w',1,2,3,4){
                                keep spid opid op`w'* wave w`w'anfinwgt0 w`w'varstr
 > at w`w'varunit r`w'dresid ///
                    mo`w'douthelp mo`w'dinsdhelp mo`w'dbedhelp sc`w'deathelp sc`w'
 >
   dbathhelp ///
                     sc`w'dtoilhelp sc`w'ddreshelp ha`w'dlaunreas ha`w'dshopreas ha
    `w'dmealreas ///
                     ha`w'dbankreas mc`w'dmedsreas
    5.
                        //add new wave to list below
    6.
23.
                     if inrange(`w',5,$w){
                                 keep spid opid op`w'* wave w`w'anfinwgt0 w`w'varstr
  > at w`w'varunit r`w'dresid ///
                    mo`w'douthelp mo`w'dinsdhelp mo`w'dbedhelp sc`w'deathelp sc`w'
 > dbathhelp ///
                     sc`w'dtoilhelp sc`w'ddreshelp ha`w'dlaunreas ha`w'dshopreas ha
    `w'dmealreas ///
                     ha`w'dbankreas mc`w'dmedsreas w`w'an2011wgt0
    8.
    9.
24.
           rename (op`w'* w`w'* r`w'* mo`w'* sc`w'* ha`w'* mc`w'*) (*)
  10.
            save R`w' OPSPltd.dta, replace
  11. }
  file R1 OPSPltd.dta saved
  file R2 OPSPltd.dta saved
  file R3_OPSPltd.dta saved
 file R4_OPSPltd.dta saved file R5_OPSPltd.dta saved
  file R6 OPSPltd.dta saved
  file R7 OPSPltd.dta saved
```

Survey wave	Freq.	Percent	Cum.
1 2 3 4 5 6 7	38,097 37,944 35,745 33,016 52,285 51,174 49,065	12.81 12.76 12.02 11.10 17.59 17.21 16.50	12.81 25.57 37.60 48.70 66.29 83.50 100.00

100.00

40. //recode helper time variables to -1 (na) if not helper per flag variable

41. **Note, these OP variables are backfilled from wave to wave 42. gen opishelper allw=.

42. gen opisherper_allw=. (297,326 missing values generated)

Total | 297,326

43. forvalues $w=1/$w{}$

- 2. tab ishelper wave if wave==`w', missing //helper flag variable
- 3. replace opishelper_allw=ishelper if wave==`w'
- 4. }

R1 BXHL1 HELPS		Survey wave 1	Total
-1 Inapplicable 1 Yes		26,500 11,597	26,500 11,597
Total	1	38,097	38 , 097

(38,097 real changes made)

R1 BXHL1 HELPS	Survey wave 2	Total
-1 Inapplicable 1 Yes	28,120 9,824	28,120 9,824
Total	37,944	37,944

(37,944 real changes made)

R1 BXHL1 HELPS	Survey wave 3	Total
-1 Inapplicable 1 Yes	27,332 8,413	27,332
Total	35,745	35,745

(35,745 real changes made)

R1 BXHL1 HELPS	Survey wave 4	Total
-1 Inapplicable 1 Yes	25,931 7,085	25,931 7,085
Total	33,016	33,016

(33,016 real changes made)

R1 BXHL1 HELPS	Survey wave 5	Total
-1 Inapplicable 1 Yes	39,861 12,424	39,861 12,424
Total	52,285	52,285

(52,285 real changes made)

R1 BXHL1 HELPS	Survey wave 6	Total
-1 Inapplicable 1 Yes	40,006 11,168	40,006 11,168
Total	51,174	51,174

(51,174 real changes made)

R1 BXHL1 HELPS	Survey wave 7	Total
-1 Inapplicable 1 Yes	39,533 9,532	39,533
Total	49,065	49,065

(49,065 real changes made)

44. tab opishelper_allw wave, missing

opishelper			Survey wave	!		
_allw	1	2	3	4	5	Total
-1 1	26,500 11,597	28,120 9,824	27,332 8,413	25,931 7,085	39,861 12,424	227,283
Total	38,097	37,944	35,745	33,016	52 , 285	297,326

```
opishelper | Survey wave __allw | 6 7 | Total
      -
-----+-----
      -1 | 40,006 39,533 | 227,283
1 | 11,168 9,532 | 70,043
 -----
     Total | 51,174 49,065 | 297,326
45.
46. forvalues w=1/$w{
   2. foreach v in helpsched numdayswk numdaysmn numhrsday {
   3.
                tab `v' if ishelper==-1 & wave==`w', missing replace `v'=-1 if ishelper==-1 & wave==`w'
   4.
   6. }
  R1 HL1 HELP IS |
                   Freq. Percent
  REG SCHEDULED |
 -8 DK | 12 0.05 0.05

-7 RF | 3 0.01 0.06

-1 INAPPLICABLE | 26,481 99.93 99.98

2 VARIED | 4 0.02 100.00
 -----
   Total | 26,500 100.00
 (19 real changes made)
 R1 HL2 NUM DAYS |
   HELP PER WK |
                           Percent
                   Freq.
                                        Cum.
 -1 Inapplicable | 26,500
                             100.00 100.00
 _____
         Total | 26,500
                             100.00
 (0 real changes made)
 R1 HL3 NUM DAYS |
  HELP PER MON |
                    Freq. Percent
 -8 DK | 14 0.05 0.05

-7 RF | 3 0.01 0.06

-1 Inapplicable | 26,483 99.94 100.00
 -----
    Total | 26,500
                             100.00
  (17 real changes made)
  R1 HL4 NUM HRS |
  HELP PER DAY | Freq. Percent Cum.
 -8 DK | 14 0.05 0.05
-7 RF | 3 0.01 0.06
-1 Inapplicable | 26,483 99.94 100.00
         Total | 26,500 100.00
 (17 real changes made)
  R1 HL1 HELP IS |
  REG SCHEDULED |
                   Freq.
                            Percent
 -1 INAPPLICABLE | 28,120 100.00 100.00
                             100.00
        Total | 28,120
 (0 real changes made)
 R1 HL2 NUM DAYS |
  HELP PER WK |
                   Freq. Percent
                                        Cum.
 -1 Inapplicable | 28,120 100.00 100.00
   Total | 28,120 100.00
 (0 real changes made)
```

R1	HL3 NUM DAYS HELP PER MON		Freq.	Percent	Cum.
-1	Inapplicable	į	28,120	100.00	100.00
				100.00	
R1	HL4 NUM HRS HELP PER DAY		Freq.	Percent	
-1	Inapplicable		28,120		
		1		100.00	
	HL1 HELP IS		Freq.	Percent	Cum.
-1	INAPPLICABLE 2 VARIED		27 , 329 3	99.99 0.01	99.99
(3	Total real changes	•	27 , 332	100.00	
R1	HL2 NUM DAYS HELP PER WK		Freq.	Percent	Cum.
-1	Inapplicable	 	27,332	100.00	100.00
(0	Total real changes	made)	27 , 332	100.00	
R1	HL3 NUM DAYS HELP PER MON		Freq.	Percent	Cum.
-1	Inapplicable	 -+	27 , 332	100.00	100.00
(0	Total real changes	,	27 , 332	100.00	
R1	HL4 NUM HRS	 -+	Freq.	Percent	Cum.
-1	Inapplicable	 -+	27 , 332	100.00	100.00
(0	Total real changes	•	27 , 332	100.00	
	HL1 HELP IS	 -+	Freq.	Percent	
-1	INAPPLICABLE	İ	25,931		100.00
(0		İ		100.00	
R1	HL2 NUM DAYS HELP PER WK		Freq.	Percent	Cum.
-1	Inapplicable				
		1		100.00	

R1 HL3 NUM DAYS HELP PER MON		Freq.	Percent	Cum.
-1 Inapplicable	-+ !	25 , 931	100.00	100.00
Total (0 real changes	i	25 , 931		
R1 HL4 NUM HRS HELP PER DAY	ĺ	Freq.	Percent	Cum.
-1 Inapplicable			100.00	100.00
Total (0 real changes		25 , 931		
R1 HL1 HELP IS REG SCHEDULED		Freq.	Percent	Cum.
-1 INAPPLICABLE	 -	39 , 861	100.00	100.00
Total (0 real changes		39,861		
R1 HL2 NUM DAYS HELP PER WK		Freq.	Percent	Cum.
-1 Inapplicable	-+ 	39 , 861	100.00	100.00
Total (0 real changes		39 , 861		
R1 HL3 NUM DAYS HELP PER MON		Freq.	Percent	Cum.
-1 Inapplicable	-+ 		100.00	100.00
Total (0 real changes			100.00	
R1 HL4 NUM HRS HELP PER DAY		Freq.	Percent	Cum.
-1 Inapplicable	 -+	39 , 861	100.00	100.00
Total (O real changes		39,861	100.00	
R1 HL1 HELP IS REG SCHEDULED		Freq.	Percent	Cum.
-1 INAPPLICABLE	-+ 	40,006	100.00	
Total (0 real changes		40,006	100.00	
R1 HL2 NUM DAYS HELP PER WK		Freq.	Percent	Cum.
-1 Inapplicable	-+ 	40,006	100.00	
Total (0 real changes	-+ made)	40,006	100.00	
R1 HL3 NUM DAYS HELP PER MON	 	Freq.	Percent	Cum.
-1 Inapplicable	-+ !	40,006	100.00	100.00
Total (0 real changes	 made)	40,006	100.00	

```
R1 HL4 NUM HRS |
  HELP PER DAY | Freq. Percent Cum.
  -----
 -1 Inapplicable | 40,006 100.00 100.00
         Total | 40,006 100.00
 (0 real changes made)
  R1 HL1 HELP IS |
  REG SCHEDULED |
                   Freq.
                           Percent
                                        C11m .
 _____
 -1 INAPPLICABLE | 39,533 100.00 100.00
 _____
   Total | 39,533 100.00
 (0 real changes made)
 R1 HL2 NUM DAYS |
   HELP PER WK |
                   Freq.
                           Percent
                                        Cum.
 -1 Inapplicable | 39,533 100.00 100.00
 Total I
        Total | 39,533 100.00
 (0 real changes made)
 R1 HL3 NUM DAYS |
  HELP PER MON | Freq. Percent
 -1 Inapplicable | 39,533 100.00 100.00
   Total | 39,533 100.00
 (0 real changes made)
 R1 HL4 NUM HRS |
  HELP PER DAY | Freq. Percent Cum.
 -1 Inapplicable | 39,533 100.00 100.00
   Total | 39,533 100.00
 (0 real changes made)
48. //generate indicator of help with any task that has monthly reference period
49. gen month=.
 (297,326 missing values generated)
50. forvalues w=1/\$w{
   2. replace month=0 if wave==`w'
   3. replace month=1 if (outhlp==1 | insdhlp==1 | bedhlp==1 | tkplhlp1==1 | ///
  tkplhlp2==1 | launhlp==1 | shophlp==1 | mealhlp==1 | bankhlp==1 | ///
 > eathlp==1 | bathhlp==1 | toilhlp==1 | dreshlp==1 | medshlp==1) & wave==`w'
   4. }
 (38,097 real changes made)
 (11,077 real changes made)
 (37,944 real changes made)
 (10,419 real changes made)
 (35,745 real changes made)
 (9,099 real changes made)
 (33,016 real changes made)
 (7,623 real changes made)
 (52,285 real changes made)
 (12,432 real changes made)
 (51,174 real changes made)
 (11,682 real changes made)
 (49,065 real changes made)
 (10,060 real changes made)
```

51. tab month wave, missing

			Survey wave	!		
month	1	2	3	4	5	Total
0 1	+ 27,020 11,077	27,525 10,419	26,646 9,099	25,393 7,623	39,853 12,432	224,934
Total	38,097	37,944	35,745	33,016	52,285	297,326

month		Survey 6	wave 7	Total
0		39,492 11,682	39,005 10,060	224,934 72,392
Total		51,174	49,065	297 , 326

52.

53. //generate indicator of help with any task that has yearly reference period 54. gen year=. (297,326 missing values generated)

- 55. forvalues $w=1/$w{}$

 - 2. replace year=0 if wave==`w'
 3. replace year=1 if (moneyhlp==1 | dochlp==1 | insurhlp==1) & wave==`w'
 4. tab year month if wave==`w', missing

 - (38,097 real changes made)
 - (4,425 real changes made)

year	month 0	1	Total
0	26,152 868	7,520 3,557	33,672 4,425
Total	27 , 020	11,077	38,097

(37,944 real changes made)

(3,489 real changes made)

year	month 0	1	Total
0	26 , 835 690	7,620 2,799	34,455
Total	27 , 525	10,419	37,944

(35,745 real changes made) (2,978 real changes made)

year	month 0	1	Total
0	25 , 983 663	6,784 2,315	32,767 2,978
Total	26 , 646	9,099	35,745

(33,016 real changes made)

(2,689 real changes made)

year	month 0	1	Total
0 1	24 , 744 649	5,583 2,040	30,327 2,689
Total	25,393	7,623	33,016

(52,285 real changes made) (4,599 real changes made)

year		month 0	1	Total
0		38,773 1,080	8,913 3,519	47,686 4,599
Total		39 , 853	12,432	52 , 285

(51,174 real changes made) (4,127 real changes made)

year		month 0 1		Total
0	38,48	•		47,047 4,127
Total	39,49	92 11,682	-+-	51,174

(49,065 real changes made) (3,538 real changes made)

year	n (nonth) 1		Total
0	38,169	•		45,527 3,538
Total	39,005	10,060		49,065

56.

57.
58. //generate indicator of help in last year but not last month

59. gen yearnotmonth=0

60. replace yearnotmonth=1 if year==1 & month==0
 (5,795 real changes made)

61. tab yearnotmonth wave, missing

yearnotmon th	 1	2	Survey wave	e 4	5	Total
0	37 , 229 868	37 , 254 690	35 , 082 663	32,367 649	51,205 1,080	291,531 5,795
Total	38 , 097	37 , 944	35 , 745	33,016	52 , 285	297,326

yearnotmon th		Survey 6	wave 7		Total
0 1	 	50,165 1,009	48 , 229 836		291,531 5,795
Total	 	51 , 174	49,065		297,326

```
63. //pull variable for sits in with doctor
64. gen op_doc_help=.
  (297,326 missing values generated)
65. forvalues w=1/$w {
             replace op doc help=dochlp if wave==`w'
   2. 3. }
  (38,097 real changes made)
  (37,944 real changes made)
  (35,745 real changes made)
  (33,016 real changes made)
  (52,285 real changes made)
  (51,174 real changes made)
  (49,065 real changes made)
67. //generate SP received help with self care or mobility activity or
68. //household activity for health and functioning reasons
69. gen disab=.
  (297,326 missing values generated)
70. forvalues w=1/$w{}
    2. replace disab=0 if wave==`w'
   3. //self care or mobility, assumed to be for health reasons
71. replace disab=1 if (douthelp==2 | dinsdhelp==2 | dbedhelp==2 | ///
  > deathelp==2 | dbathhelp==2 | dtoilhelp==2 | ddreshelp==2) & wave==`w'
   4. //household activity for health or functioning reasons or in residential ca
72. **note this is different from tech paper #7 because codes disab=1 if 1,3 or 4
73. **not just if 3 or 4
74. foreach v in dlaunreas dshopreas dmealreas dbankreas dmedsreas{
   5. replace disab=1 if inlist(`v',1,3,4) & wave==`w'
   6. }
   7.
  (38,097 real changes made)
  (9,055 real changes made)
  (1,494 real changes made)
  (1,737 real changes made)
  (376 real changes made)
  (335 real changes made)
(211 real changes made)
  (37,944 real changes made)
  (10,999 real changes made)
  (1,524 real changes made)
  (1,870 real changes made)
  (347 real changes made)
  (388 real changes made)
  (280 real changes made)
  (35,745 real changes made)
  (11,252 real changes made)
  (1,182 real changes made)
  (1,866 real changes made)
  (392 real changes made)
  (370 real changes made)
  (205 real changes made)
  (33,016 real changes made)
  (10,392 real changes made)
  (1,215 real changes made)
  (1,557 real changes made)
  (423 real changes made)
  (383 real changes made)
  (266 real changes made)
  (52,285 real changes made)
  (14,693 real changes made)
  (1,735 real changes made)
  (2,443 real changes made)
  (716 real changes made)
  (497 real changes made)
  (337 real changes made)
  (51,174 real changes made)
  (15,688 real changes made)
```

```
(1,912 real changes made)
(2,230 real changes made)
(751 real changes made)
(537 real changes made)
(272 real changes made)
(49,065 real changes made)
(15,536 real changes made)
(1,761 real changes made)
(2,301 real changes made)
(556 real changes made)
(455 real changes made)
(248 real changes made)
```

75. tab disab wave, missing

disab	1	2	Survey wave 3	4	5	Total
0 1	24,889 13,208	22,536 15,408	20,478 15,267	18,780 14,236	31,864 20,421	176,539 120,787
Total	38 , 097	37,944	35 , 745	33,016	52,285	297 , 326

disab	Survey 6	7	Total
0	29,784 21,390	28,208 20,857	176,539 120,787
Total	51,174	49,065	297,326

79. tab dhrsmth wave, missing //derived hours/month from HL section

R1 D HL2 HL3 HL4 HRS HELP MONTH	1	Survey 2	y wave	4	Total
HELP MONTH -13 -12:valid skip/staff -11:hours missing -10:days missing -9:days+hrs missing -1:Inapp. 1 2 3 4 4.33 5 6 7 8 8.66 9 10 11 12 12.99 13 14 15 16 17 17.32	1 0 0 253 103 729 26,500 1,093 554 219 834 0 134 291 68 285 0 291 191 2 197 0 118 72 118 129 126	2,287 1,264 220 0 372 25,833 412 391 200 433 161 79 261 54 298 182 71 179 1 206 96 0 60 113 135 0 172	2,790 1,024 324 0 558 24,542 246 364 173 403 100 94 248 30 222 127 71 170 2 212 88 0 44 107 114	2,516 998 237 0 547 23,415 186 249 147 330 73 79 184 26 216 106 62 103 1 137 64 0 39 86 82	Total H
17.32 18 20 21 21.65	36 139 33 0	28 138 38 36	29 137 24 25	103 44 115 17 22	261 1,081 180 213

22 23 24 25 25 25 98 26 27 28 29 30 31 32 33 34 34 64 35 36 38 97 39 40 42 43 43 31 44 45 46 47 63 48 49 50 51 51 51 55 55 55 55	66 2 92 34 0 134 2 31 0 531 0 41 41 1 1 0 0 0 116 24 0 47 62 23 60 0 0 4 23 2 0 24 7 28 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 94 35 122 1 3 33 0 308 124 21 38 1 1 89 14 32 49 2 68 18 0 41 0 29 0 14 12 0 94 12 0 14 12 0 0 14 12 0 0 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	1 2 76 27 100 2 3 30 1 265 99 26 25 0 2 65 13 25 34 0 60 8 0 34 1 19 2 2 0 43 0 3 3 1 1 2 6 6 6 7 6 7 8 8 8 8 9 9 9 1 9 1 9 1 9 1 9 1 9 1 9 1	2 0 74 14 14 94 2 3 18 0 222 50 35 27 1 0 38 59 10 0 24 0 19 0 20 1 20 1 20 1 20 53 0 1 1 0 9 0 238 122 0 1 238 122 0 1 20 1 20 238 122 0 1 20 20 238 122 20 238	203 24 177 1 418 81 124 2 2,182 2,182
47.63 48 49 50 51 51.96 52	0 24 7 28 0 0 76	1 34 5 20 0 94 1	0 26 4 22 0 43 0	2 20 1 20 0 53 0	6 4 203 24 177 1 418 81
55 56 57 58 60 60.62 61	0 27 0 0 304 0 219	0 14 1 0 313 189 0	3 18 0 2 266 135 0	0 9 0 4 238 122 0	4 124 2 8 2,182 845 219
62 63 64 64 65 66 68	34 3 9 0 54 0 0	33 0 7 41 1 0 0	29 3 6 25 0 1	28 1 5 28 1 0 0	260 12 58 223 57 3 1
69.28 70 72 75 76 77 77.94 78 78 78 78 78 78 78 7	0 8 11 15 0 0 0	29 5 18 11 0 26 1 21	24 5 8 9 1 0 21 0	16 5 12 19 0 0 14 1 22	165 36 87 112 1 3 121 24
80 81 84 85 86.6 87 88 90	23 0 8 0 0 38 0	0 5 0 42 0 1	0 6 0 20 0 0 158	1 4 0 25 1 2 103	152 3 59 1 209 40 3 1,053
90.93 91 92 93 95 95.26	0 122 0 13 1 0	100 0 0 29 0 1	80 1 0 20 0	72 0 0 9 0 1	487 123 2 153 1 2

96 98 99.59 100 102 103.92 104 105 112 112.58 115 116 116.91 124 125 128 129.9 130 132 135 138.56 139 140 142.89 144 145 147.22 150 151.55 152	16 2 0 23 0 0 45 3 23 0 0 0 0 0 0 0 0 0 0 139 108 0 20 6 11 2 0 10 0 0 10 0 0 0 0 0 0 0 0 0 0 0	15 3 0 9 0 42 0 0 2 22 0 8 1 0 0 4 136 0 92 20 1 0 1 17 0 0 1 17 0 0 1 16 0 16 0 17 0 0 17 0 0 0 17 0 0 0 0 0 0 0 0 0	10 0 0 11 0 26 1 0 1 14 0 8 0 0 0 1 4 97 0 51 23 1 0 0 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 0 1 1 1 1 1 1 1 1 1	73 7 1 117 189 47 8 28 107 1 46 2 3 3 12 867 109 405 145 23 8 4 113 10 1 3 2 57 2 27 3 21 1 408 321 82
155 155.88 156 160 161 162 165 168 173 173.2 174 175 176 180 181.86 182 184 186 189 190.52 191 192 194.85 195 196 198 200 207.84 208 212 212.17	17 0 11 9 1 0 0 28 0 20 0 0 0 1 43 0 56 1 12 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0	9 16 1 5 1 0 0 28 0 0 14 1 0 0 34 43 0 0 7 1 1 0 2 3 3 0 0 0 2 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 10 0 7 0 0 0 17 0 0 23 0 1 0 44 41 0 0 0 0 0 0 1 1 0 0 0 0 0 0	12 14 1 2 0 0 0 0 12 0 12 0 29 27 0 5 0 1 4 0 1 15 0 15	88 87 14 41 2 1 1 128 2 20 120 2 4 3 307 216 57 4 60 1 3 1 22 19 5 1 1 21 93 16 55 27 70

216 216.5	1	1	0	0	7
217	0 4	5 3	4 1	4 1	28 17
220 220.83	1 0	1 0	0 0	0 0	2 1
224	2	0	1	0	6
225 231	1 0	1 0	0 0	0 0	5 1
233.82 234	0 1 2	1 0	2	0 0	1 3 2
238.15	0	0	0	0	2
240 242	73 1 101	62 0	56 0	51 0	457 101
242.48	0	88	48	44	351
248 250	18 1	13 1	9 0	8 1	74 4
252 253] 3 0	0	0 0	0 0	3 1
256 259.8	0	0	0	0 6	1
260	7	0	5 0	0	41 8
264 270	0 2	1 6	1 2	0 2	2 27
272.79 273	0 1 7	6 1	3 0	4 0	29
276	j 0	0	0	0	8 1
277.12 279	0 1	0	1 0	1 0	2
280	j 0	0	1	1 j	2
281.45 286	0 1	0	0 0	0 0	2 1
288 299	1 1	2	3 0	1 0	13 1
300	23	16	9	8	130
303 303.1	23	0 28	0 16	0 6	23 119
310 311.76	5 I 0	2 30	4 28	1 17	24 113
312 324	18	0	0	0	18
324.75	0 0	0	0	0 0	3 1
330 333	1 2	0	1 0	2 0	10 2
333.41 336	0 1	0 1	2 3	0 4	3 15
337.74	j 0	0	0	0	2
338 341	1 0	0	0 1	0 0	1 1
346.4 348	0	2	0 1	0 0	4 2
360	33	30	22	18	201
363.72 364	0 49	36 0	31 0	15 0	179 49
372 375	4 3	4 0	4 0	7 0	44
381.04	0	1	0	0	2
384 389.7	0 0	2 1	0 0	0 0	4 2
390 394	1 1	1 0	0 0	0 0	2 3 1
394.03	0	1	0	1	4
398.36 400	[0 [0	0	0	0 2	1 3
403 415.68	I 0 I 0	1 8	0 4	1 1	4 25 3 9 7 24
416	3	0	0	0	3
420 424		0	1 0	0 0	7
424.34 425	0 1	0	5 0	3 0	24 1
432	1	0	0	0	1
433	3	0	0	0	4

434 450 454.65 455 456 467.64 476.3 480 484 484.96 485 496 504 510 515 515.27 519.6 520 527 540 545.58 570 575.89 576 600 606.2 623.52 624 630 636.51 648 651 666 666.82 667 672 690 697 697.13 713 720 727 727.44	1 4 0 2 0 1 1 0 0 2 2 2 1 1 0 0 0 6 2 3 3 0 0 0 2 2 3 0 0 0 0 0 0 0 0 0 0 0	1 3 3 0 0 0 0 0 0 1 0 0 0 0 0 0 3 0 0 0 0	0 0 1 0 0 1 0 0 1 2 1 0 0 2 1 1 0 0 2 1 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 0	0 3 0 0 0 0 0 0 0 0	3 23 15 2 2 6 2 1 5 9 1 51 22 10 4 1 1 5 3 3 6 3 3 1 3 1 2 2 2 2 1 2 2 1 2 2 1 2 2 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 8 1 3 1 3
					726 69
Total	38,097	37,944	35,745	33,016	297,326
R1 D HL2 HL3 HL4 HRS HELP MONTH		Survey wave 6	7	Total	
-13 -12:valid skip/staff -11:hours missing -10:days missing	2,374	3,143 1,878 292 0	3,377 1,861 227 0	9,399	

R1 D HL2 HL3 HL4 HRS HELP MONTH	5 	Survey wave 6	: 7	Total
-13 -12:valid skip/staff -11:hours missing -10:days missing -9:days+hrs missing -1:Inapp. 1 2 3 4 4.33 5 6 7 8	2,118 2,374 333 0 1,007 37,743 335 465 222 505 102 105 343 63 336	3,143 1,878 292 0 543 36,863 244 467 241 494 106 103 322 44 313	3,377 1,861 227 0 443 36,156 238 395 198 423 85 84 303 36	16,231 9,399 1,886 103 4,199 211,052 2,754 2,885 1,400 3,422 678 1,952 321 1,950

8.66	151	180	118	864
9	90	94	101	780
10 11	196	224	153 1	1,216 1 11
12	236	254	208	1,450
12.99	79	107	85	519
13	2	2	0	122
14	57	42	37	351
15	136	143	71	
16	134	153	131	878
17	3	0	0	1 129
17.32	158	150	123	823
	38	48	38	261
20	194	194	164	1,081
21	28	25	15	180
21.65	51	47	32	213
22	2	3	2	77
23	0	1	1	7
24 25	103 34 125	125 31 128	76 23	640
25.98	125	128	97	666
26	1	2	0	142
27	0	5	0	16
28	41	33	25	211
29	I 0	0	0	
30 30.31	338	396 98 29	297 64	2,357
31 32 33	42 43 0	49 2	40 34 2	234 257 7
34	0	0	2	5
34.64	76	90	69	427
35	19	13	10	190
36	36	29	33	202
38.97	35	39	32	217
30.97 39 40	33 0 97	0 103	0 69	52 518
42 43	15 0	19	9	102
43.3	56	44	33	232
44	2	6	1	14
45	32	24	36	182
46 47.63	0 0	0	2	6
48 49	29 3	34	36 2	203
50	32	29	26	177
51	0	0	1	1
51.96	76	87	65	418
52 54	3 1 2	0	1 1	81
55 56	1 21	0 21	0 14	124
57	0	1	0	2
58	1	0	1	8
60	364	375	322	2,182
60.62	150	143	106	845
61	I 0	0	0	219
62	48	43	45	260
63	0	3	2	12
64	13	7	11	58
64.95	58 58	42 0	29 1	223
66 68	1 1	0	1	3 1
69	1	1	0	44
69.28	31	37	28	165
70	7	3	3	36
72	11	11	16	87
75	22	25	11	112
76	0	0	0	1 3
77	1	2	0	

77.94	28	18	14	121
	1	2		24
80	26	25	20	152
81	1	1	0] 3
84	22	11	3	59
85	1	0	0	1
86.6	39	49	34	209
87	0	0	1	40
88	0	0	0] 3
90	171	183	131	1,053
90.93	90	79	66	487
91	0	0	0	123
92	0	2	0	2
93	32	24	26	153
95	0	0	0	1
95.26	0	0	0	2
96	8	14	7	73
98	0	1	1	1 7
99.59	0	0	0	1
100	19	24	20	117
102	1	0	0	1
103.92	37	35	27	189
104	0	0	1	47
105	1	4	0	8
108	0	0	1	28
108.25	1 26	21	12	107
110	1	0	0	1
112	13	6	4	46
112.58	0	1	0	2
115	2	0	1] 3
116	0	2	0] 3
116.91	1	1	0	12
120	153	148	110	867
121	0	1	0	109
121.24	81	72	50	1 405
124	17	19	31	145
125	4	4	5	23
126	2	1	0	8
128	0	1	0	4
129.9	18	23	21	113
130	0	0	0	10
132	0	0	0	1
135	1	0	0	3
138	1 12	0 15	0 9] 2 57
138.56 139	•	0	0	2
140	0 1 4	6	3	1 27
142.89	1 0	0	0] 3
142.09	I 5	4	3	3 21
	0	0	_	1
147.22	1 0	0	0	1
150	80	53	51	408
151.55	55	63	42	321
152	0	0	0	82
154	i ő	Ő	1	2
155	16	11	15	88
155.88	20	16	11	87
156	1	0	0	14
160	i 7	5	6	41
161	i o	0	Ö	2
162	i 0	0	1	j 1
165	i 0	0	1	i - 1
168	i 17	18	14	128
168.87	j 2	0	0	2
173	j 0	0	0	20
173.2	j 27	26	18	120
174	j 0	1	0	2
175	1	1	0	4
176	1	1	0] 3
180	51	45	61	307
181.86	33	35	37	216
182	0	1	0	57

184	1	1	0	4
186 189	17 I 0	3	6 0	60 1 1
190.52 191	1 0	1 0	0	3
192 194.85	5 6	5 2	5 2	1 22 19 5
195 196	0 1	0 0	0	5 1
198 200	0 0	0 3	1 3	1 1 21
207.84	19 0	14	12	93 16
210 212	19 0	4	4 0	55 27
212.17 216	11 1	7 1	15 3	70 1 7
216.5 217	3	2 4	10	28
220 220.83	0 0	0	0	2
224 225	,	1 1	0	6
231 233.82	0	0	1 0	1 1
234 238.15	0 1	0	0	2 1 6 5 1 3 2 2
240 242	82 82	60 0	73 0	457 101
242.48	63 9	58 5	50 12	351 74
250 252	0 0	0	1 0	4
252 253 256	0 1 1	0	0	1
259.8 260	14	7 1	6	1 41
264 270	0 0	0	0 0 4	8 2 27
272.79] 3 6	8 7	3	29
273 276	0 1	0	0	8 1 2 3 2 2 1
277.12	0 1	0	0] 3
280 281.45	0 1	0	0	2
286 288	0 3	0	0	
299 300	0 22	0 29	0 23	1 130
303 303.1	0 20	0 29	0 20	23 119
310 311.76	4 17	5 11	3 10	24 113
312 324	[0 [0	0 0	0 2	18 3
324.75 330	0 1	1 3	0 2	1 10
333 333.41	0 1 0	0 1	0	2
336 337.74	2 1	1 1	3	15
338 341	0	0	0	2 1 1 4 2
346.4 348	0 0	1 0	1 1	4 2
360 363.72	37 43	33 24	28 30	201 179
364 372	0 7	0 6	0 12	49 44
375	0 1	0 0	0	3 2

Not codeable,	667 672 690 697.13 713 720 727 727.44 744 <1 hour	0 0 1 0 1 0 67 0 155 135	0 0 2 0 0 53 0 111 5 654	0 2 0 0 0 48 0 86 1 585	
	620 623.52 624 630 636.51 648 651 660	0 0 0 0 0 0 0 0	2 1 0 0 0 1 1 0	1 2 0 0 1 0 0 0	
	540 545.58 546 552 558 570 575.89 576 600 606.2	2 1 2 1 0 1 0 1 3 1 0 1 1 1 0 1 4 1 3 1 0	2 1 0 0 2 1 0 0 4 6	1 3 3 0 0 2 0 0 0 2 2 2	
	485 496 504 510 515.27 519.6 520 527	0 2 1 0 0 1 6 0	0 3 0 1 0 1 3 0	0 0 0 0 0 1 1 8	
	423 432 433 434 450 454.65 455 456 465 467.64 476.3 480 484	0 0 0 0 0 5 4 0 0 2 0 0 12 1	0 0 1 5 3 0 2 1 0 1 14 0 6	0 0 1 0 3 4 0 0 1 2 0 5 0	
	384 389.7 390 394.03 398.36 400 403 415.68 416 420 424 424.34 425	1	0 0 0 0 1 1 0 6 0	1 0 1 0 1 0 0 2 2 2 0 3 0	

- 80. gen op ind hrsmth=. (297,326 missing values generated)
- 81. forvalues $w=1/$w{}$
 - 2. replace op_ind_hrsmth=dhrsmth if wave==`w'
 - (38,097 real changes made) (37,944 real changes made)

 - (35,745 real changes made)
 - (33,016 real changes made)
 - (52,285 real changes made) (51,174 real changes made)
 - (49,065 real changes made)
- 82. recode op_ind_hrsmth (1/750=1)(op ind hrsmth: 47183 changes made)
- 84. la def hrsmth -13"-13:Deceased" -12"Zero days/wk" -11"-11:hours missing" ///> -10"-10:days missing" -9 "-9:days+hours mssing" -1"-1:NA" 1"1:Valid" 9999"999
 > 9:<1hr/day",replace
- 85. la val op ind hrsmth hrsmth
- 86. tab op_ind_hrsmth wave, missing

	I	Surve	ey wave		
op_ind_hrsmth	1 +	2	3	4	Total
-13:Deceased Zero days/wk -11:hours missing -10:days missing -9:days+hours mssing -1:NA 1:Valid 9999:<1hr/day	0 0 253 103 729 26,500 9,206 1,306	2,287 1,264 220 0 372 25,833 7,502 466	2,790 1,024 324 0 558 24,542 6,116 391	2,516 998 237 0 547 23,415 4,921 382	16,231 9,399 1,886 103 4,199 211,052 49,937 4,519
Total	+ 38,097	37 , 944	35,745	33,016	297,326

		Survey wave	!	
op_ind_hrsmth	5 	6 	7	Total
-13:Deceased Zero days/wk -11:hours missing -10:days missing -9:days+hours mssing -1:NA 1:Valid 9999:<1hr/day	2,118 2,374 333 0 1,007 37,743 7,975 735	3,143 1,878 292 0 543 36,863 7,801 654	3,377 1,861 227 0 443 36,156 6,416 585	16,231 9,399 1,886 103 4,199 211,052 49,937 4,519
Total	52 , 285	51 , 174	49,065	297,326

^{87.}

^{(297,326} missing values generated)

```
90. forvalues w=1/$w{}
   2. replace justone=0 if wave==`w'
   3. replace justone=1 if (numdayswk==1 | numdaysmn==1) & wave==`w'
   4.
 (38,097 real changes made)
 (3,160 real changes made)
 (37,944 real changes made)
 (1,386 real changes made)
 (35,745 real changes made)
 (1,062 real changes made)
 (33,016 real changes made)
 (847 real changes made)
 (52,285 real changes made)
 (1,387 real changes made)
 (51,174 real changes made)
 (1,305 real changes made)
 (49,065 real changes made)
 (1,096 real changes made)
91. tab justone op ind hrsmth, missing
                             op_ind_hrsmth
    justone | -13:Decea Zero days -11:hours -10:days -9:days+h |
     -----
       0 | 16,231 9,398 1,682 103 4,198 | 287,083
1 | 0 1 204 0 1 10,243
    Total | 16,231 9,399 1,886 103 4,199 | 297,326
                    op_ind_hrsmth
    _____
 Total | 211,052 49,937 4,519 | 297,326
92.
93. //recode help flags to 0=(no or inapplicable) or 1=yes
94. forvalues w=1/\$w
   2. foreach v in outhlp insdhlp bedhlp tkplhlp1 tkplhlp2 launhlp shophlp mealhl
 > p ///
 > bankhlp eathlp bathhlp toilhlp dreshlp medshlp moneyhlp dochlp insurhlp{
   3. tab `v' if wave==`w', missing
4. replace `v'=0 if `v'==-1 & wave==`w'
   5. }
6. }
   R1 MO6A HELPS |
   SP GO OUTSIDE |
                   Freq. Percent
 -1 Inapplicable | 36,363 95.45 95.45
1 Yes | 1,734 4.55 100.00
         Total | 38,097 100.00
 (36,363 real changes made)
  R1 MO19A HELPS |
 SP INSIDE HOUSE | Freq. Percent Cum.
 -1 Inapplicable | 36,951 96.99 96.99 1 Yes | 1,146 3.01 100.00
         Total | 38,097 100.00
 (36,951 real changes made)
```

R1 MO25A HELPS SP OUT OF BED	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes		98.10 1.90	98.10 100.00
Total (37,372 real char	38,097 nges made)	100.00	
R1 DT5A TAKES SP PLACES MOST	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,277 3,820	89.97 10.03	89.97 100.00
Total (34,277 real char	/	100.00	
R1 DT7A TAKES SP PLACES OTH	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	36,423 1,674	95.61 4.39	95.61 100.00
Total (36,423 real char	•	100.00	
R1 HA3A HELPS SP WITH LAUNDRY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,248 3,849	89.90 10.10	89.90 100.00
Total (34,248 real char		100.00	
R1 HA25A HELPS SP WITH SHOPPING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	32,691 5,406	85.81 14.19	85.81 100.00
Total (32,691 real char	•	100.00	
R1 HA32A HELPS SP WITH MEALS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	33,240 4,857	87.25 12.75	87.25 100.00
Total (33,240 real char	38,097 nges made)	100.00	
R1 HA42A HELPS SP WITH BANKING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,595 3,502	90.81 9.19	90.81
Total (34,595 real char	•	100.00	

R1 SC3A HELPS SP WITH EATING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	37 , 466 631	98.34 1.66	98.34 100.00
Total (37,466 real chan	38,097 .ges made)	100.00	
R1 SC11A HELPS SP WITH BATHING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	37,131 966	97.46 2.54	97.46 100.00
Total (37,131 real chan	38,097 ges made)	100.00	
R1 SC17A HELPS SP WITH TOILETING	Freq.	Percent	Cum.
	37,601	98.70	98.70
1 Yes	496	1.30	100.00
Total (37,601 real chan	38,097 ges made)	100.00	
R1 SC23A HELPS			
SP WITH DRESSING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	36,877 1,220	96.80 3.20	96.80 100.00
Total (36,877 real chan	38,097 ges made)	100.00	
R1 MC5A HELPS SP WITH MEDICINES	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	36,515 1,582	95.85 4.15	95.85 100.00
Total (36,515 real chan	38,097 ges made)	100.00	
R1 HA52A HELPS	Frog	Dorgont	Cum
SP WITH MONEY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	36,906 1,191	96.87 3.13	96.87
Total (36,906 real chan	38,097 ges made)	100.00	
R1 MC17A SITS IN W SP AT DRS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,631 3,466	90.90 9.10	90.90 100.00
Total (34,631 real chan	38,097 .ges made)	100.00	

R1 MC22A HELPS WITH INSUR DECIS	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	37,690 407	98.93 1.07	98.93 100.00
Total (37,690 real char	38,097 nges made)	100.00	
R1 MO6A HELPS SP GO OUTSIDE	 Freq. +	Percent	Cum.
-1 Inapplicable 1 Yes	36,119 1,825	95.19 4.81	95.19 100.00
Total (36,119 real char	'	100.00	
R1 MO19A HELPS SP INSIDE HOUSE	 Freq. +	Percent	Cum.
-1 Inapplicable 1 Yes	36,536 1,408	96.29 3.71	96.29 100.00
Total (36,536 real char		100.00	
R1 MO25A HELPS SP OUT OF BED	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	36,942 1,002	97.36 2.64	97.36 100.00
Total (36,942 real char		100.00	
R1 DT5A TAKES SP PLACES MOST	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,708 3,236	91.47 8.53	91.47 100.00
Total (34,708 real char		100.00	
R1 DT7A TAKES SP PLACES OTH	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	36,459 1,485	96.09 3.91	96.09 100.00
Total (36,459 real char	. ,	100.00	
R1 HA3A HELPS SP WITH LAUNDRY	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,791 3,153	91.69 8.31	91.69
Total (34,791 real char	+ 37,944 nges made)	100.00	

R1 HA25A HELPS SP WITH	 	Danasah	Com
SHOPPING	Freq. +	Percent	Cum.
-1 Inapplicable 1 Yes	33,637 4,307	88.65 11.35	88.65 100.00
Total (33,637 real char		100.00	
R1 HA32A HELPS SP WITH MEALS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes		89.18 10.82	89.18 100.00
Total (33,840 real char		100.00	
R1 HA42A HELPS SP WITH BANKING	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	35,151 2,793	92.64 7.36	92.64 100.00
Total (35,151 real char		100.00	
R1 SC3A HELPS SP WITH EATING	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes		97.38 2.62	97.38 100.00
Total (36,948 real char		100.00	
R1 SC11A HELPS SP WITH BATHING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	36,479 1,465		96.14 100.00
Total (36,479 real char		100.00	
R1 SC17A HELPS SP WITH			
TOILETING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	37 , 086 858	97.74 2.26	
Total (37,086 real char		100.00	
R1 SC23A HELPS SP WITH	_		
DRESSING	Freq. 	Percent 	Cum.
-1 Inapplicable 1 Yes	36,411 1,533		95.96 100.00
Total (36,411 real char	•	100.00	

R1 MC5A HELPS SP WITH			
MEDICINES	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	36,629 1,315	96.53 3.47	96.53 100.00
Total (36,629 real char	37,944 ages made)	100.00	
R1 HA52A HELPS SP WITH MONEY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	37,034 910	97.60 2.40	97.60 100.00
Total (37,034 real char	•	100.00	
R1 MC17A SITS IN W SP AT DRS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	35,204 2,740	92.78 7.22	92.78 100.00
Total (35,204 real char	37,944 ages made)	100.00	
R1 MC22A HELPS WITH INSUR DECIS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	37,670 274	99.28 0.72	99.28
Total (37,670 real char	37,944 ages made)	100.00	
R1 MO6A HELPS SP GO OUTSIDE	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,099 1,646	95.40 4.60	95.40 100.00
Total (34,099 real char	•	100.00	
R1 MO19A HELPS SP INSIDE HOUSE	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,468 1,277	96.43 3.57	96.43 100.00
Total (34,468 real char	35,745 iges made)	100.00	
R1 MO25A HELPS SP OUT OF BED	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34 , 758 987	97.24 2.76	97.24 100.00
Total (34,758 real char	35,745 iges made)	100.00	

R1 DT5A TAKES SP PLACES MOST	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes		92.50 7.50	92.50 100.00
Total (33,064 real char	,	100.00	
R1 DT7A TAKES SP PLACES OTH	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,376 1,369	96.17 3.83	96.17 100.00
Total (34,376 real char	/	100.00	
R1 HA3A HELPS SP WITH LAUNDRY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	33,148 2,597	92.73 7.27	92.73 100.00
Total (33,148 real char	35,745 nges made)	100.00	
R1 HA25A HELPS SP WITH	_		
SHOPPING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes		89.83 10.17	89.83 100.00
Total (32,111 real char		100.00	
R1 HA32A HELPS SP WITH MEALS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	32,304 3,441	90.37 9.63	90.37
Total (32,304 real char	,	100.00	
R1 HA42A HELPS SP WITH BANKING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	33,433 2,312	93.53 6.47	93.53
Total (33,433 real char	35,745 nges made)	100.00	
R1 SC3A HELPS SP WITH EATING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,725 1,020	97.15 2.85	97.15 100.00
Total (34,725 real char		100.00	

R1 SC11A HELPS SP WITH BATHING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,399 1,346	96.23 3.77	96.23 100.00
Total (34,399 real char	35,745 iges made)	100.00	
R1 SC17A HELPS SP WITH TOILETING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,880 865	97.58 2.42	97.58 100.00
Total (34,880 real char	35,745 nges made)	100.00	
R1 SC23A HELPS SP WITH DRESSING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,251 1,494	95.82 4.18	95.82 100.00
Total (34,251 real char	35,745 nges made)	100.00	
R1 MC5A HELPS SP WITH MEDICINES	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34,644 1,101	96.92 3.08	96.92 100.00
Total (34,644 real char	•	100.00	
R1 HA52A HELPS SP WITH MONEY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	34 , 973 772	97.84 2.16	97.84 100.00
Total (34,973 real char	35,745 nges made)	100.00	
R1 MC17A SITS IN W SP AT DRS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	33,422 2,323	93.50 6.50	93.50 100.00
Total (33,422 real char	35,745 nges made)	100.00	
R1 MC22A HELPS WITH INSUR DECIS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	35 , 516 229	99.36 0.64	99.36 100.00
Total (35,516 real char	35,745 nges made)	100.00	

R1 MO6A HELPS SP GO OUTSIDE	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	31,583 1,433	95.66 4.34	95.66 100.00
Total (31,583 real char	33,016 nges made)	100.00	
R1 MO19A HELPS SP INSIDE HOUSE	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	31,894 1,122	96.60 3.40	96.60 100.00
Total (31,894 real char	•	100.00	
R1 MO25A HELPS SP OUT OF BED	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	32,139 877	97.34 2.66	97.34 100.00
Total (32,139 real char		100.00	
R1 DT5A TAKES SP PLACES MOST	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	30,769 2,247	93.19 6.81	93.19
Total (30,769 real char	•	100.00	
R1 DT7A TAKES SP PLACES OTH	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	31,867 1,149	96.52 3.48	96.52 100.00
Total (31,867 real char		100.00	
R1 HA3A HELPS SP WITH LAUNDRY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	30,847 2,169	93.43 6.57	93.43 100.00
Total (30,847 real char		100.00	
R1 HA25A HELPS SP WITH SHOPPING	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	30,036 2,980	90.97 9.03	90.97
Total (30,036 real char	33,016	100.00	

R1 HA32A HELPS SP WITH MEALS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	30,131 2,885	91.26 8.74	91.26 100.00
Total (30,131 real char	33,016 nges made)	100.00	
R1 HA42A HELPS SP WITH BANKING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	31,080 1,936	94.14 5.86	94.14
Total (31,080 real char	•	100.00	
R1 SC3A HELPS SP WITH EATING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	32,104 912	97.24 2.76	97.24 100.00
Total (32,104 real char	•	100.00	
R1 SC11A HELPS SP WITH BATHING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	31,910 1,106	96.65 3.35	96.65 100.00
Total (31,910 real char	•	100.00	
R1 SC17A HELPS SP WITH TOILETING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	32 , 329 687	97.92 2.08	97.92 100.00
Total (32,329 real char	/	100.00	
R1 SC23A HELPS SP WITH DRESSING	Frog	Porcont	Cum.
-1 Inapplicable	Freq. 31,704	Percent 96.03	96.03
1 Yes 	1,312 33,016	3.97 100.00	100.00
(31,704 real char R1 MC5A HELPS	nges made)		
SP WITH MEDICINES	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	32 , 033 983	97.02 2.98	97.02 100.00
Total (32,033 real char	33,016 nges made)	100.00	

R1 HA52A HELPS SP WITH MONEY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes		97.79 2.21	97.79 100.00
Total (32,285 real char	33,016 nges made)	100.00	
R1 MC17A SITS IN W SP AT DRS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	31,006 2,010	93.91 6.09	93.91 100.00
Total (31,006 real char		100.00	
R1 MC22A HELPS WITH INSUR DECIS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	32 , 766 250	99.24 0.76	99.24
Total (32,766 real char		100.00	
R1 MO6A HELPS SP GO OUTSIDE	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	50,225 2,060	96.06 3.94	96.06 100.00
Total (50,225 real char		100.00	
R1 MO19A HELPS SP INSIDE HOUSE	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	50,773 1,512	97.11 2.89	97.11 100.00
Total (50,773 real char	•	100.00	
R1 MO25A HELPS SP OUT OF BED	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	51,201 1,084	97.93 2.07	97.93 100.00
Total (51,201 real char	•	100.00	
R1 DT5A TAKES SP PLACES MOST	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes		7.23	92.77
Total (48,505 real char		100.00	

R1 DT7A TAKES SP PLACES OTH	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	50,442 1,843	96.48 3.52	96.48 100.00
Total (50,442 real char	52,285 nges made)	100.00	
R1 HA3A HELPS SP WITH LAUNDRY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	48,357 3,928	92.49 7.51	92.49
Total (48,357 real char	- ,	100.00	
R1 HA25A HELPS SP WITH SHOPPING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	46,731 5,554	89.38 10.62	89.38 100.00
Total (46,731 real char		100.00	
R1 HA32A HELPS SP WITH MEALS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	47,057 5,228	90.00 10.00	90.00
Total (47,057 real char		100.00	
R1 HA42A HELPS SP WITH BANKING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	48,892 3,393	93.51 6.49	93.51 100.00
Total (48,892 real char		100.00	
R1 SC3A HELPS SP WITH EATING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	51 , 286 999	98.09 1.91	98.09
Total (51,286 real char	•	100.00	
R1 SC11A HELPS SP WITH BATHING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	50,903 1,382	97.36 2.64	97.36 100.00
Total (50,903 real char	•	100.00	

R1 SC17A HELPS SP WITH	_		
TOILETING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	51,502 783	98.50 1.50	98.50 100.00
Total (51,502 real chang	52,285 res made)	100.00	
R1 SC23A HELPS SP WITH			
DRESSING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	50,533 1,752	96.65	96.65 100.00
Total (50,533 real chang	52,285 res made)	100.00	
R1 MC5A HELPS			
SP WITH MEDICINES	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	50,666 1,619	96.90 3.10	96.90 100.00
Total (50,666 real chang	52,285 res made)	100.00	
R1 HA52A HELPS SP WITH MONEY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	51,075 1,210	97.69 2.31	97.69 100.00
Total (51,075 real chang	52,285 res made)	100.00	
R1 MC17A SITS IN W SP AT DRS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	48,781 3,504	93.30 6.70	93.30
Total (48,781 real chang	52,285 res made)	100.00	
R1 MC22A HELPS			
WITH INSUR DECIS	Freq.	Percent	Cum.
+1 Inapplicable	51,894	99.25	99.25
1 Yes	391	0.75	100.00
Total (51,894 real chang	52,285 res made)	100.00	
R1 MO6A HELPS SP GO OUTSIDE	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	49,066 2,108	95.88 4.12	95.88 100.00
Total (49,066 real chang	51,174 res made)	100.00	

R1 MO19A HELPS SP INSIDE HOUSE	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	49,578 1,596	96.88 3.12	96.88 100.00
Total (49,578 real change	51,174 res made)	100.00	
R1 MO25A HELPS SP OUT OF BED	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	49,915 1,259	97.54 2.46	97.54 100.00
Total (49,915 real chang	51,174 res made)	100.00	
R1 DT5A TAKES SP PLACES MOST	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	47,690 3,484	93.19 6.81	93.19 100.00
Total (47,690 real change	51,174 res made)	100.00	
R1 DT7A TAKES SP PLACES OTH	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	49,390 1,784	96.51 3.49	96.51 100.00
Total (49,390 real change	51,174 res made)	100.00	
R1 HA3A HELPS SP WITH LAUNDRY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	47,738 3,436	93.29 6.71	93.29
Total (47,738 real change	•	100.00	
R1 HA25A HELPS SP WITH SHOPPING	Freq.	Percent	Cum.
	46,370 4,804	90.61 9.39	90.61
Total (46,370 real change	51,174 ges made)	100.00	
R1 HA32A HELPS SP WITH MEALS	Freq.	Percent	Cum.
	46,584 4,590	91.03 8.97	91.03 100.00
Total (46,584 real change	51,174 res made)	100.00	

R1 HA42A HELPS SP WITH BANKING	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	48,291 2,883	94.37 5.63	94.37
Total (48,291 real char	51,174 nges made)	100.00	
R1 SC3A HELPS SP WITH EATING	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	50,058 1,116	97.82 2.18	97.82 100.00
Total (50,058 real char	· •	100.00	
R1 SC11A HELPS SP WITH BATHING	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	49,655 1,519	97.03 2.97	97.03 100.00
Total (49,655 real char		100.00	
R1 SC17A HELPS SP WITH TOILETING	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	50,203 971	98.10 1.90	98.10 100.00
Total (50,203 real char		100.00	
R1 SC23A HELPS SP WITH DRESSING	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	49,318 49,856	96.37 3.63	96.37 100.00
Total (49,318 real char		100.00	
R1 MC5A HELPS SP WITH MEDICINES	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	49,779 1,395	97.27 2.73	97.27 100.00
Total (49,779 real char	. ,	100.00	
R1 HA52A HELPS SP WITH MONEY	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	50,138 1,036	97.98 2.02	97.98 100.00
Total (50,138 real char	51,174 sade)	100.00	

R1 MC17A SITS IN W SP AT DRS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	48,004 3,170	93.81 6.19	93.81 100.00
Total (48,004 real chan-	51,174 ges made)	100.00	
R1 MC22A HELPS WITH INSUR DECIS	Freq.	Percent	Cum.
		99.31 0.69	99.31
Total (50,822 real chan-	•	100.00	
R1 MO6A HELPS SP GO OUTSIDE	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	47,332 1,733	96.47 3.53	96.47 100.00
Total (47,332 real chan-	- /	100.00	
R1 MO19A HELPS SP INSIDE HOUSE	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	47,702 1,363	97.22 2.78	97.22 100.00
Total (47,702 real chan		100.00	
R1 MO25A HELPS SP OUT OF BED	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	47,998 1,067	97.83 2.17	97.83 100.00
Total (47,998 real chan	•	100.00	
R1 DT5A TAKES SP PLACES MOST	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	46,068 2,997	93.89 6.11	93.89 100.00
Total (46,068 real chan	•	100.00	
R1 DT7A TAKES SP PLACES OTH	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	47,543 1,522	96.90 3.10	96.90 100.00
Total (47,543 real chan-	•	100.00	

R1 HA3A HELPS SP WITH LAUNDRY	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	46,118 2,947	93.99 6.01	93.99 100.00
Total (46,118 real char	49,065 nges made)	100.00	
R1 HA25A HELPS SP WITH SHOPPING	Freq.	Percent	Cum.
* * * * * * * * * * * * * * * * * * * *	44,920 4,145	91.55 8.45	91.55 100.00
Total (44,920 real char		100.00	
R1 HA32A HELPS SP WITH MEALS	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	45,082 3,983	91.88 8.12	91.88
Total (45,082 real char		100.00	
R1 HA42A HELPS SP WITH BANKING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	46,577 2,488	94.93 5.07	94.93 100.00
Total (46,577 real char		100.00	
R1 SC3A HELPS SP WITH EATING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	48,024 1,041	97.88 2.12	97.88 100.00
Total (48,024 real char		100.00	
R1 SC11A HELPS SP WITH BATHING	Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	47,720 1,345	97.26 2.74	97.26 100.00
Total (47,720 real char	49,065 nges made)	100.00	
R1 SC17A HELPS SP WITH TOILETING	 Freq.	Percent	Cum.
-1 Inapplicable 1 Yes	48,318	98.48 1.52	98.48 100.00
Total (48,318 real char	49,065	100.00	

```
R1 SC23A HELPS
       SP WITH |
                                           Cum.
       DRESSING |
                    Freq. Percent
 -1 Inapplicable | 47,470 96.75 96.75
1 Yes | 1,595 3.25 100.00
         Total | 49,065 100.00
 (47,470 real changes made)
   R1 MC5A HELPS
       SP WITH |
      MEDICINES | Freq. Percent
 -1 Inapplicable | 47,841 97.51 97.51
1 Yes | 1,224 2.49 100.00
         Total | 49,065 100.00
  (47,841 real changes made)
  R1 HA52A HELPS |
  SP WITH MONEY | Freq. Percent Cum.
 _____
 -1 Inapplicable | 48,157 98.15 98.15
1 Yes | 908 1.85 100.00
          Total | 49,065 100.00
  (48,157 real changes made)
   R1 MC17A SITS |
  IN W SP AT DRS | Freq.
                             Percent
 -1 Inapplicable | 46,353 94.47 94.47 1 Yes | 2,712 5.53 100.00
         Total | 49,065 100.00
 (46,353 real changes made)
  R1 MC22A HELPS |
    WITH INSUR |
        DECIS | Freq. Percent Cum.
 -1 Inapplicable | 48,784 99.43 99.43
1 Yes | 281 0.57 100.00
 _____
         Total | 49,065 100.00
  (48,784 real changes made)
95.
96. //generate variable indicating help with only one activity
97. gen numact=.
 (297,326 missing values generated)
98. forvalues w=1/$w{}
   2. replace numact=outhlp + insdhlp + bedhlp + tkplhlp1 + tkplhlp2 + launhlp +
 > shophlp + mealhlp + bankhlp + eathlp + bathhlp + toilhlp + dreshlp + medshlp /
 > + moneyhlp + dochlp + insurhlp if wave==`w'
  (38,097 real changes made)
  (37,944 real changes made)
  (35,745 real changes made)
  (33,016 real changes made)
  (52,285 real changes made)
  (51,174 real changes made)
 (49,065 real changes made)
```

99. 100 tab numact wave, missing

			Survey wave			
numact	1	2	3	4	5	Total
0 1 2 3 4 5 6 7	26,152 4,741 1,875 1,433 1,242 877 570 345	26,835 4,436 1,747 1,382 1,122 786 580 357	25,983 4,003 1,566 1,091 974 665 520 357	24,744 3,367 1,359 931 755 611 448 264	38,773 5,526 2,220 1,627 1,291 896 679 417	219,139 31,857 12,465 9,299 7,632 5,487 3,945 2,511
8 9 10 11 12 13 14 15	246 149 134 131 92 55 41 13	203 152 109 95 57 51 23 9	157 126 105 78 51 40 20 8	173 111 75 63 55 35 17 7	235 185 139 110 90 51 40 6	1,443 1,097 769 640 470 313 201 54 4
Total	38,097	37,944	35,745	33,016	52,285	297,326

numact	Survey 6	wave 7	Total
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	38,483 5,262 1,994 1,525 1,220 874 617 426 230 197 111 84 62 48 31	38,169 4,522 1,704 1,310 1,028 778 531 345 199 177 96 79 63 33 29 2 0	219,139 31,857 12,465 9,299 7,632 5,487 3,945 2,511 1,443 1,097 769 640 470 313 201 54
Total	+51 , 174	49,065	297,326

101 gen oneact=0 //note this =0 if help with no activities

102 replace oneact=1 if numact==1
 (31,857 real changes made)

103 tab oneact opishelper_allw, missing

	opishelpe	er allw	
oneact	-1	_ 1	Total
0	225,082 2,201	40,387 29,656	265,469 31,857
Total	227,283	70,043	297,326

18 FATHER-IN-LAW |

```
104
106 //generate variables indicating relationship is spouse, other rel, other nonre
107 gen spouse=.
   (297,326 missing values generated)
108 gen otherrel=.
    (297,326 missing values generated)
109 gen nonrel=.
    (297,326 missing values generated)
110 gen daughter=0
111 gen son=0
112 gen oth fam=0
113
114 label var otherrel "Non-spouse relative"
115 label var oth fam "Family member of SP, not spouse, son, or daughter"
116 label var nonrel "Non-relative"
117
118 forvalues w=1/$w{}
        2. replace spouse=0 if wave==`w'
        3. replace spouse=1 if relat==2 & wave==`w'
        4. replace otherrel=0 if wave==`w'
        5. replace otherrel=1 if ((relat>2 & relat<=29) | relat==91) & wave==`w'
        6. replace nonrel=0 if wave==`w'
        7. replace nonrel=1 if (relat>=30 & relat~=91) & wave==`w'
        8. replace daughter=1 if inlist(relat, 3, 5, 7) & wave==`w'
        9. replace son=1 if inlist(relat, 4, 6, 8) & wave==`w'
      10. replace oth fam=1 if ((relat>8 & relat<=29) | relat==91) & wave==`w'
      11.
119 tab relat spouse
      12. tab relat otherrel
      13. tab relat nonrel
     14. }
    (38,097 real changes made)
    (3,804 real changes made)
    (38,097 real changes made)
    (29,181 real changes made)
    (38,097 real changes made)
    (5,112 real changes made)
    (11,763 real changes made)
    (11,544 real changes made)
    (5,874 real changes made)
         RELATIONSHIP TO SP | Spouse
                                                                  0 1 | Total
    ______
           2 SPOUSE/ PARTNER | 0 3,804 | 3,804 | 3,804 | 304 | 10,386 | 10,386 | 10,386 | 10,386 | 10,322 | 0 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 10,322 | 1
                              974

9 SISTER | 974

9 SISTER | 1,360
                                                                                         0 |
                                                                                                          1,360
                                                            571
205
                                                                                         0 |
                          10 BROTHER |
                                                                                                                   571
            11 SISTER-IN-LAW |
12 BROTHER-IN-LAW |
                                                                                                                 205
                                                                  77
                                                                                          0 i
                                                                                         0 |
                                                               115
                            13 MOTHER |
                                                                                                                115
                    14 STEPMOTHER |
                                                               5
35
                                                                                            0 |
                                                                                                                35
                                                                                           0 |
              15 MOTHER-IN-LAW |
                                                                                   0 |
                          16 FATHER |
                    17 STEPFATHER |
                                                                                           0 |
                                                                                                                  7
                                                                  3
7
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19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S SON/ 30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 91 OTHER RELATIVE	1,169 950 347 201 45 14 182 30 12 55 26 10 547 25 54 51 189 2,803 367 18 155 41 451 852		1,169 950 347 201 45 182 30 12 55 26 10 547 25 54 51 189 2,803 367 18 155 41 451 852
Total	+ 34 , 293	3,804	+ 38,097
R1 OTHR PRSN RELATIONSHIP TO SP	Non-spouse	relative	Total
2 SPOUSE / PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON / DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S SON / 30 BOARDER / RENTER 31 PAID AIDE / HOUSEKE 32 ROOMMATE 33 EX-WIFE / EX-HUSBAN 34 BOYFRIEND / GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 91 OTHER RELATIVE 92 OTHER NONRELATIVE		0 10,386 10,322 403 331 974 891 1,360 571 205 77 115 35 14 37 1,169 950 347 201 455 26 0 0 0 0 0 0 0 0 451 0	950 347 201

Total	8,916	29,181	38,097
R1 OTHR PRSN	Non-rela	ative	
RELATIONSHIP TO SP	0	1	Total
2 SPOUSE/ PARTNER	3,804	0	3,804
3 DAUGHTER	10,386	0	10,386
4 SON	10,322	0	10,322
5 DAUGHTER-IN-LAW	403	0	403
6 SON-IN-LAW	331	0	331
7 STEPDAUGHTER	974	0	974
8 STEPSON 9 SISTER	891 1,360	0	891 1,360
10 BROTHER	571	0	571
11 SISTER-IN-LAW	205	0	205
12 BROTHER-IN-LAW	77	0	77
13 MOTHER	115	Ö	115
14 STEPMOTHER	5	Ö	5
15 MOTHER-IN-LAW	35	0	35
16 FATHER	14	0	14
17 STEPFATHER	3	0	3
18 FATHER-IN-LAW	7	0	7
19 GRANDDAUGHTER	1,169	0	1,169
20 GRANDSON	950	0	950
21 NIECE	347	0	347
22 NEPHEW	201	0	201
23 AUNT 24 UNCLE	45 14	0	45
25 COUSIN	182	0	14 182
26 STEPDAUGHTER'S SON	30	0	30
27 STEPSON'S SON/ DAU	12	0	12
28 DAUGHTER-IN-LAW'S	55	Ő	55
29 SON-IN-LAW'S SON/	26	Ō	26
30 BOARDER/RENTER	0	10	10
31 PAID AIDE/ HOUSEKE	0	547	547
32 ROOMMATE	0	25	25
33 EX-WIFE/ EX-HUSBAN	0	54	54
34 BOYFRIEND/ GIRLFRI	0	51	51
35 NEIGHBOR	0	189	189
36 FRIEND	0	2,803	2,803
37 STAFF PERSON AT TH	0	367	367
38 CO-WORKER) 0	18 155	18 155
39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC	0	41	155
91 OTHER RELATIVE	451	0	451
92 OTHER NONRELATIVE	0	852	852
Total	+ 32 , 985	5,112	38,097
IOCAL	34, 303	J, 112	30,097

^{(37,944} real changes made)

^{(37,944} real changes made)
(3,063 real changes made)
(37,944 real changes made)
(27,270 real changes made)
(37,944 real changes made)
(7,365 real changes made)
(10,211 real changes made)
(9,912 real changes made)
(7,147 real changes made)

R1 OTHR PRSN RELATIONSHIP TO SP	spous	se 1	Total
-8 -1 2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S 29 SON-IN-LAW'S 30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE	3 243 0 19,244 19,064 906 708 1,824 1,684 2,810 1,211 465 171 233 10 78 32 6 19 2,602 2,159 787 431 90 28 422 71 37 130 61 21 1,426 54 139 116 464 6,358 1,014 44 44 44 44 349 88 113 1,682 1,014 44 1,684 6,867 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3	
Total	+ 69 , 174	6 , 867	+ 76,041
R1 OTHR PRSN RELATIONSHIP TO SP	Non-spouse 0	relative 1	Total
-8 -1 2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER	3 243 6,867 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 19,244 19,064 906 708 1,824 1,684 2,810 1,211 465 171 233 10 78 32	6,867 19,244 19,064 906 708

18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S SON/ 30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 21 1,426 54 139 116 464 6,358 1,014 44 349 88 113 0 2,291	19 2,602 2,159 787 431 90 28 422 71 37 130 61 0 0 0 0 0 1,168 0	19 2,602 2,159 787 431 90 28 422 71 37 130 61 21 1,426 54 139 116 464 6,358 1,014 44 349 88 113 1,168 2,291
Total	19,590	56,451	76,041
R1 OTHR PRSN RELATIONSHIP TO SP	Non-rela 0	ntive 1	Total
-8	3 243 6,867 19,244 19,064 906 708 1,824 1,684 2,810 1,211 465 171 233 10 78 32 6 19 2,602 2,159 787 431 90 28 422 71 37 130 61 0 0	0 0 0 0 0 0 0 0 0 0	3 243 6,867 19,244 19,064 906 708 1,824 1,684 2,810 1,211 465 171 233 10 78 32 6 19 2,159 2,159 787 431 90 28 422 71 130 61 21 1,426 54 139 116 464 6,358 1,014

39 MINISTER, PRIEST,	J 0	349	349
40 PSYCHIATRIST, PSYC	0 0	88 113	88 113
91 OTHER RELATIVE 92 OTHER NONRELATIVE	1,168 0	0 2,291	1,168 2,291
Total	+	12,477	·
(35,745 real changes ma		12,117	, , , , , , , ,
(2,440 real changes mad (35,745 real changes mad (35,745 real changes mad (35,745 real changes mad (8,364 real changes mad (8,546 real changes mad (8,352 real changes mad (7,523 real changes mad	de) ade) ade) ade) de) de)		
R1 OTHR PRSN RELATIONSHIP TO SP	spouse 0	1	Total
-8	+ 3	0	3
2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S 29 SON-IN-LAW'S 30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE 92 OTHER NONRELATIVE	763 0 26,553 26,341 1,415 1,094 2,552 2,373 4,208 1,888 746 277 347 15 125 48 9 35 4,121 3,444 1,254 687 140 38 670 115 70 237 105 32 2,405 80 235 175 80 235 175 80 235 175 833 10,399 1,659 71 556 136 202 1,965 4,058	9,307	763 9,307 26,553 26,341 1,415 1,094 2,552 2,373 4,208 1,888 746 277 347 15 125 48 9 35 4,121 3,444 1,254 687 140 38 670 115 70 237 105 32 2,405 80 235 175 80 235 175 80 235 175 80 237 105 32 2,405 80 235 175 80 237 105 32 2,405 80 235 175 80 237 105 32 2,405
Total	102,479	9,307	111,786

18 FATHER-IN-LAW 19 GRANDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S SON/ 30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE	35 4,121 3,444 1,254 687 140 38 670 115 70 237 105 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0	0 0 0 0 0 0 0 0 0 0 0 0 0 32 2,405 80 235 175 833 10,399 1,659 71 556 136 202 0 4,058	35 4,121 3,444 1,254 687 140 38 670 115 70 237 105 32 2,405 80 235 175 833 10,399 1,659 71 556 136 202 1,965 4,058
Total	90,945	20,841	111,786

(33,016 real changes made) (1,969 real changes made) (33,016 real changes made) (21,632 real changes made) (33,016 real changes made) (8,600 real changes made) (7,165 real changes made) (6,991 real changes made) (7,476 real changes made)

30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE 92 OTHER NONRELATIVE	43 3,297 110 331 226 1,234 14,633 2,243 99 762 185 286 2,754 5,992 133,526	0 0 0 0 0 0 0 0 0 0 0 0	43 3,297 110 331 226 1,234 14,633 2,243 99 762 185 2,86 2,754 5,992
R1 OTHR PRSN RELATIONSHIP TO SP	Non-spouse	relative	Total
-8 -1 2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN	3 1,578 11,276 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 32,623 32,381 1,904 1,459 3,158 2,959 5,544 2,538 1,041 390 449 20 168 62 13 5,660 4,762 1,727 936 191 48 921	1,578 11,276 32,623 32,381 1,904 1,459 3,158 2,959 5,544 2,538 1,041 390 449 20 168 62 13 53 5,660 4,762 1,727 936 191 48 921
26 STEPDAUGHTER'S SON 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S SON/ 30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE	0 0 0 0 1 0 1 43 1 3,297	155 101 344 143 0	155 101 344 143 43 3,297
32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND	110 331 226 1,234 14,633	0 0 0 0	110 331 226 1,234 14,633
37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE 92 OTHER NONRELATIVE	2,243 99 762 185 286 0	0 0 0 0 0 0 2,754	2,243 99 762 185 286 2,754 5,992
Total	+ 42 , 298	102,504	144,802

R1 OTHR PRSN RELATIONSHIP TO SP	Non-relat 0	ive 1	Total
-8 -1 2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S 29 SON-IN-LAW'S 30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE 92 OTHER NONRELATIVE	3 1,578 11,276 32,623 32,381 1,904 1,459 3,158 2,959 5,544 2,538 1,041 390 449 20 168 62 13 53 5,660 4,762 1,727 936 191 48 921 155 101 344 143 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	3 1,578 11,276 32,623 32,381 1,904 1,459 3,158 2,959 5,544 2,538 1,041 390 449 20 168 62 13 53 5,660 4,762 1,727 936 191 48 921 155 101 344 143 3,297 110 331 226 1,234 14,633 2,243 99 762 185 286 2,754 5,992
Total (52,285 real changes mad (3,736 real changes mad (52,285 real changes mad (35,336 real changes mad (52,285 real changes mad (52,285 real changes mad (12,301 real changes mad (12,241 real changes mad (11,938 real changes mad (11,157 real changes mad	de) ade) ade) ade) ade) ade) ade)	29,441	144,802
R1 OTHR PRSN RELATIONSHIP TO SP	spouse 0	1	Total
-8 -1 2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON	3 2,490 0 43,043 42,736 2,602 1,998 4,281 4,003	0 0 15,012 0 0 0 0 0	3 2,490 15,012 43,043 42,736 2,602 1,998 4,281 4,003

9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON/ 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S SON/ 30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE	7,788		7,788 3,595 1,500 569 632 26 233 95 17 80 7,813 6,713 2,377 1,265 266 62 1,299 206 151 485 198 4,498 4,498 146 458 310 1,786 21,035 2,924 139 1,086 270 418 3,807 8,603
	+ 182,075	15,012	+
	Non-spouse	relative	Total
-8 -1 2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S SON/	2,490	0 0 0 43,043 42,736 2,602 1,998 4,281 4,003 7,788 3,595 1,500 569 632 26 233 95 17 813 6,713 2,377 1,265 266 1,299 206 151 485 198	2,490 15,012 43,043 42,736 2,602 1,998 4,281 4,003 7,788 3,595 1,500 569 632 26 233 95 17 813 6,713 2,377 1,265 266 1,299 206 151 485 198

30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE 92 OTHER NONRELATIVE	69 4,498 146 458 310 1,786 21,035 2,924 139 1,086 270 418 0 8,603	0 0 0 0 0 0 0 0 0 0	69 4,498 146 458 310 1,786 21,035 2,924 139 1,086 270 418 3,807 8,603
10041	00,217	137,010	137,007
R1 OTHR PRSN RELATIONSHIP TO SP	Non-rel	lative 1	Total
-8 -1 2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON/ 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S			2,490 15,012 43,043 42,736 2,602 1,998 4,281 4,003 7,788 3,595 1,500 569 632 26 233 95 17 80 7,813 6,713 2,377 1,265 266 1,299 206 151 485 198
30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR	0 0 0 0 0	4,498 146 458 310 1,786	69 4,498 146 458 310 1,786
36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE	0 0 0 0 0 0 3,807	21,035 2,924 139 1,086 270 418 0	21,035 2,924 139 1,086 270 418 3,807
92 OTHER NONRELATIVE	0 + 155,345	8,603 41,742	8,603 197,087
IOCAL	1 100,040	71/17	1001

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(51,174 real changes made)
(3,191 real changes made)
(51,174 real changes made)
(33,049 real changes made)
(51,174 real changes made)
(13,584 real changes made)
(10,799 real changes made)
(10,530 real changes made)
(11,720 real changes made)
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R1 OTHR PRSN RELATIONSHIP TO SP					
RELATIONSHIP TO SP -8 -1 2 SPOUSE / PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON / DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S 29 SON-IN-LAW'S 30 BOARDER/RENTER 31 PAID AIDE / HOUSEKE 32 ROOMMATE 33 EX-WIFE / EX-HUSBAN 34 BOYFRIEND / GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE	0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total 3 3,840 18,203 52,128 51,775 3,313 2,542 5,284 4,950 10,095 4,738 2,013 769 799 33 299 129 20 111 10,026 8,730 3,072 1,606 347 81 1,709 268 191 655 263 91 5,792 187 578 400 2,460 28,011 3,661 193 1,430 369 4,943 11,637		
Total	+ 230,058	18,203	248,261		

R1 OTHR PRSN RELATIONSHIP TO SP	Non-spouse 0	relative 1	Total
RELATIONSHIP TO SP -8 -1 2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON/ DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S SON/ 30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC	3,840 18,203 18,203 10 18,203 10 10 10 10 10 10 10 10 10 10 10 10 10	1 0 0 0 52,128 51,775 3,313 2,542 5,284 4,950 10,095 4,738 2,013 769 799 33 299 129 20 111 10,026 8,730 3,072 1,606 347 81 1,709 268 191 655 263 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,840 18,203 52,128 51,775 3,313 2,542 5,242 5,244 4,950 10,095 4,738 2,013 769 799 33 299 129 20 111 10,026 8,730 3,072 1,606 347 81 1,709 268 191 655 263 91 5,792 187 578 400 2,460 28,011 3,661 193 1,430 369 517
91 OTHER RELATIVE 92 OTHER NONRELATIVE	11,637	4,943 0	4,943 11,637
Total	77,372	170 , 889	248,261
R1 OTHR PRSN RELATIONSHIP TO SP			Total
-8 -1 2 SPOUSE/ PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER-IN-LAW 16 FATHER 17 STEPFATHER	3,840 18,203 52,128 51,775 3,313 2,542 5,284		3 3,840 18,203 52,128 51,775 3,313 2,542 5,284 4,950 10,095 4,738 2,013 769 799 33 299 129 20

(49,065 real changes made) (2,729 real changes made) (49,065 real changes made) (30,636 real changes made) (49,065 real changes made) (14,305 real changes made) (9,504 real changes made) (9,314 real changes made) (11,818 real changes made)

30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE 32 ROOMMATE 33 EX-WIFE/ EX-HUSBAN 34 BOYFRIEND/ GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE 92 OTHER NONRELATIVE	109 7,114 240 710 492 3,220 35,308 4,391 263 1,810 486 613 6,103 14,875	0 0 0 0 0 0 0 0 0	109 7,114 240 710 492 3,220 35,308 4,391 263 1,810 486 613 6,103 14,875
Total	276,394	20,932	297 , 326
R1 OTHR PRSN RELATIONSHIP TO SP	Non-spouse 0	relative 1	Total
-8 -1 2 SPOUSE / PARTNER 3 DAUGHTER 4 SON 5 DAUGHTER-IN-LAW 6 SON-IN-LAW 7 STEPDAUGHTER 8 STEPSON 9 SISTER 10 BROTHER 11 SISTER-IN-LAW 12 BROTHER-IN-LAW 13 MOTHER 14 STEPMOTHER 15 MOTHER - IN-LAW 16 FATHER 17 STEPFATHER 18 FATHER-IN-LAW 19 GRANDDAUGHTER 20 GRANDSON 21 NIECE 22 NEPHEW 23 AUNT 24 UNCLE 25 COUSIN 26 STEPDAUGHTER'S SON 27 STEPSON'S SON / DAU 28 DAUGHTER-IN-LAW'S 29 SON-IN-LAW'S SON / 30 BOARDER/RENTER 31 PAID AIDE / HOUSEKE 32 ROOMMATE 33 EX-WIFE / EX-HUSBAN 34 BOYFRIEND / GIRLFRI 35 NEIGHBOR 36 FRIEND 37 STAFF PERSON AT TH 38 CO-WORKER 39 MINISTER, PRIEST, 40 PSYCHIATRIST, PSYC 41 91 OTHER RELATIVE 92 OTHER NONRELATIVE	3 5,235 20,932 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20,932 60,069 59,708 3,999 3,071 6,161 5,802 12,368 5,888 2,543 967 960 39 369 162 25 141 12,255 10,731 3,788 1,961 433 103 2,163 336 226 825 329 109 7,114 240 710 492 3,220 35,308 4,391 263 1,810 486 613 6,103 14,875

R1 OTHR PRSN	Non-relat	ive	
RELATIONSHIP TO SP			Total
-8	+ 3	0	3
-1	5,235	0	
2 SPOUSE/ PARTNER	20,932	0	20,932
3 DAUGHTER	60,069	0	60,069
4 SON	59,708	0	59,708
5 DAUGHTER-IN-LAW	3,999	0	3,999
6 SON-IN-LAW	3,071	0	3,071
7 STEPDAUGHTER	6,161	0	6,161
8 STEPSON	5,802	0	5,802
9 SISTER	12,368	0	12,368
10 BROTHER	5,888	0	5,888
11 SISTER-IN-LAW	2,543	0	2,543
12 BROTHER-IN-LAW	967	0	967
13 MOTHER	960	0	960
14 STEPMOTHER 15 MOTHER-IN-LAW	39 369	0	39 369
15 MOTHER-IN-LAW 16 FATHER	162	0	162
17 STEPFATHER	1 25	0	25
18 FATHER-IN-LAW	141	0	141
19 GRANDDAUGHTER	12,255	Ö	12,255
20 GRANDSON	10,731	Ö	10,731
21 NIECE	3,788	Ō	3,788
22 NEPHEW	1,961	0	1,961
23 AUNT	433	0	433
24 UNCLE	103	0	103
25 COUSIN	2,163	0	2,163
26 STEPDAUGHTER'S SON	336	0	336
27 STEPSON'S SON/ DAU	226	0	226
28 DAUGHTER-IN-LAW'S	825	0	825
29 SON-IN-LAW'S SON/	329	0	329
30 BOARDER/RENTER 31 PAID AIDE/ HOUSEKE	0	109 7 , 114	109 7,114
31 PAID AIDE/ HOUSEKE 32 ROOMMATE	0 I 0	240	1 7,114
33 EX-WIFE/ EX-HUSBAN	I 0	710	710
34 BOYFRIEND/ GIRLFRI	0	492	1 492
35 NEIGHBOR	0	3,220	3,220
36 FRIEND	i 0	35,308	35,308
37 STAFF PERSON AT TH	i 0	4,391	4,391
38 CO-WORKER	0	263	263
39 MINISTER, PRIEST,	0	1,810	1,810
40 PSYCHIATRIST, PSYC	0	486	486
41	0	613	613
91 OTHER RELATIVE	6,103	0	6,103
92 OTHER NONRELATIVE	0	14,875	14,875
m-+-1	1 227 605	60 621	1 207 226
Total	227,695	69,631	297,326

120 121 tab spouse wave, missing

	1		Survey wave	е		
spouse		1 2	3	4	5	Total
	+					+
0	34,29	3 34,881	33,305	31,047	48,549	276,394
1	3,80	4 3,063	2,440	1,969	3,736	20,932
Total	38,09	7 37,944	35,745	33,016	52 , 285	297,326

spouse	Survey 6	wave 7	Total
0	47,983 3,191	46,336 2,729	276,394
Total	51 , 174	49,065	297,326

122 tab otherrel wave, missing

Non-spouse			Survey wave	!		
relative	1	2	3	4	5	Total
0 1	8,916 29,181	10,674 27,270	11,324 24,421	11,384 21,632	16,949 35,336	95,801
Total	38,097	37,944	35,745	33,016	52,285	297,326

Non-spouse relative	Survey 6	wave 7	Total
0 1	18,125 33,049	18,429 30,636	95,801
Total	51 , 174	49,065	297,326

123 tab nonrel wave, missing

Non-relati	1	2	Survey wave		5	Total
ve			J 			IOLAI
0 1	32,985 5,112	30,579 7,365	27,381 8,364	24,416 8,600	39,984 12,301	227,695
Total	38 , 097	37,944	35 , 745	33,016	52 , 285	297,326

Non-relati ve		Survey 6	wave 7	[Total
0 1		37,590 13,584	34,760 14,305		227,695 69,631
Total		51,174	49 , 065		297,326

- 124
- 126 //generate variables indicating help w/ adls & iadls
- 127 local adl insd bed eat bath toil dres
- 128 local iadl laun shop meal bank meds
- 129 local nonadl out money tkpl
- 130

131 gen tkplhlp=. (297,326 missing values generated)

- 132 forvalues $w=1/$w{}$
 - 2. replace tkplhlp=tkplhlp1==1 | tkplhlp2==1 if wave==`w'

 - 3. } (38,097 real changes made)
 - (37,944 real changes made) (35,745 real changes made)

 - (33,016 real changes made)
 - (52,285 real changes made) (51,174 real changes made)

 - (49,065 real changes made)

```
133
134 foreach x in `adl' {
          gen op adl `x'=0
    2.
135 foreach x in `iadl' {
    2.
3. }
          gen op_iadl_`x'=0
136 foreach x in `nonadl' {
           gen op nonadl `x'=0
137
138 forvalues w=1/$w {
    2. foreach x in `adl' {
           replace op_adl_`x'=1 if `x'hlp==1 & wave==`w'
    5. foreach x in `iadl' {
              replace op iadl `x'=1 if `x'hlp==1 & wave==`w'
    8. foreach x in `nonadl' {
               replace op nonadl `x'=1 if `x'hlp==1 & wave==`w'
   9.
   10. }
  11. }
  (1,146 real changes made)
  (725 real changes made)
  (631 real changes made)
  (966 real changes made)
  (496 real changes made)
  (1,220 real changes made)
  (3,849 real changes made)
  (5,406 real changes made)
  (4,857 real changes made)
(3,502 real changes made)
  (1,582 real changes made)
  (1,734 real changes made)
  (1,191 real changes made)
  (5,478 real changes made)
  (1,408 real changes made)
  (1,002 real changes made)
  (996 real changes made)
  (1,465 real changes made)
  (858 real changes made)
  (1,533 real changes made)
  (3,153 real changes made)
  (4,307 real changes made)
  (4,104 real changes made)
  (2,793 real changes made)
  (1,315 real changes made)
  (1,825 real changes made)
  (910 real changes made)
  (4,721 real changes made)
  (1,277 real changes made)
  (987 real changes made)
  (1,020 real changes made)
  (1,346 real changes made)
  (865 real changes made)
  (1,494 real changes made)
  (2,597 real changes made)
  (3,634 real changes made)
  (3,441 real changes made)
  (2,312 real changes made)
  (1,101 real changes made)
  (1,646 real changes made)
  (772 real changes made)
  (4,050 real changes made)
  (1,122 real changes made)
(877 real changes made)
  (912 real changes made)
  (1,106 real changes made)
  (687 real changes made)
```

```
(1,312 real changes made)
  (2,169 real changes made)
  (2,980 real changes made)
  (2,885 real changes made)
  (1,936 real changes made)
  (983 real changes made)
  (1,433 real changes made)
  (731 real changes made)
  (3,396 real changes made)
  (1,512 real changes made)
  (1,084 real changes made)
  (999 real changes made)
  (1,382 real changes made)
  (783 real changes made)
  (1,752 real changes made)
  (3,928 real changes made)
  (5,554 real changes made)
  (5,228 real changes made)
  (3,393 real changes made)
  (1,619 real changes made)
  (2,060 real changes made)
  (1,210 real changes made)
  (5,623 real changes made)
  (1,596 real changes made)
  (1,259 real changes made)
  (1,116 real changes made)
  (1,519 real changes made)
  (971 real changes made)
  (1,856 real changes made)
  (3,436 real changes made)
  (4,804 real changes made)
  (4,590 real changes made)
  (2,883 real changes made)
  (1,395 real changes made)
(2,108 real changes made)
  (1,036 real changes made)
  (5,268 real changes made)
  (1,363 real changes made)
  (1,067 real changes made)
  (1,041 real changes made)
  (1,345 real changes made)
  (747 real changes made)
  (1,595 real changes made)
  (2,947 real changes made)
  (4,145 real changes made)
  (3,983 real changes made)
  (2,488 real changes made)
  (1,224 real changes made)
  (1,733 real changes made)
  (908 real changes made)
  (4,519 real changes made)
141 //generate variables indicating help on a regular schedule
142 gen regular=.
  (297,326 missing values generated)
143 forvalues w=1/$w{
   2. replace regular=0 if wave==`w'
    3. replace regular=1 if helpsched==1 & wave==`w'
  (38,097 real changes made)
  (3,198 real changes made)
  (37,944 real changes made)
  (2,832 real changes made)
  (35,745 real changes made)
  (2,077 real changes made)
  (33,016 real changes made)
  (1,713 real changes made)
  (52,285 real changes made)
  (2,800 real changes made)
```

(51,174 real changes made) (2,637 real changes made) (49,065 real changes made) (2,113 real changes made)

144 tab regular wave, missing

	1		Survey wave			
regular	1	2	3	4	5	Total
0 1	34,899 3,198	35,112 2,832	33,668 2,077	31,303 1,713	49,485 2,800	279,956
Total	38,097	37,944	35,745	33,016	52,285	297,326

,	Survey	wave	
regular	6 +	/	Total
0 1	48,537 2,637	46,952 2,113	279,956
Total	51,174	49,065	297,326

- 146 la def hrsmth -13"-13:Deceased" -12"-12:Zero days/wk" -11"-11:hours missing" /
 - > //
 > -10"-10:days missing" -9 "-9:days+hours mssing" -1"-1:NA" 1"1:Valid" 9999"999
 > 9:<1hr/day",replace
- 147 la val op_ind_hrsmth hrsmth

149 tab op_ind_hrsmth wave

1		Surve	y wave		
op_ind_hrsmth	1	2	3	4	Total
-13:Deceased -12:Zero days/wk -11:hours missing -10:days missing -9:days+hours mssing -1:NA 1:Valid 9999:<1hr/day	253 103 729 26,500 9,206 1,306	2,287 1,264 220 0 372 25,833 7,502 466	2,790 1,024 324 0 558 24,542 6,116 391	2,516 998 237 0 547 23,415 4,921 382	1 16,231 9,399 1,886 103 4,199 211,052 49,937 4,519
 Total	38 , 097	37 , 944	35 , 745	33 , 016	297,326

		Survey wave	<u> </u>	
op_ind_hrsmth	5	6	7	Total
-13:Deceased -12:Zero days/wk -11:hours missing -10:days missing -9:days+hours mssing -1:NA 1:Valid 9999:<1hr/day	2,118 2,374 333 0 1,007 37,743 7,975 735	3,143 1,878 292 0 543 36,863 7,801 654	3,377 1,861 227 0 443 36,156 6,416 585	16,231 9,399 1,886 103 4,199 211,052 49,937 4,519
Total	52 , 285	51,174	49,065	297,326

150
151 tab op ind hrsmth yearnotmonth if wave==1 & opishelper allw==1

op_ind_hrsmth	yearno	otmonth 1	Total
-11:hours missing -10:days missing -9:days+hours mssing 1:Valid 9999:<1hr/day	242 91 638 8,697 1,072	11 12 91 509 234	253 103 729 9,206 1,306
Total	10,740	857	11,597

152 tab op ind hrsmth yearnotmonth if wave==2 & opishelper allw==1

	yearno	otmonth	
op_ind_hrsmth	0	1	Total
-12:Zero days/wk -11:hours missing -9:days+hours mssing 1:Valid 9999:<1hr/day	965 209 334 7,204 428	299 11 38 298 38	1,264 220 372 7,502 466
Total	9,140	684	9,824

153
154 tab opishelper allw

opishelper_ allw	Freq.	Percent	Cum.
-1 1	227,283 70,043	76.44 23.56	76.44 100.00
Total	297 , 326	100.00	

```
156 //generate indicator of imputation category
157 //1=impute, 2=recode to zero, 3=recode to small number hrs/day, 4=no imputatio
 > n needed
158 gen impute_cat=-1
159
160 //wave=1
161
           //1=impute
           replace impute cat=1 if inlist(op ind hrsmth,-11,-10) | ///
162
           (op_ind_hrsmth==-9 & yearnotmonth==0) & ishelper==1 & wave==1
 (2,627 real changes made)
           replace impute_cat=1 if op_ind_hrsmth==9999 & (numdayswk==1 | numdaysm
163
 > n==1) ///
           & yearnotmonth==0 & ishelper==1 & wave==1
 (676 real changes made)
           //2=recode to zero
           replace impute_cat=2 if op_ind_hrsmth==-9 & yearnotmonth==1 & ishelper
 > ==1 & wave==1
 (91 real changes made)
```

```
replace impute cat=2 if op ind hrsmth==9999 & (numdayswk==1 | numdaysm
166
 > n==1) ///
         & yearnotmonth==1 & ishelper==1 & wave==1
 (212 real changes made)
167
          //3=set to small number
          replace impute cat=3 if op_ind_hrsmth==9999 & /// (numdayswk~=1 & numdaysmn~=1) & ishelper==1 & wave==1
168
 (418 real changes made)
169
          //4=imputation not necessary, complete info
replace impute_cat=4 if op_ind_hrsmth==1 & ishelper==1 & wave==1
 (9,206 real changes made)
172 // if wave==2 | wave==3 | wave == 4
    //1=impute, wave 2,3 criteria
173
174
          replace impute_cat=1 if inlist(op_ind_hrsmth,-11,-9) & opishelper_allw
 > ==1 \& inrange(wave, 2, $\overline{w})
 (3,470 real changes made)
          replace impute cat=1 if op ind hrsmth==-12 & yearnotmonth==0 & opishel
 > per allw==1 & inrange(wave, 2, $w)
 (6,877 \text{ real changes made})
176
          //2=recode to zero, wave 2, 3
          replace impute_cat=2 if op_ind_hrsmth==-12 & yearnotmonth==1 & opishel
 > per allw==1 & inrange(wave, 2, $w)
 (2,52\overline{2} \text{ real changes made})
          //3=recode to small number
         replace impute_cat=3 if op_ind_hrsmth==9999 & opishelper_allw==1 & inr
179
 > ange(wave, 2, $w)
 (3,213 real changes made)
          //4=imputation not necessary
181
          replace impute cat=4 if op ind hrsmth==1 & opishelper allw==1 & inrang
 > e(wave, 2, \$\bar{w})
 (40,731 real changes made)
183 la def impute_cat -1"N/A, not helper" 1"Impute" 2"Recode to zero" /// > 3"Recode to small number" 4"No imputation needed"
184 la val impute cat impute cat
185 tab impute cat wave, missing
           Survey wave impute_cat | 1 2 3 4 | Total
 Total | 38,097 37,944
                                              35,745 33,016 | 297,326
           impute_cat | Survey wave
5 6
                                              7 | Total
```

Total | 52,285 51,174 49,065 | 297,326

186
187 tab impute_cat op_ind_hrsmth if wave==1, missing

i manaka sak	op_ind_hrsmth -11:hours -10:days -9:days+h -1:NA Total					
impute_cat	-11:nours 	-10:days	-9:days+n	-1:NA	Total	
N/A, not helper	0	0	0	26,500	26,500	
Impute	253	103	638	0	1,670	
Recode to zero	0	0	91	0	303	
Recode to small numbe	0	0	0	0	418	
No imputation needed	0	0	0	0	9,206	
Total	253	103	729	26,500	38,097	

impute_cat		_hrsmth _9999:<1hr	Total
N/A, not helper Impute Recode to zero Recode to small numbe No imputation needed	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 676 212 418 0	26,500 1,670 303 418 9,206
Total	9,206	1,306	38,097

188 tab impute_cat op_ind_hrsmth if wave==2, missing

	op ind hrsmth				
impute_cat	-13:Decea	-12:Zero	11:hours	-9:days+h	Total
N/A, not helper Impute	2,287	0 965	0 220	0 372	28,120 1,557
Recode to zero	0	299	0	0	299
Recode to small numbe No imputation needed	0	0	0	0	466 7,502
Total	2 , 287	1,264	220	372	37,944

	0	p ind hrsmt	:h	
impute_cat	-1:NA	1:\overline{Valid}	9999:<1hr	Total
N/A, not helper Impute Recode to zero	25,833 0 0	0 0 0	0 0 0	28,120 1,557 299
Recode to small numbe No imputation needed	0 0	7,502	466 0	466 7,502
Total	25,833	7,502	466	37,944

189 tab impute_cat op_ind_hrsmth if wave==3, missing

	op ind hrsmth				
impute_cat	-13:Decea	-12:Zero	-11:hours	-9:days+h	Total
N/A, not helper	2,790	0	0	0	27,332
Impute Recode to zero	0	714 310	324 0	558 0	310
Recode to small numbe No imputation needed	0 1 0	0	0	0	391 6,116
Total	+ 2,790	1,024	324	558	35,745

	op ind hrsmth				
impute_cat	-1:NA	1:∇alid	9999:<1hr	Total	
N/A, not helper Impute Recode to zero Recode to small numbe No imputation needed	24,542 0 0 0 0	0 0 0 0 0 6,116	0 0 0 391 0	27,332 1,596 310 391 6,116	
Total	+ 24,542	6,116	391	35,745	

190 tab impute_cat op_ind_hrsmth if wave==4, missing

impute_cat	 -13:Decea		_hrsmth -11:hours	-9:days+h	Total
N/A, not helper Impute Recode to zero Recode to small numbe No imputation needed	2,516 0 0 0 0	0 667 331 0	0 237 0 0	0 547 0 0	25,931 1,451 331 382 4,921
Total	 2 , 516	998	237	547	33,016

	0	p ind hrsmt	:h	
impute_cat	-1:NA	1:\overline{Valid}	9999:<1hr	Total
N/A, not helper Impute Recode to zero Recode to small numbe No imputation needed	0 0	0 0 0 0 0 4,921	0 0 0 382 0	25,931 1,451 331 382 4,921
Total	+ 23,415	4,921	382	33,016

191 tab impute_cat op_ind_hrsmth if wave==5, missing

	op ind hrsmth				
impute_cat	-13:Decea	-12:Zero	-11:hours	-9:days+h	Total
N/A, not helper Impute Recode to zero Recode to small numbe No imputation needed	2,118 0 0 0	0 1,800 574 0	0 333 0 0	1,007 0 0 0 0	39,861 3,140 574 735 7,975
Total	+ 2,118	2,374	333	1,007	52,285

impute_cat	op -1:NA	_ind_hrsmt 1:Valid	h 9999:<1hr	Total
N/A, not helper Impute Recode to zero Recode to small numbe No imputation needed	37,743 0 0 0	0 0 0 0 0 7,975	0 0 0 735 0	39,861 3,140 574 735 7,975
Total	+ 37,743	7,975	735	52 , 285

impute_cat	 -13:Decea		hrsmth -11:hours	-9:days+h	Total
N/A, not helper Impute Recode to zero Recode to small numbe No imputation needed	3,143 0 0 0 0	1,321 557 0	0 292 0 0	543 0 0 0	40,006 2,156 557 654 7,801
Total	3,143	1,878	292	543	51,174

	0	p ind hrsmt	.h	
impute_cat	-1:NA	1:\overline{Valid}	9999:<1hr	Total
N/A, not helper Impute Recode to zero Recode to small numbe No imputation needed	36,863 0 0 0	0 0 0 0 0 7,801	0 0 0 0 654 0	40,006 2,156 557 654 7,801
Total	+ 36,863	7,801	654	51,174

193 tab impute_cat op_ind_hrsmth if wave==7, missing

impute_cat	 -13:Decea		_hrsmth -11:hours	-9:days+h	Total
N/A, not helper Impute Recode to zero Recode to small numbe No imputation needed	3,377 0 0 0 0 0	0 1,410 451 0	0 227 0 0	0 443 0 0	39,533 2,080 451 585 6,416
Total	3,377	1,861	227	443	49,065

	op ind hrsmth				
impute_cat	-1:NA	1:Valid	9999:<1hr	Total	
N/A, not helper Impute Recode to zero	36,156 0 0	0 0 0	0 0 0	39,533 2,080 451	
Recode to small numbe No imputation needed	0 0 +	0 6,416	585 0 	585 6,416	
Total	36 , 156	6,416	585	49,065	

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¹⁹⁶ //save separate datasets for each round so can run imputation with weighting 197 forvalues w=1/\$w{

^{2.} preserve

^{3. /*}keep op* wave numact yearnotmonth disab anfinwgt0 varstrat varunit ///
> dresid spid justone spouse otherrel nonrel regular oneact impute_cat son ///
> daughter oth_fam */

```
198 keep if wave==`w'
     4. save R`w'_for_hrs_impute.dta,replace
     5. restore
   (259,229 observations deleted)
  file R1 for hrs impute.dta saved
  (259,382 observations deleted) file R2_for_hrs_impute.dta saved
  (261,581 observations deleted)
  file R3_for_hrs_impute.dta saved
   (264,310 \text{ observations deleted})
  file R4 for hrs impute.dta saved
  (245,041 observations deleted)
  file R5_for_hrs_impute.dta saved (246,152 observations deleted)
  file R6 for hrs impute.dta saved
   (248,26\overline{1} \text{ observations deleted})
  file R7_for_hrs_impute.dta saved
199 */
201 //implement matching, do separately for each wave
202 forvalues w=1/$w{
     2. use R`w'_for_hrs_impute.dta, clear
203 svyset varunit [pweight=anfinwgt0], strata(varstrat)
     4 .
204 //wave 1 imputation... need to check what is different if anything for wave 2
205 gen op hrsmth i=0
    5. replace op_hrsmth_i=dhrsmth if impute_cat==4 //use actual value
6. replace op_hrsmth_i=0 if impute_cat==2 //set to zero
7. replace op_hrsmth_i=(.5*numdayswk*4.3) if impute_cat==3 & helpsched==1 //as
  > sign small hours
     8. replace op hrsmth i=(.5*numdaysmn) if impute cat==3 & inlist(helpsched,2,-7
    ,-8) //assign small hours
206 //impute where op_ind_hrsmth=-10, missing days per month
207 gen op_numdays i=\overline{0}
   10. replace op numdays i=numdayswk*4.3 if inlist(impute cat,3,4) & helpsched==1
   11. replace op_numdays_i=numdaysmn if inlist(impute_cat,3,4) & inlist(helpsched
  > ,2,-7,-8)
   12.
208 gen ln opnumdays i=ln(op numdays i) if inlist(impute cat,3,4)
   13.
209 local adjvars spouse otherrel regular yearnotmonth oneact disab ///
  > outhlp insdhlp bedhlp tkplhlp1 tkplhlp2 launhlp ///
  > shophlp mealhlp bankhlp eathlp bathhlp toilhlp ///
     dreshlp medshlp moneyhlp dochlp insurhlp
   14.
210 svy: reg ln_opnumdays_i `adjvars' if inlist(impute_cat,3,4)
   15. predict ln_opnumdays_i2 if impute_cat==1 & op_ind_hrsmth==-10
   16. gen op_numdays_i2=exp(ln_opnumdays_i2) if impute_cat==1 & op_ind_hrsmth==-1
   17. replace op_hrsmth_i= op_numdays_i2*numhrsday if impute_cat==1 & ///
  > op ind hrsmth==-10 & numhrsday>=1
   18. replace op hrsmth i= op numdays i2*.5 if impute cat==1 & ///
  > op_ind_hrsmth==-10 & numhrsday==0
   19.
211 //impute where op_ind_hrsmth=-11, missing hours per day
212 gen op numhrsday \overline{i}=0
   20. replace op_numhrsday_i=.5 if impute_cat==3
21. replace op_numhrsday_i=numhrsday if impute_cat==4
22. gen ln_opnumhrsday_i=ln(op_numhrsday_i) if inlist(impute_cat,3,4)
23. svy: reg ln_opnumhrsday_i adjvars' if inlist(impute_cat,3,4)
   23. svy: reg ln_opnumhrsday_i adjvars' if inlist(impute_cat,3,4)
24. predict ln_opnumhrsday_i2 if impute_cat==1 & op_ind_hrsmth==-11
25. gen op_numhrsday_i2=exp(ln_opnumhrsday_i2) if impute_cat==1 & op_ind_hrsmth
  > ==-11
   26. replace op_hrsmth_i=numdayswk*4.3*op_numhrsday_i2 if impute_cat==1 & ///
  > op ind hrsmt\overline{h}==-11 & helpsched==1
   27. replace op hrsmth i=numdaysmn*op numhrsday i2 if impute cat==1 & ///
     op_ind_hrsmth==-11 \overline{\&} inlist(helpsched, 2, -7, \overline{-8}) \& numdaysmn>=1
   28. replace op hrsmth i=numdayswk*4.3*op numhrsday i2 if impute cat==1 & ///
```

```
op ind hrsmth==-11 & inlist(helpsched, 2, -7, -8) & ///
  > numdaysmn<1 & numdayswk>=1
  29.
213 //impute where op ind hrsmth=-9, -12 or 9999, missing hours and days or <1hr/d
  > ay
214 gen ln_opdhrsmth_i=ln(op_hrsmth_i) if inlist(impute_cat,3,4)
   30. svy: reg ln_opdhrsmth_i `adjvars' if inlist(impute_cat, 3, 4)
31. predict ln_opdhrsmth_i2 if impute_cat==1 & inlist(op_ind_hrsmth, -9, -12, 9999)
  32. gen op_hrsmth_i2=exp(ln_opdhrsmth_i2) if impute_cat==1 & inlist(op_ind_hrsm
  > th, -9, -12, 9999
  33. replace op_hrsmth_i=op_hrsmth_i2 if impute_cat==1 & inlist(op_ind_hrsmth,-9
  > ,-12,9999)
   34. replace op hrsmth i=-1 if ishelper~=1
215 //look at imputed hours per month by imputation category
216 di "where op_ind_hrsmth==-12"
   36. capture noisily: mean op_hrsmth_i if impute_cat==1 & op_ind_hrsmth==-12 [pw
  > eight=anfinwgt0]
   37. di "where op ind hrsmth==-11"
   38. mean op hrsmth i if impute cat==1 & op ind hrsmth==-11 [pweight=anfinwgt0]
   39. di "where op ind hrsmth==-\overline{1}0"
  40. capture noisily: mean op hrsmth i if impute cat==1 & op ind hrsmth==-10 [pw
  > eight=anfinwgt0]
  41. di "where op ind hrsmth==-9"
   42. mean op hrsmth i if impute cat==1 & op ind hrsmth==-9 [pweight=anfinwgt0]
   43. di "where op_ind_hrsmth==99999"
   44. capture noisily: mean op hrsmth i if impute cat == 1 & op ind hrsmth == 9999 [p
  > weight=anfinwgt0]
  45.
217 di "impute cat==2"
   46. mean op_hrsmth_i if op_hrsmth_i~=-1 & impute_cat==2 [pweight=anfinwgt0]
   47. di "impute cat==3"
   48. mean op hrsmth i if op hrsmth i~=-1 & impute cat==3 [pweight=anfinwgt0]
   49. di "impute cat==4"
   50. mean op hrsmth i if op hrsmth i~=-1 & impute cat==4 [pweight=anfinwgt0]
   51.
218 save R`w'_hrs_imputed_added.dta,replace
   52.
219 }
        pweight: anfinwgt0
            VCE: linearized
    Single unit: missing
       Strata 1: varstrat
          SU 1: varunit
          FPC 1: <zero>
  (9,206 real changes made)
  (0 real changes made)
  (78 real changes made)
  (340 real changes made)
  (2,921 real changes made)
  (6,703 real changes made)
  (28,473 missing values generated)
  (running regress on estimation sample)
  Survey: Linear regression
  Number of strata
                                                                               9,624
                               56
                                                   Number of obs
  Number of PSUs
                              112
                                                   Population size = 41,048,905
                                                   Design df
                                                                                  56
                                                                      =
                                                                34)
                                                                              312.37
                                                   F( 23,
                                                                      =
                                                   Prob > F
                                                                      =
                                                                              0.0000
                                                                      =
                                                   R-squared
                                                                              0.4322
```

(40 real changes made)

(418 real changes made)

(9,206 real changes made)

(28,473 missing values generated)

(running regress on estimation sample)

Survey: Linear regression

56 Number of strata = = Number of PSUs 112

9,624 Number of obs = Population size = 41,048,905Design df = 56 F(23, 34) = 100.39 Prob > F = 0.0000 R-squared = 0.1837

	1	Linearized				
ln_opnumhr~i	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
spouse	.0564317	.0456012	1.24	0.221	0349184	.1477819
otherrel	.0624205	.0255773	2.44	0.018	.0111831	.113658
regular	.3052847	.0329666	9.26	0.000	.2392447	.3713246
yearnotmonth	.0200923	.0458621	0.44	0.663	0717805	.1119651
oneact	0130288	.034018	-0.38	0.703	081175	.0551174
disab	.11202	.0278872	4.02	0.000	.0561553	.1678848
outhlp	.0449579	.0330294	1.36	0.179	021208	.1111238
insdhlp	.1500529	.049026	3.06	0.003	.051842	.2482639
bedhlp	.2441647	.0611057	4.00	0.000	.1217552	.3665741
tkplhlp1	.0420772	.0230763	1.82	0.074	0041503	.0883046
tkplhlp2	.1003105	.0297705	3.37	0.001	.040673	.159948
launhlp	.2755963	.0233343	11.81	0.000	.228852	.3223405
shophlp	.0844578	.0284647	2.97	0.004	.0274361	.1414794
mealhlp	.0811433	.0264363	3.07	0.003	.028185	.1341015
bankhlp	.031007	.0263091	1.18	0.244	0216965	.0837106
eathlp	.0705038	.0564336	1.25	0.217	0425462	.1835539
bathhlp	.162383	.0469407	3.46	0.001	.0683495	.2564164
toilhlp	.196473	.0776547	2.53	0.014	.0409119	.3520341
dreshlp	.0401705	.0448144	0.90	0.374	0496035	.1299445
medshlp	.2475913	.0339665	7.29	0.000	.1795482	.3156344

```
      moneyhlp | -.0775432
      .0336455
      -2.30
      0.025
      -.1449433
      -.0101431

      dochlp | .104771
      .0308297
      3.40
      0.001
      .0430118
      .1665303

      insurhlp | -.157476
      .0649034
      -2.43
      0.018
      -.2874931
      -.0274589

      _cons | .309135
      .0444415
      6.96
      0.000
      .220108
      .3981621

 (option xb assumed; fitted values)
 (37,844 missing values generated)
 (37,844 missing values generated)
 (60 real changes made)
 (184 real changes made)
 (9 real changes made)
 (28,473 missing values generated)
 (running regress on estimation sample)
Survey: Linear regression
                                                              Number of obs = 9,624
Population size = 41,048,905
Design df = 56
F( 23, 34) = 241.30
Prob > F = 0.0000
R-squared = 0.4215
Number of strata = 56
Number of PSUs = 112
t P>|t|
                                                                            [95% Conf. Interval]
 (option xb assumed; fitted values)
 (36,783 missing values generated)
 (36,783 missing values generated)
 (1,314 real changes made)
 (26,500 real changes made)
where op ind hrsmth==-12
no observations
where op ind hrsmth==-11
                                             Number of obs =
Mean estimation
                         Mean Std. Err. [95% Conf. Interval]
 op_hrsmth_i | 45.92267 3.138149 39.74233 52.10301
where op ind hrsmth==-10
Mean estimation
                                             Number of obs =
                                                                              103
```

	Mean								
op_hrsmth_i	8.574615	.92081	.14	6.748	19	10.40104			
where op_ind_hrs	smth==-9								
Mean estimation			Number	of obs	=	638			
!	Mean	Std. E	err.	[95% C	onf.	Interval]			
op_hrsmth_i									
where op_ind_hrs									
Mean estimation			Number	of obs	=	676			
!	Mean	Std. E	Err.	[95% C	onf.	Interval]			
op_hrsmth_i									
impute_cat==2									
Mean estimation			Number	of obs	=	303			
	Mean	Std. E	Err.	[95% C	onf.	Interval]			
op_hrsmth_i			ed)						
impute_cat==3									
Mean estimation			Number	of obs	=	418			
	Mean	Std. E	lrr.	[95% C	onf.	Interval]			
op_hrsmth_i									
impute_cat==4									
Mean estimation			Number	of obs	=	9,206			
	Mean	Std. E	Err.	[95% C	onf.	Interval]			
op_hrsmth_i	74.28973	1.8379	924	70.686	99	77.89247			
file R1_hrs_imputed_added.dta saved									
Single unit: n Strata 1: N SU 1: N FPC 1: < (7,502 real char (0 real changes (85 real changes (381 real changes (2,495 real char (5,473 real char (29,977 missing (running regress	inearized missing varstrat varunit (zero> made) made) es made) es made) mges made) uges made) values gen on estima		mple)						
Survey: Linear 1	regression								

```
Number of obs = 7,967
Population size = 40,549,774
Number of strata = 56
Number of PSUs = 112
                                  Design df = 56
F( 23, 34) = 273.74
Prob > F = 0.0000
R-squared = 0.4854
______
t P>|t|
                                         [95% Conf. Interval]
_____
(option xb assumed; fitted values)
(37,944 missing values generated)
(37,944 missing values generated)
(0 real changes made)
(0 real changes made)
(466 real changes made)
(7,502 real changes made)
(29,976 missing values generated)
(running regress on estimation sample)
Survey: Linear regression
Number of strata = 56
Number of PSUs = 112
                               Number of obs =
                                                   7,968
                                  Population size = 40,556,183
                                  Design df = 56
F( 23, 34) = 51.13
Prob > F = 0.0000
R-squared = 0.1809
ln opnumhr~i | Linearized | Linearized | Coef. Std. Err.
                              t P>|t| [95% Conf. Interval]
_____
```

·____·

(option xb assumed; fitted values)

(37,724 missing values generated)

(37,724 missing values generated)

(50 real changes made)

(170 real changes made)

(0 real changes made)

(29,976 missing values generated)

(running regress on estimation sample)

Survey: Linear regression

Number of strata = 56 Number of PSUs = 112

Number of obs = 7,968 Population size = 40,556,183 Design df = 56 F(23, 34) = 178.00 Prob > F = 0.0000 R-squared = 0.4504

ln opdhrsm~i | Linearized | P>|t| [95% Conf. Interval] Linearized

^{(36,607} missing values generated)

^{(36,607} missing values generated)

^{(1,337} real changes made)

^{(28,120} real changes made)

where op ind hrsmth==-12

	Mean	Std.	Err.	[95% (Conf.	Interval]
op_hrsmth_i	15.70768	.7069	9004	14.320	043	17.09492
where op_ind_h:	rsmth==-11					
Mean estimation	า		Number	of obs	=	220
!	Mean	Std.	Err.	[95% (Conf.	Interval]
op_hrsmth_i	50.0305			43.		56.359
where op_ind_h: no observations where op_ind_h:	5					
Mean estimation	ר		Number	of obs	=	372
	Mean	Std.	Err.	[95% (Conf.	Interval]
op_hrsmth_i	17.59416	1.12	7487	15.3	771	19.81123
where op_ind_hano observations impute_cat==2						
Mean estimation	ו		Number	of obs	=	299
!	Mean		Err.	[95% (Conf.	Interval]
op_hrsmth_i		(omit	ced)			
impute_cat==3						
Mean estimation	ו		Number	of obs	=	466
	Mean	Std.	Err.	[95% (Conf.	Interval]
op_hrsmth_i			2403	3.5025	553	4.501757
impute_cat==4						
Mean estimation	ı		Number	of obs	=	7,502
	Mean	Std.	Err.	[95% (Conf.	Interval]
op_hrsmth_i	73.71425	1.905	5108	69.9	797	77.44879
file R2_hrs_imp						
VCE: Single unit: Strata 1: SU 1:	varstrat varunit <zero> anges made) es made) ges made) anges made) anges made) anges made) g values ger</zero>					

```
launhlp | .3123969 .0285702 10.93 0.000 .2551639 .3696298 shophlp | .0578082 .03317 1.74 0.087 -.0086394 .1242558 mealhlp | .1269939 .0286869 4.43 0.000 .0695271 .1844606 bankhlp | .015884 .0285125 0.56 0.580 -.0412335 .0730015 eathlp | .1799637 .0710467 2.53 0.014 .03764 .3222874 bathlp | .1845982 .0650902 2.84 0.006 .0542068 .3149896 toilhlp | .3482768 .1180198 2.95 0.005 .1118548 .5846988 dreshlp | -.0373171 .0722364 -0.52 0.607 -.182024 .1073897 medshlp | .1849502 .0568245 3.25 0.002 .071117 .2987833 moneyhlp | .0162145 .0418607 0.39 0.700 -.0676425 .1000715 dochlp | .1541263 .031081 4.96 0.000 .0918635 .216389 insurhlp | -.0343378 .0799739 -0.43 0.669 -.1945448 .1258691 _cons | .4266783 .0464004 9.20 0.000 .3337271 .5196295
```

(35,421 missing values generated)

(35,421 missing values generated)

(73 real changes made)

(250 real changes made)

(1 real change made)

(29,238 missing values generated)

(running regress on estimation sample)

Survey: Linear regression

Number of strata = 56 Number of PSUs = 112 56

Number of obs = 6,507
Population size = 39,798,563
Design df = 56
F(23, 34) = 168.19
Prob > F = 0.0000
R-squared = 0.4667

______ | Linearized ln_opdhrsm~i | Coef. Std. Err. t P>|t| [95% Conf. Interval]

⁽option xb assumed; fitted values)

^{(34,473} missing values generated)

^{(34,473} missing values generated)

^{(1,272} real changes made)

^{(27,332} real changes made)

where op_ind hrsmth==-12

	Mean	Std. Er	r.	[95%	Conf.	Interval]
op_hrsmth_i	14.64018	.736023	9	13.19	514	16.08521
where op_ind_h	rsmth==-11					
Mean estimation	n	N	umber	of obs	=	324
!	Mean	Std. Er	r.	[95%	Conf.	Interval]
op_hrsmth_i	55.27517	3.05563	6	49.26	 371	61.28663
where op_ind_h no observation where op_ind_h	S					
Mean estimation	n	N	umber	of obs	=	558
!	Mean	Std. Er	r.	[95%	Conf.	Interval]
op_hrsmth_i	18.73445	1.26459	8	16.25	049	21.21841
where op_ind_h no observation impute_cat==2						
Mean estimation	n	N	umber	of obs	=	310
!	Mean		r.	[95%	Conf.	Interval]
op_hrsmth_i		(omitted	.)			
impute_cat==3						
Mean estimation	n	N	umber	of obs	=	391
	Mean	Std. Er	r.	[95%	Conf.	Interval]
op_hrsmth_i			2	4.433	 293	5.675596
impute_cat==4						
Mean estimation	n	N	umber	of obs	=	6,116
	Mean	Std. Er	r.	[95%	Conf.	Interval]
op_hrsmth_i	67.19971	1.8812	9	63.51	172	70.8877
file R3_hrs_im						
VCE: Single unit: Strata 1: SU 1:	varstrat varunit <zero> anges made) es made) ges made) ges made) anges made) anges made) g values ger</zero>	nerated) ation samp	le)			

Survey:	Linear	regression
---------	--------	------------

Number of strata Number of PSUs	=	56 112	Number of obs Population size	=	-,
			Design df	=	56
			F(23, 34)	=	170.75
			Prob > F	=	0.0000
			R-squared	=	0.4720

ln_opnumda~i	 Coef.	Linearized Std. Err.	t	P> t	[95% Conf.	Interval]
spouse	.5389448	.0489551	11.01	0.000	.440876	.6370135
otherrel	.096415	.0306095	3.15	0.003	.0350968	.1577331
regular	.5930351	.0343051	17.29	0.000	.5243137	.6617564
yearnotmonth	1442419	.0828231	-1.74	0.087	3101564	.0216727
oneact	2521449	.0432321	-5.83	0.000	3387492	1655407
disab	.1344615	.0363075	3.70	0.000	.0617289	.2071941
outhlp	.0362634	.0455839	0.80	0.430	0550521	.1275788
insdhlp	.1198898	.0662082	1.81	0.076	0127412	.2525209
bedhlp	.0289062	.0808411	0.36	0.722	1330379	.1908503
tkplhlp1	.0042865	.031816	0.13	0.893	0594486	.0680216
tkplhlp2	2276146	.0409083	-5.56	0.000	3095637	1456655
launhlp	.3163341	.0408879	7.74	0.000	.2344257	.3982425
shophlp	.1972409	.0429879	4.59	0.000	.1111259	.283356
mealhlp	.4014343	.0369929	10.85	0.000	.3273286	.47554
bankhlp	.1075383	.0410596	2.62	0.011	.025286	.1897906
eathlp	0028902	.0836913	-0.03	0.973	1705441	.1647636
bathhlp	.057077	.0657812	0.87	0.389	0746985	.1888525
toilhlp	.1309503	.0844888	1.55	0.127	0383011	.3002016
dreshlp	.1287687	.0580887	2.22	0.031	.0124031	.2451342
medshlp	.1026022	.0405006	2.53	0.014	.0214697	.1837346
moneyhlp	.0180766	.0442788	0.41	0.685	0706245	.1067777
dochlp	.1073062	.0337808	3.18	0.002	.0396351	.1749773
insurhlp	0738072	.0732966	-1.01	0.318	220638	.0730235
_cons	1.264653	.0553879	22.83	0.000	1.153697	1.375608

(382 real changes made)
(4,921 real changes made)
(27,713 missing values generated)
(running regress on estimation sample)

Survey: Linear regression

Number of st	rata = 5	66 Nur	mber of obs	=	5,303
Number of PSU	Js = 11	.2 Por	pulation size	=	37,609,074
		Des	sign df	=	56
		F(23, 34)	=	30.96
		Pro	ob > F	=	0.0000
		R-9	squared	=	0.2142

ln_opnumhr~i	Coef.	Linearized Std. Err.	t	P> t	[95% Conf.	Interval]
spouse otherrel regular yearnotmonth oneact disab outhlp insdhlp bedhlp tkplhlp1	1101905 .1213047 .1838924 155088 .0035548 .0621988 .0564042 0307943 .2828585 .0483347 .1109742	.0513319 .0408604 .0353226 .0745429 .0421986 .0335155 .03924 .0646201 .1059707 .026793	-2.15 2.97 5.21 -2.08 0.08 1.86 1.44 -0.48 2.67 1.80 3.12	0.036 0.004 0.000 0.042 0.933 0.069 0.156 0.636 0.010 0.077		0073603 .203158 .254652 0057607 .0880887 .1293383 .1350115 .0986553 .4951432 .1020076 .1823407

^{(33,016} missing values generated)
(33,016 missing values generated)
(0 real changes made)

⁽⁰ real changes made)

launhlp shophlp mealhlp bankhlp eathlp bathhlp toilhlp dreshlp medshlp	.245514 .0617318 .1495413 .061585 .1811966 .0864734 .3410338 .2159683 .3249501	.0359457 .0251383 .0306292 .0291042 .0728149 .0920411 .1026354 .0722333 .0538953 .0443013	6.83 2.46 4.88 2.12 2.49 0.94 3.32 2.99 6.03 -2.06	0.000 0.017 0.000 0.039 0.016 0.352 0.002 0.004 0.000	.173506 .0113737 .0881837 .0032823 .0353307 0979072 .1354304 .0712676 .2169848 1798552	.3175219 .1120899 .2108989 .1198877 .3270624 .2708539 .5466372 .360669 .4329153 0023628
_						

(32,779 missing values generated)

(32,779 missing values generated)

(55 real changes made)

(182 real changes made)

(0 real changes made)

(27,713 missing values generated)

(running regress on estimation sample)

Survey: Linear regression

Number of strata = 56 Number of obs Number of PSUs = 112 Population size

Number of obs = 5,303
Population size = 37,609,074
Design df = 56
F(23, 34) = 130.75
Prob > F = 0.0000
R-squared = 0.4605

| | Linearized | Std. Err. | t | P>|t| | [95% Conf. Interval] | spouse | .428818 | .0785376 | 5.46 | 0.000 | .2714883 | .5861478 | cherrel | .2178294 | .0561204 | 3.88 | 0.000 | .1054067 | .3302521 | regular | .783394 | .0475008 | 16.49 | 0.000 | .6882385 | .8785495 | yearnotmonth | -.2997251 | .1275116 | -.2.35 | 0.022 | -.5551615 | -.0442888 | oneact | -.2486415 | .0624875 | -.3.98 | 0.000 | -.373819 | -.123464 | disab | .1966733 | .0486886 | 4.04 | 0.000 | 0.991382 | .2942083 | outhlp | .0926853 | .0634405 | 1.46 | 0.150 | -.0344013 | .2197719 | insdhlp | .0891692 | .0933495 | 0.96 | 0.344 | -.0978322 | .2761706 | bedhlp | .3116923 | .127804 | 2.44 | 0.018 | .0556701 | .5677145 | tkplhlpl | .0526695 | .0443091 | 1.19 | 0.240 | -.0360924 | .1414314 | tkplhlp2 | -.1165579 | .0555297 | -2.10 | 0.040 | -.2277972 | -.0053186 | launhlp | .259002 | .0507931 | 5.10 | 0.000 | .4366419 | .6872601 | shophlp | .259002 | .0507931 | 5.10 | 0.000 | .4491872 | .6528183 | bankhlp | .1690593 | .0527261 | 3.21 | 0.002 | .0634362 | .2746824 | eathlp | .1782567 | .1231032 | 1.45 | 0.153 | -.0683486 | .424862 | bathhlp | .1435325 | .1318954 | 1.09 | 0.281 | -.1206858 | .4077508 | toilhlp | .472151 | .1410642 | 3.35 | 0.001 | .1895654 | .7547366 | dreshlp | .3448332 | .1050022 | 3.28 | 0.002 | .1344884 | .555178 | medshlp | .4276202 | .0720038 | 5.94 | 0.000 | .2833792 | .5718612 | moneyhlp | -.0731165 | .0667011 | -1.10 | 0.278 | -.2067348 | .0605018 | dochlp | .2448772 | .0488731 | 5.01 | 0.000 | .1469726 | .3427817 | insurhlp | -1049379 | .1200768 | -0.87 | 0.386 | -3345807 | .1356049 | .2008 | .162006 | .0872828 | 18.56 | 0.000 | 1.445217 | 1.794914 |

⁽option xb assumed; fitted values)

^{(31,802} missing values generated)

^{(31,802} missing values generated)

^{(1,214} real changes made)

^{(25,931} real changes made)

where op ind hrsmth==-12

	Mean 	Std. Err. .7897666	[95% Conf.	Interval]
		.7897666	12.20289	15.30435
where op_ind_h	rsmth==-11			
Mean estimation	n	Number	of obs =	237
	Mean	Std. Err.	 [95% Conf.	Interval]
op_hrsmth_i	45.3443	2.922556	39.58667	51.10193
where op_ind_h no observation where op_ind_h	ersmth==-10			
Mean estimation	n	Number	of obs =	547
	Mean	Std. Err.	 [95% Conf.	Interval]
op_hrsmth_i	19.83486	1.407003	17.07106	22.59866
where op_ind_h no observation impute_cat==2				
Mean estimation			of obs =	
		Std. Err.	 [95% Conf.	
op_hrsmth_i	0	(omitted)		
impute_cat==3				
Mean estimation	n	Number	of obs =	382
	 Mean	Std. Err.	 [95% Conf.	Interval
+ op_hrsmth_i	4.280268	Std. Err. .2808654	3.728028	4.832509
impute_cat==4				
Mean estimation	on	Number	of obs =	4,921
!	Mean	Std. Err.	[95% Conf.	Interval]
		2.050624		
file R4_hrs_im				
VCE: Single unit: Strata 1: SU 1:	varstrat varunit <zero> manges made) mages made) mages made) mages made) manges made)</zero>	nerated) ation sample)		

Survey: Linear rec	gression						
Number of strata Number of PSUs	=	56 112		Number of or Population Design df F(23, Prob > F R-squared	size 34)		41,615,766 56 187.57 0.0000
ln_opnumda~i	Coef.	Linearized Std. Err.	t	P> t	[95%	Conf.	Interval]

ln_opnumda~i	Coef.	Linearized Std. Err.	t	P> t	[95% Conf.	Interval]
spouse otherrel regular yearnotmonth oneact disab outhlp insdhlp bedhlp tkplhlp1 tkplhlp2	.5901718 .0918411 .6664401 .3519573 .3246226 .0858568 .1258303 .171046 .0309755 .0348915 .2182365	.0470392 .0315069 .0354237 .0707579 .0447085 .0276459 .0365956 .0500358 .0601449 .0309127	12.55 2.91 18.81 -4.97 -7.26 3.11 3.44 3.42 -0.52 -1.13 -6.73	0.000 0.005 0.000 0.000 0.000 0.003 0.001 0.001 0.609 0.264	.4959409 .0287252 .5954779 4937024 4141846 .0304754 .0525205 .0708122 1514602 096817 2831598	.6844026 .1549569 .7374023 2102122 2350606 .1412382 .19914 .2712798 .0895093 .0270339 1533133
launhlp	.2212987	.0289501	7.64	0.000	.1633048	.2792927
shophlp mealhlp bankhlp	.1886661 .3633231 .0741053	.0386028 .0386587 .0331238	4.89 9.40 2.24	0.000	.2858804	.4407657
eathlp bathhlp toilhlp	0494396 .1375993 .1010186	.0531744 .0511825 .0616165	-0.93 2.69 1.64	0.356 0.009 0.107	1559608 .0350684 0224142	.0570816 .2401303 .2244513
dreshlp medshlp	0043073 .2167914	.0541041 .0387892	-0.08 5.59	0.937 0.000	1126908 .1390872	.1040762 .2944956
moneyhlp dochlp insurhlp cons	0612134 .0747689 .0287134 1.294865	.0492585 .0290065 .0779589 .0541537	-1.24 2.58 0.37 23.91	0.219 0.013 0.714 0.000	1598901 .016662 127457 1.186382	.0374632 .1328759 .1848838 1.403348
	1 1.274000	.0011001	20.01	0.000	1.100002	1.100040

(52,285 missing values generated) (52,285 missing values generated) (0 real changes made)

(0 real changes made)

(735 real changes made)
(7,975 real changes made)
(43,575 missing values generated)
(running regress on estimation sample)

Survey: Linear regression

Number of stra	ta =	56	Number of obs	=	8,710
Number of PSUs	=	112	Population size	=	41,615,766
			Design df	=	56
			F(23, 34)	=	55.46
			Prob > F	=	0.0000
			R-squared	=	0.1760

ln_opnumhr~i	Coef.	Linearized Std. Err.	t	P> t	[95% Conf.	Interval]
spouse otherrel regular yearnotmonth oneact disab outhlp insdhlp bedhlp tkplhlp1 tkplhlp2	0735505 .1056342 .1784674 .0818495 0062206 .0916614 .1589277 .1180209 .1163501 .0610301	.0346331 .0292972 .0342604 .0551601 .0309995 .0336252 .0406539 .0754303 .0701736 .029125	-2.12 3.61 5.21 1.48 -0.20 2.73 3.91 1.56 1.66 2.10	0.038 0.001 0.000 0.143 0.842 0.009 0.000 0.123 0.103 0.041 0.005	1429289 .0469449 .1098356 0286493 0683201 .024302 .0774882 0330843 0242244 .0026857	0041722 .1643234 .2470993 .1923484 .0558789 .1590207 .2403673 .269126 .2569246 .1193744 .1556383

(51,952 missing values generated) (51,952 missing values generated) (74 real changes made) (259 real changes made) (0 real changes made) (43,575 missing values generated) (running regress on estimation sample)

Survey: Linear regression

Number of obs = 8,710
Population size = 41,615,766
Design df = 56
F(23, 34) = 154.06
Prob > F = 0.0000
R-squared = 0.4288 Number of strata = 56 Number of PSUs = 112 56

______ ln_opdhrsm~i | Linearized | Coef. Std. Err. ln_opdhrsm~i | Coef. Std. Err. t P>|t| [95% Conf. Interval]

^{(49,478} missing values generated)

^{(49,478} missing values generated)

^{(2,807} real changes made)

^{(39,861} real changes made)

where op_ind hrsmth==-12

```
Mean Std. Err. [95% Conf. Interval]
          op hrsmth i | 16.39445 .550631 15.31451 17.47439
where op ind hrsmth==-11
                             Number of obs =
Mean estimation
                                   [95% Conf. Interval]
                Mean Std. Err.
op_hrsmth_i | 47.38086 2.702981 42.06373 52.69799
where op_ind hrsmth==-10
no observations
where op_ind_hrsmth==-9
Mean estimation
                             Number of obs = 1,007
              Mean Std. Err. [95% Conf. Interval]
          1
op_hrsmth_i | 20.63111 1.104936 18.46287 22.79936
where op ind hrsmth==9999
no observations
impute cat==2
                            Number of obs =
Mean estimation
                Mean Std. Err. [95% Conf. Interval]
op hrsmth i | 0 (omitted)
impute cat==3
                             Number of obs =
Mean estimation
                Mean Std. Err. [95% Conf. Interval]
op_hrsmth_i | 4.606265 .2427935 4.129613 5.082918
impute_cat==4
Mean estimation
                             Number of obs = 7,975
______
                Mean Std. Err.
                                   [95% Conf. Interval]
op hrsmth i | 66.99769 1.720874 63.62433 70.37106
file R5 hrs imputed added.dta saved
     pweight: anfinwgt0
      VCE: linearized
 Single unit: missing
    Strata 1: varstrat
      SU 1: varunit FPC 1: <zero>
(7,801 real changes made)
(0 real changes made)
(120 real changes made)
(534 real changes made)
(2,188 real changes made)
(6,267 real changes made)
(42,719 missing values generated)
(running regress on estimation sample)
```

56

112

Survey:	: Ы	ınear	regi	ression	.1
Number	of	strat	а	=	
Number	of	PSUs		=	

Number of	obs	=	8,455
Population	size	=	47,201,947
Design df		=	56
F(23,	34)	=	277.20
Prob > F		=	0.0000
R-squared		=	0.4739

Linearized ln opnumda~i | Coef. Std. Err. t P>|t| [95% Conf. Interval] _____ .6817684 .1573963 .706654 -.2174035 -.2054401 .2213311 .1585394 .1964078 .0056161 -4.25 0.000 -.2473792 9.84 0.000 .260462 5.51 0.000 .1213327 -.0889864 .3935549 .1213327 shophlp | .1905923 .0345738 .2598519

 mealhlp | .3534543
 .0273488
 12.92
 0.000
 .298668

 bankhlp | .0993146
 .035277
 2.82
 0.007
 .0286463

 eathlp | -.0359025
 .0776719
 -0.46
 0.646
 -.1914981

 .298668 .4082406 mealhlp | .169983 .119693 bankhlp .0983016 .2915372 -.1369201 .1424147 -.1019417 .0985962 .082412 medshlp | .1743252 .0378033 moneyhlp | -.0836059 .0462812 dochlp | .0796669 .0305901 insurhlp | -.0144977 .0999017 .2500542 4.61 0.000 .0091064 -1.81 0.076 2.60 0.012 -.1763183 .0183876 .1409463 -0.15 0.885 -.2146249 .1856295 __cons | 1.30037 .0608231 21.38 0.000 1.178526 1.422213 1.422213

(option xb assumed; fitted values)

(42,719 missing values generated)

(running regress on estimation sample)

Survey: Linear regression

Number	of	strata	=	56	
Number	of	PSUs	=	112	

Number of obs	=	8,455
Population size	e =	47,201,947
Design df	=	56
F(23, 34)) =	60.61
Prob > F	=	0.0000
R-squared	=	0.1761

ln_opnumhr~i	 Coef.	Linearized Std. Err.	t	P> t	[95% Conf.	Interval]
spouse otherrel regular yearnotmonth oneact disab outhlp insdhlp bedhlp tkplhlp1	1299766 .1152326 .1300361 0229723 0009082 .0843415 .1594653 011275 .098848 .0166771	.0410499 .0311721 .029995 .0771563 .0315505 .0310525 .0456161 .0704221 .0816599	-3.17 3.70 4.34 -0.30 -0.03 2.72 3.50 -0.16 1.21 0.64	0.002 0.000 0.000 0.767 0.977 0.009 0.001 0.873 0.231 0.522	2122095 .0527874 .069949 177535 0641115 .022136 .0680851 1523475 0647364 0351369	0477437 .1776779 .1901233 .1315905 .0622951 .1465471 .2508454 .1297974 .2624324 .0684911
bedhlp	.098848	.0816599	1.21	0.231	0647364	.2624324

^{(51,174} missing values generated)

^{(51,174} missing values generated)

⁽⁰ real changes made)

⁽⁰ real changes made)

⁽⁶⁵⁴ real changes made)

^{(7,801} real changes made)

(option xb assumed; fitted values) (50,882 missing values generated) (50,882 missing values generated) (64 real changes made) (228 real changes made) (0 real changes made)

(42,719 missing values generated) (running regress on estimation sample)

Survey: Linear regression

Number of obs = 8,455 Population size = 47,201,947 Design df = 56 F(23, 34) = 333.81 Prob > F = 0.0000 R-squared = 0.4369 Number of strata = 56 Number of PSUs = 112 56

______ | Linearized ln_opdhrsm~i | Coef. Std. Err. t P>|t| [95% Conf. Interval]

^{(49,310} missing values generated)

^{(49,310} missing values generated)

^{(1,864} real changes made)

^{(40,006} real changes made)

where op_ind hrsmth==-12

	Mean	Std. Err.	[95% Conf.	Interval]
Mean 		.5986056	13.42611	15.77475
where op_ind_l	hrsmth==-11			
Mean estimation	on	Number	of obs =	292
	Mean	Std. Err.	[95% Conf.	Interval]
op_hrsmth_i	51.84578	2.788372	46.35785	57.33371
where op_ind_l no observation where op_ind_l	hrsmth==-10 ns			
Mean estimation	on	Number	of obs =	543
	Mean	Std. Err.	[95% Conf.	Interval]
op_hrsmth_i	17.20306	1.063947	15.11309	19.29302
where op_ind_l no observation impute_cat==2	hrsmth==9999			
Mean estimation	on	Number	of obs =	557
		Std. Err.		
op_hrsmth_i				
impute cat==3				
Mean estimation	on	Number	of obs =	654
	Mean	Std. Err.	[95% Conf.	Interval]
op_hrsmth_i	4.459655	.2562381	3.956505	4.962805
impute_cat==4				
Mean estimation	on	Number	of obs =	7,801
	Mean	Std. Err.	 [95% Conf.	Interval]
		1.502888		
file R6_hrs_ir				
VCE Single unit Strata 1 SU 1	: varstrat : varunit : <zero> hanges made) es made) ges made) nges made) hanges made) hanges made) hanges made)</zero>	nerated)		

(option xb assumed; fitted values) (48,838 missing values generated)

(48,838 missing values generated)

(53 real changes made)

(174 real changes made)

(0 real changes made)

(42,064 missing values generated)

(running regress on estimation sample)

Survey: Linear regression

Number of strata = 56 Number of PSUs = 112 56

Number of obs = 7,001
Population size = 42,621,876
Design df = 56
F(23, 34) = 135.12
Prob > F = 0.0000
R-squared = 0.4244

______ | Linearized ln_opdhrsm~i | Coef. Std. Err. t P>|t| [95% Conf. Interval] | Coef. Std. Err. | t | P>|t| | [95% Conf. Interval] | spouse | .422301 | .0798742 | 5.29 | 0.000 | .2622937 | .5823083 | otherrel | .2161649 | .0577889 | 3.74 | 0.000 | .1003997 | .33193 | regular | .8416063 | .0505575 | 16.65 | 0.000 | .7403275 | .942885 | yearnotmonth | -.331217 | .1512885 | -2.19 | 0.033 | -.6342843 | -.0281496 | oneact | -.3469612 | .0610246 | -5.69 | 0.000 | -.4692081 | -.2247142 | disab | .1211631 | .0563262 | 2.15 | 0.036 | .0083282 | .2339981 | outhlp | .1992923 | .0606639 | 3.29 | 0.002 | .0777678 | .3208167 | insdhlp | .1583852 | .0905469 | 1.75 | 0.086 | -.023002 | .3397723 | bedhlp | .4604492 | .0961189 | 4.79 | 0.000 | .2679 | .6529985 | tkplhlp1 | -0103986 | .0520314 | -0.20 | 0.842 | -.1146299 | .0938327 | tkplhlp2 | -.1111845 | .0703968 | -1.58 | 0.120 | -.2522062 | .0298371 | launhlp | .5896418 | .0656108 | 8.99 | 0.000 | .4582076 | .7210759 | shophlp | .2699544 | .054224 | 4.98 | 0.000 | .4582076 | .7210759 | shophlp | .4134476 | .0514765 | 8.03 | 0.000 | .3103278 | .5165674 | bankhlp | .1117541 | .0452708 | 2.47 | 0.017 | .0210657 | .2024425 | eathlp | .3513473 | .1136319 | 3.09 | 0.003 | .1237152 | .5789794 | bathhlp | .3028474 | .1325251 | 2.29 | 0.026 | .0373677 | .5683271 | dreshlp | .3028474 | .1325251 | 2.29 | 0.026 | .0373677 | .5683271 | dreshlp | .3725014 | .0651229 | 5.72 | 0.000 | .2420445 | .5029583 | moneyhlp | .1571025 | .0788491 | -1.99 | 0.051 | -.3150561 | .0008511 | dochlp | .2729656 | .0511643 | 5.34 | 0.000 | .1704712 | .37546 | insurhlp | -0742034 | .1438664 | -0.52 | 0.608 | -.3624024 | .2139956 | .20010 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .212278 | .2122

^{(47,212} missing values generated)

^{(47,212} missing values generated)

^{(1,853} real changes made)

^{(39,533} real changes made)

where op_ind hrsmth==-12

```
Mean Std. Err. [95% Conf. Interval]
         _____
 op hrsmth i | 15.1476 .5411432 14.08607 16.20914
 where op ind hrsmth==-11
                        Number of obs =
 Mean estimation
                                          227
                             [95% Conf. Interval]
              Mean Std. Err.
 op hrsmth i | 42.59677 3.262759 36.16745 49.02609
 where op_ind hrsmth==-10
 no observations
 where op_ind_hrsmth==-9
                        Number of obs = 443
 Mean estimation
             Mean Std. Err. [95% Conf. Interval]
         1
 ______
 op hrsmth i | 17.85096 1.813534 14.28673 21.41518
 where op ind hrsmth==9999
 no observations
 impute cat==2
                        Number of obs =
 Mean estimation
              Mean Std. Err. [95% Conf. Interval]
 op hrsmth i | 0 (omitted)
 impute cat==3
                        Number of obs =
                                          585
 Mean estimation
              Mean Std. Err. [95% Conf. Interval]
 op_hrsmth_i | 4.450013 .2537683 3.951603 4.948423
         -----
 impute_cat==4
 Mean estimation
                        Number of obs =
 ______
              Mean Std. Err.
                             [95% Conf. Interval]
 op hrsmth i | 60.22063 1.699959 56.88814 63.55312
 file R7 hrs imputed added.dta saved
220
222 log close
    name: <unnamed>
     log: E:\nhats_code\NHATS data setup\logs\/1a-help_hours_imputation
   18 Apr_2019.smcl
  log type: text
 closed on: 18 Apr 2019, 11:14:07
                          _____
```