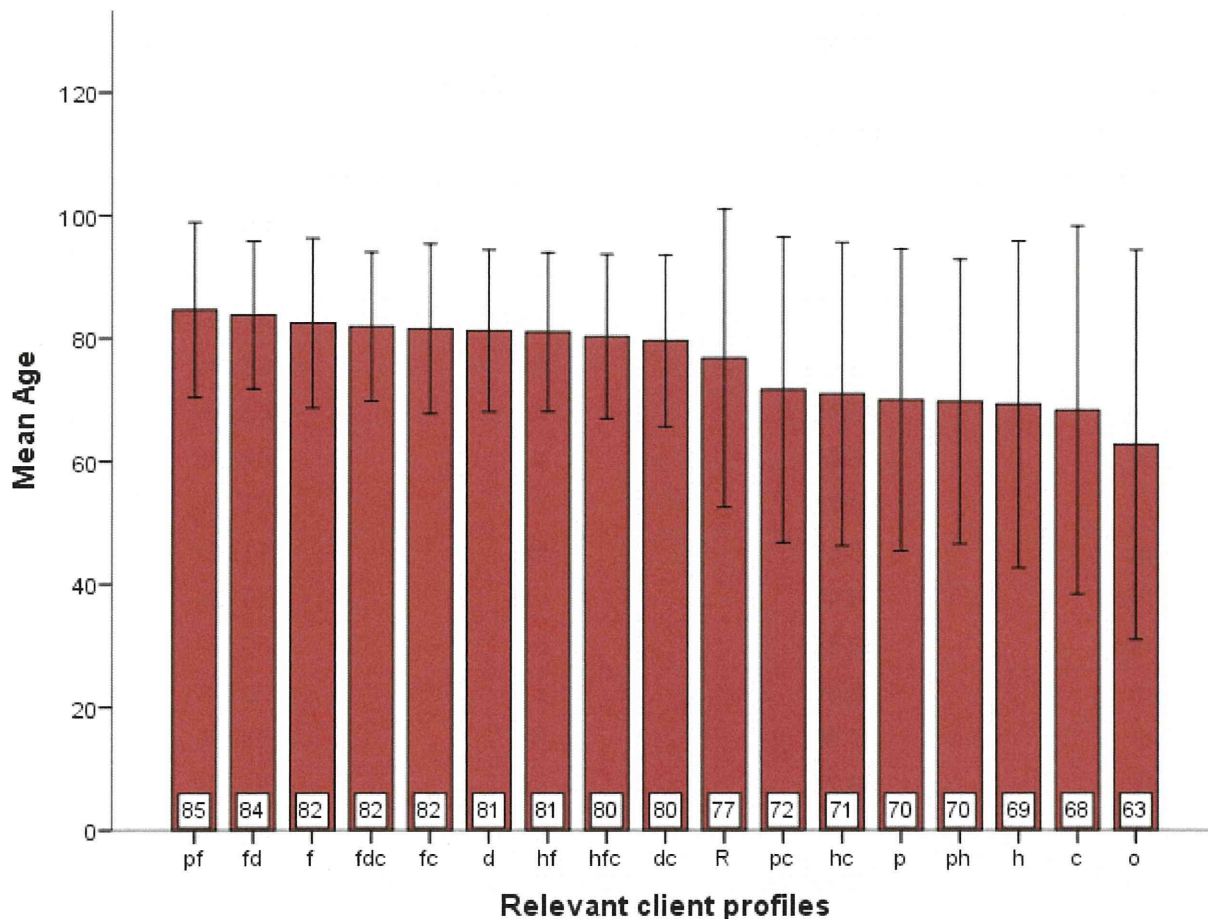


4.4 Comparing relevant client profiles on demographics

4.4.1 Age

The mean age of all clients was 74 (Figure 2). Dementing elderly are included in the profiles with the highest mean age, ranging from 81 to 84. Clients with the profile 'palliative care clients and frail elderly' have the highest mean age of 85, whereas any other palliative care client profile has a mean age ranging from 70-72.

FIGURE 8 MEAN AGE PER RELEVANT CLIENT PROFILE



Error Bars: +/- 2 SD

c = chronically ill clients, d = dementing elderly, f = frail elderly, h = hospital discharged, o = other, p = palliative care clients, R = rare combinations

4.4.2 Gender

The female / male ratio for all clients was 45,405 / 31,726 (59% / 41%). This ratio differs per client profile. More men than women are palliative care clients (on average 54% vs. 46%), except for clients who are also frail elderly. More women than men are characterized as frail elderly (on average 67.5% vs. 32.5%).

TABLE 4 GENDER PER CLIENT PROFILE

Gender per client profile		Gender per client profile	
	Male		Female
ALL CLIENTS		ALL CLIENTS	
	41.1%		58.9%
PER CLIENT PROFILE		PER CLIENT PROFILE	
p	54.7%	f	68.9%
pc	54.1%	hf	68.0%
ph	53.8%	fd	67.9%
pf	48.3%	fc	65.1%
dc	46.7%	h	63.8%
R	46.6%	d	62.5%
c	44.7%	o	61.2%
hc	43.5%	fdc	61.2%
hfc	40.4%	hfc	59.6%
fdc	38.8%	hc	56.5%
o	38.8%	c	55.3%
d	37.5%	R	53.4%
h	36.2%	dc	53.3%
fc	34.9%	pf	51.7%
fd	32.0%	ph	46.2%
hf	32.0%	pc	45.9%
f	31.1%	p	45.3%

c = chronically ill clients, d = dementing elderly, f = frail elderly, h = hospital discharged, o = other, p = palliative care clients, R = rare combinations

4.4.3 Living unit

The vast majority of clients live with a partner only (46%) or live alone (45%). Results per profile show that most frail elderly live alone (on average for the most prevalent profiles 60%) as opposed to with a partner (35%). Most palliative care clients live with a partner only (on average 62%), except the profile 'pf', as opposed to alone (25%). Young clients living with parents are most prevalent in the group 'other' or in the group 'chronically ill clients'.

TABLE 5 LIVING UNIT PER CLIENT PROFILE

Living unit per client profile						
	I.	II.	III.	IV.	V.	VI.
ALL CLIENTS						
	46.2%	44.7%	4.0%	2.2%	2.2%	0.8%
PER CLIENT PROFILE						
c	45.1%	42.3%	5.0%	2.5%	2.8%	2.3%
d	47.6%	46.9%	1.2%	2.0%	2.5%	0.0%
dc	56.1%	38.8%	1.6%	1.4%	2.0%	0.1%
f	33.6%	61.9%	0.8%	1.7%	2.0%	0.0%
fc	35.8%	58.8%	1.0%	2.4%	2.6%	0.1%
fd	34.2%	60.4%	0.9%	2.6%	1.9%	0.1%
fdc	40.3%	53.2%	1.1%	2.5%	2.8%	0.1%
h	45.9%	44.0%	5.0%	2.4%	1.6%	1.2%
hc	47.8%	42.3%	3.8%	3.1%	2.2%	0.8%
hf	39.3%	56.9%	1.1%	1.2%	1.4%	0.0%
hfc	31.3%	53.9%	1.4%	1.6%	1.8%	0.1%
o	36.7%	46.7%	7.1%	3.0%	2.3%	4.2%
p	60.8%	26.0%	8.3%	2.1%	2.3%	0.6%
pc	63.7%	26.3%	4.5%	2.4%	2.1%	1.0%
pf	42.1%	51.9%	0.5%	3.6%	1.9%	0.0%
ph	62.6%	23.9%	8.9%	2.2%	2.1%	0.4%
R	48.9%	42.7%	2.6%	2.1%	2.9%	0.8%

I. HAS AN INDEPENDENT HOUSEHOLD WITH PARTNER ONLY

II. LIVES ALONE AND INDEPENDENTLY (SINGLE HOUSEHOLD)

III: HAS A HOUSEHOLD WITH PARTNER AND CHILDREN LIVING AT HOME

IV: IS A HOUSEHOLD OF ONE ADULT WITH 1 OR MORE CHILDREN

V: ANOTHER MULTI-PERSON HOUSEHOLD

VI. CHILD LIVING TOGETHER WITH PARENT(S) IN PARENTAL HOME

c = chronically ill clients, d = dementing elderly, f = frail elderly, h = hospital discharged, o = other, p = palliative care clients, R = rare combinations

4.5 The amount of care delivered

The amount of care delivered was measured with the following outcomes:

- number and duration of **care episodes**
- **time spent**
 - total time spent
 - hours of care per week
- **number of visits**
 - total number of visits
 - number of visits per week

4.5.1 Care episodes

The total number of care episodes for all clients, and the duration of the care episode for clients with one episode were analyzed. The mean of the total number of care episodes was 1.35 while the median was 1. A total of 79.4% of clients had one care episode, 14% had two episodes, 3.8% of clients had three episodes, and the remaining 2.8% had four episodes or more. The maximum was 43 episodes. One client with for example 43 episodes received visits approximately once every 5 weeks for one hour; each visit therefore counted as an episode (see paragraph 3.2.2 for explanation).

Duration of care episode

The mean duration of the care episodes for all clients with one completed care episode was 20.0 (SD 37.1) weeks with a median of 5.9 (IQR 2.1-17.4). The mean is not an accurate representation of the data because there is a highly skewed distribution (Figure 9). Therefore, tables show the median and the interquartile range, as well as the 95th percentile, as more accurate representation of the data. Several outliers were checked to see whether data were correct and did not result from faulty registration of time. These outliers were clients requiring long term home health care.

Figure 10 shows duration of care episode in 4-week intervals. An episode of one day to 4 weeks was observed in 39.6% of clients, 4 to 8 weeks in 19.5%; 8 to 12 weeks in 9.3%; 12 to 16 weeks in 5.3%; 16 to 20 weeks in 3.5%; 20 to 24 weeks in 2.4% and 24 weeks and more in the remaining 15.5%.

Table 6 shows results per client profile. There is a large difference between groups in duration of care episode, ranging from a median of 60.5 weeks for the profile 'frail elderly, dementing and chronically ill', to a median of 3.1 weeks for the profile 'other'. All profiles show highly skewed distributions. All profiles that include the client type characteristic 'dementing elderly' belong to the top four profiles with the longest duration of care episode. Total duration of care is doubled when clients are not 'only' typified as dementing elderly, but also as frail elderly and chronically ill. This group of clients is the group by far receiving most long term care. Palliative care clients however, are among the groups of clients receiving short term care, with a median of 3.3 weeks (IQR 1.1-9.9). Clients with the profile 'frail elderly and palliative care client' receive care for five times longer.

FIGURE 9 TOTAL DURATION OF CARE EPISODE

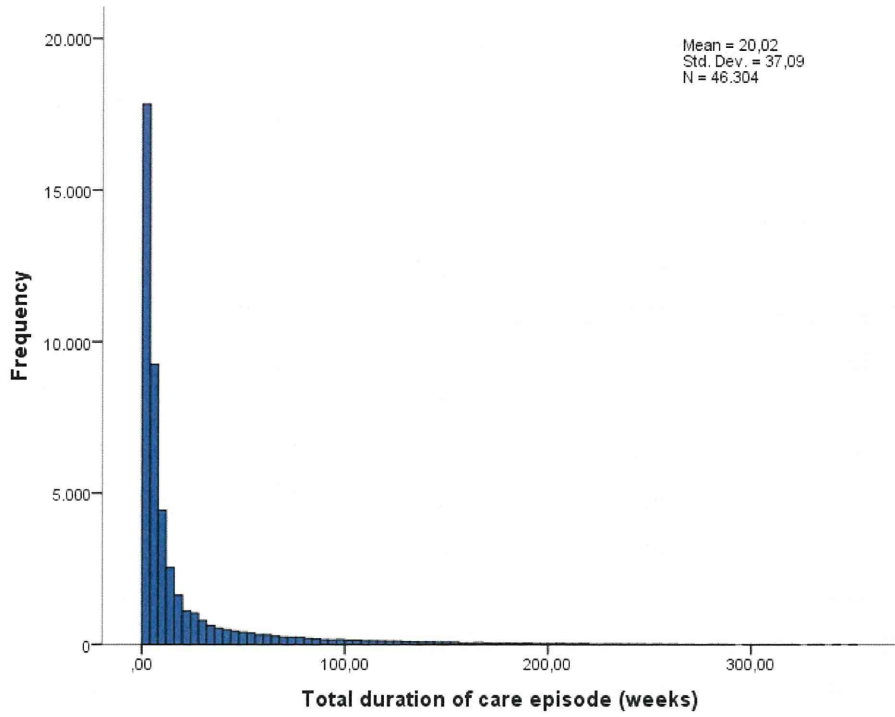


FIGURE 10 TOTAL DURATION OF CARE EPISODE, BY 4-WEEK UNITS

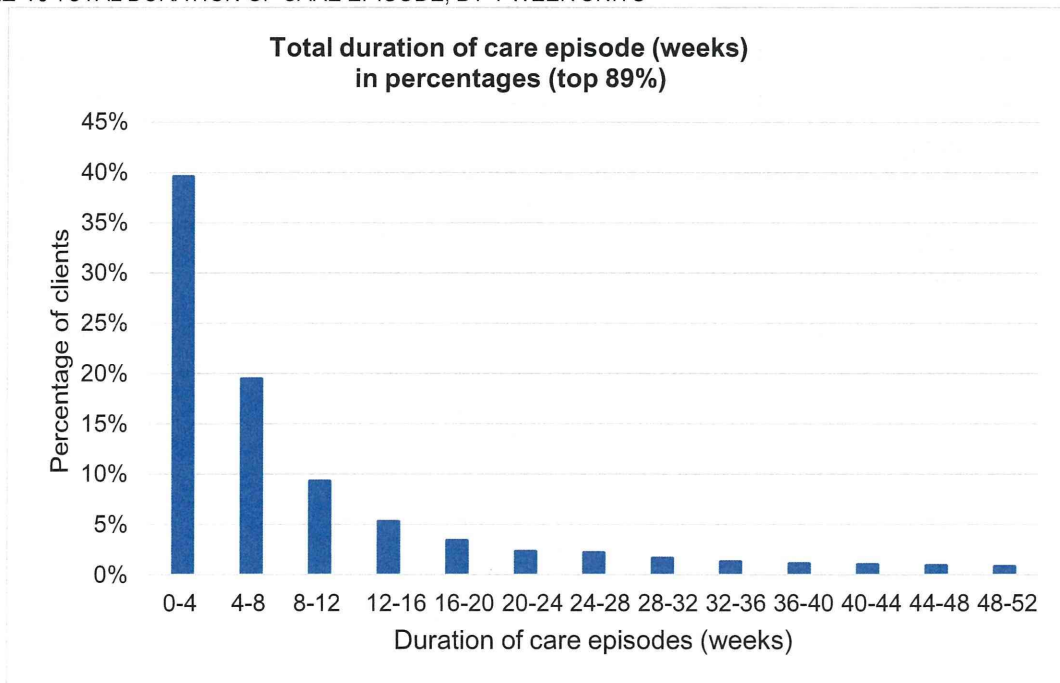


TABLE 6 TOTAL DURATION OF CARE EPISODE (WEEKS)

Total duration of care episode (weeks)							
		mean	SD	median	Interquartile range (IQR)		
					25%	75%	95%
ALL CLIENTS WITH COMPLETED EPISODES							
	(N=46304)	20.0	37.1	5.9	2.1	17.4	99.6
ALL CLIENTS WITH COMPLETED EPISODES – PER RELEVANT CLIENT PROFILE							
fdc	(N=212)	78.6	70.4	60.5	16.9	125.7	221.6
dc	(N = 249)	62.4	68.5	37.4	13.4	92.4	213.1
fd	(N = 992)	52.4	54.0	33.6	10.6	76	167.5
d	(N = 3823)	45.1	45.9	30.7	10.0	64.7	141.0
fc	(N = 1120)	56.4	67.8	22.1	4.9	93.6	194.8
pf	(N = 616)	35.8	50.1	15.0	5.3	43.4	154.9
R	(N = 1264)	39.9	53.2	14.4	3.9	58.3	154.4
pc	(N = 758)	32.7	47.7	11.1	3.7	40.1	137.2
hfc	(N = 230)	24.6	36.3	8.7	3.0	29.5	113.1
c	(N = 4485)	27.5	47.5	7.3	2.6	26.5	135.1
hc	(N = 533)	17.6	29.9	6.6	2.5	17.6	83.9
hf	(N = 753)	14.1	24.5	6.3	3	13.7	56.2
f	(N = 6280)	19.9	37.7	6.1	2.4	16.3	100.7
ph	(N = 1520)	11.7	17.0	5.7	1.9	14.1	42.3
h	(N = 12155)	7.9	12.4	4.9	2.1	8.4	25.7
p	(N = 10637)	11.0	23.2	3.3	1.1	9.9	50.4
o	(N = 677)	8.5	20.6	3.1	1.4	7.0	31.0

c = chronically ill clients, d = dementing elderly, f = frail elderly, h = hospital discharged, o = other, p = palliative care clients, R = rare combinations

Comparison of groups on a statistical level, using log transformed data to correct for outliers, shows that many groups differ significantly from each other on duration of care episode (Appendix D, Table 36). Fourteen homogenous subsets were defined based on significance testing. These tests are on differences between means. The tables on subsets however show medians of the profile because these are more informative. Results show that there is overlap with other groups, considering all medians and IQR values. Profile 'o' in the first subset has a median of 3.1 and IQR of 1.4–7 / 31 weeks (for 25%-75% / 95% of clients). Episodes of 31 weeks however are also found in profile 'fdc', which is in the last subset.

Examples of interpretation of the table are:

- Profile 'o' does not differ from 'p'. Both of them differ from all others.
- Profile 'fdc' does not differ from 'dc', but it does from all others.
- Profile 'fd' does not differ from 'd' or 'dc'

TABLE 7 HOMOGENEOUS SUBSETS FOR TOTAL DURATION OF CARE EPISODE (WEEKS)

		Homogenous subsets for Total duration of care episode (weeks)													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
o	(N = 677)	3.1													
p	(N = 10637)	3.3													
h	(N = 12155)		4.9												
ph	(N = 1520)			5.7											
f	(N = 6280)				6.1	6.1		6.1							
hf	(N = 753)				6.3	6.3		6.3							
hc	(N = 533)				6.6	6.6	6.6	6.6							
c	(N = 4485)					7.3	7.3	7.3							
hfc	(N = 230)				8.7	8.7	8.7	8.7	8.7						
pc	(N = 758)							11.1	11.1	11.1					
R	(N = 1264)								14.4	14.4					
pf	(N = 616)								15.0	15.0					
fc	(N = 1120)										22.1	22.1			
d	(N = 3823)										30.7	30.7	30.7	30.7	
fd	(N = 992)											33.6	33.6	33.6	
dc	(N = 249)												37.4	37.4	37.4
fdc	(N = 212)														60.5

c = chronically ill clients, d = dementing elderly, f = frail elderly, h = hospital discharged, o = other, p = palliative care clients, R = rare combinations
 Bold values indicate the reference profile in the subset. A reference profile is the profile to which others were compared pairwise.

4.5.2 Time spent in hours

The total hours of care and mean hours of care per week were analyzed. The total could only be calculated for clients who had completed episodes. The mean number of hours of care per week was calculated for clients currently in care and for clients with completed episodes. Both outcomes could only be calculated for clients with one care episode. They both showed highly skewed distributions (Figure 11, Figure 12). This was also the case for all relevant client profiles. Therefore, tables show the median and the interquartile range, as well as the 95th percentile, as more accurate representation of the data. Several outliers were checked to see if data were correct and did not result from faulty registration of time. These outliers were all clients requiring a large amount of care.

Total number of hours of care

The mean of the total hours of care for all groups was 133 (SD 352), while the median was 30.1 (IQR 10,6-103,3). Results per client profile are shown in Table 8. There is a large difference between groups, ranging from 280 hours for the profile 'frail elderly, dementing and cthonically ill', to a median of 8 hours for the profile 'other'. All profiles with the client type characteristic 'dementing elderly' belong to the top six profiles with highest total number hours of care. The total is (more than) doubled to a median of 280, when clients are not 'only' typified as dementing elderly, but also as frail elderly and chronically ill. The results also show that frail elderly or chronically ill clients, are among the profiles receiving the lowest total hours of care. Clients who are typified as both, receive four times as much care (median of 80 hours).

FIGURE 11 TOTAL NUMBER OF HOURS OF CARE

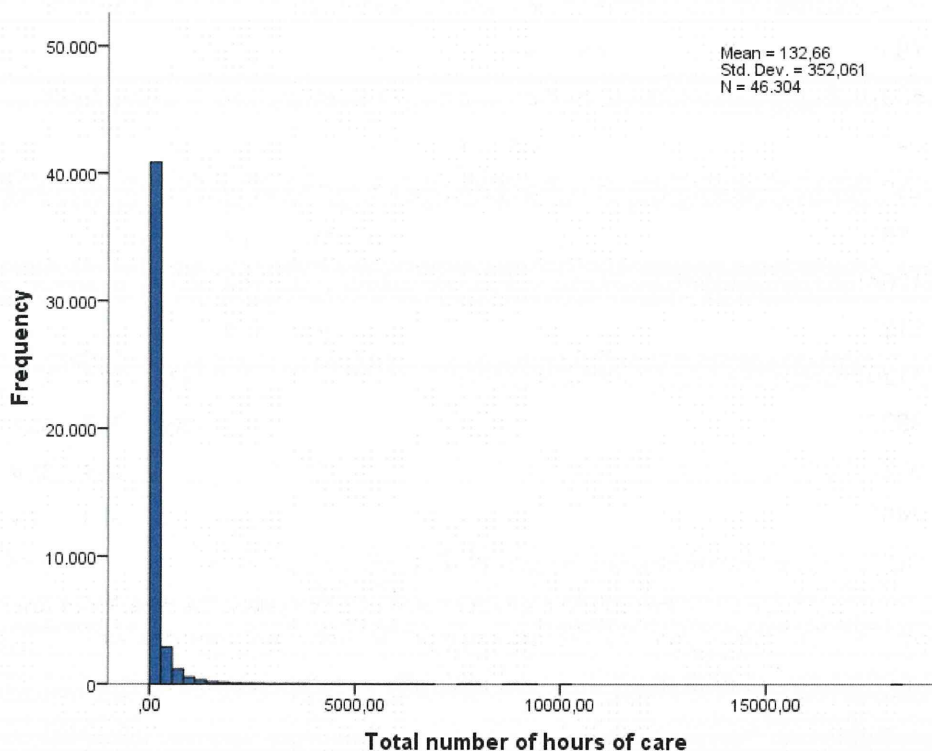


TABLE 8 TOTAL NUMBER OF HOURS OF CARE, SUMMARY

Total number of hours of care							
		mean	SD	median	Interquartile range (IQR)		
					25%	75%	95%
ALL CLIENTS WITH COMPLETED EPISODES							
	(N = 46304)	133	352	30	11	103	602
ALL CLIENTS WITH COMPLETED EPISODES – PER RELEVANT CLIENT PROFILE							
fdc	(N = 212)	548	725	280	62	763	2075
dc	(N = 249)	405	610	159	40	525	1616
pf	(N = 616)	376	889	154	55	409	1417
fd	(N = 992)	270	358	133	38	362	935
pc	(N = 758)	352	651	122	45	360	1697
d	(N = 3823)	239	334	121	35	309	863
R	(N = 1264)	365	720	115	24	391	1586
fc	(N = 1120)	298	497	80	15	362	1331
ph	(N = 1520)	157	267	76	30	171	583
p	(N = 10637)	149	399	51	20	132	575
hfc	(N = 230)	123	217	36	12	129	586
hc	(N = 533)	90	236	23	9	67	296
hf	(N = 753)	65	181	22	10	51	256
c	(N = 4485)	136	357	20	7	86	703
f	(N = 6280)	79	215	17	7	50	372
h	(N = 12155)	31	67	16	7	32	101
o	(N = 677)	30	163	8	4	19	88

c = chronically ill clients, d = dementing elderly, f = frail elderly, h = hospital discharged, o = other, p = palliative care clients, R = rare combinations

Comparison of groups on a statistical level, using log transformed data to correct for outliers, shows that many groups differ significantly from each other on total number of hours of care (Appendix D, Table 37). Fourteen homogenous subsets were defined based on significance testing. These tests are on differences between means. The tables on subsets however show medians of the profile because these are more informative. Results show that there is overlap with other groups, considering all medians and IQR values. Profile 'o' in the first subset has a median of 8.3 and IQR of 4–19 / 88 hours (for 25%-75% / 95% of clients). Total numbers of hours of care of 88 however are also found in profile 'fdc', which is in the last subset.

Examples of interpretation of the table are:

- Profile 'o' differs from all others, as do 'h' and 'f'.
- Profile 'd' does not differ from 'R', 'fd' or 'dc', but it does from all others.
- Profile 'R' does not differ from 'd', 'dc', 'fd', or 'pc', but it does from all others.

TABLE 9 HOMOGENOUS SUBSETS FOR TOTAL NUMBER OF HOURS OF CARE

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
o	(N = 677)	8.3													
h	(N = 12155)		15.8												
f	(N = 6280)			17.0											
hf	(N = 753)				22.2	22.2									
c	(N = 4485)				20.4	20.4									
hc	(N = 533)				23.3	23.3	23.3								
hfc	(N = 230)					36.3	36.6	36.6							
p	(N = 10637)						51.3	51.3							
ph	(N = 1520)								75.8						
fc	(N = 1120)									80.1					
d	(N = 3823)										120.9	120.9	120.9		
R	(N = 1264)									115.0	115.0	115.0	115.0		
fd	(N = 992)									133.2	133.2	133.2	133.2		
pc	(N = 758)										121.6	121.6	121.6	121.6	
dc	(N = 249)									158.7	158.7	158.7	158.7	158.7	158.7
pf	(N = 616)											154.4	154.4	154.4	154.4
fdc	(N = 212)													279.5	279.5

c = chronically ill clients, d = dementing elderly, f = frail elderly, h = hospital discharged, o = other, p = palliative care clients, R = rare combinations
 Bold values indicate the reference profile in the subset. A reference profile is the profile to which others were compared pairwise.