

informal care. At least, however, our results indicated that both mechanisms were likely at work.

In conclusion, the subsidy policy strongly affected utilization patterns of homecare services among qualified frail elderly in the LTCL. Although the subsidy might induce overuse of home help, it might also allow easier access to home help service especially among cases of higher care levels and single households that were susceptible to more intensive care needs and less capacity of informal care. The current study suggests the necessity and importance of further investigation on the effect of socioeconomic conditions of households and social insurance policy that determine the care service utilization of the beneficiaries (Hays and Branch 1994).

NOTES:

1. Benefits limit

The monthly benefits limit for total homecare utilization at each care level is as follows:

Support-required: ¥61,500 (\$550), Level 1: ¥165,800 (\$1,500), Level 2: ¥194,800 (\$1,800), Level 3: ¥267,500 (\$2,400), Level 4: ¥306,000 (\$2,800) and Level 5: ¥358,000 (\$3,200) (Ministry of Health, Labor and Welfare 2002a); exchange rate: \$1=¥110.

2. Income criteria for the subsidy among aged 65 and over

Annual household income (1) lower than ¥2,280,000 (\$21,000) for those without

dependents, or (2) lower than ¥3,280,000 (\$29,000) for those with dependents (Ministry of Health, Labor and Welfare 2002a); exchange rate: \$1=¥110.

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TABLE 1: Basic Characteristics of the subsidized and non-subsidized groups

Variables, n (%)	All N= 704	Subsidy status		χ^2	p
		Non-subsidized N= 567	Subsidized N= 137		
Age, year				0.3	0.854
65 - 74	117 (17)	96 (17)	21 (15)		
75 - 84	352 (50)	284 (50)	68 (50)		
85 +	235 (33)	187 (33)	48 (35)		
Gender				3.4	0.067
Male	182 (26)	155 (27)	27 (20)		
Care level				19.8	0.001
Support-required	168 (24)	149 (26)	19 (14)		
Level 1	318 (45)	253 (45)	65 (47)		
Level 2	103 (15)	78 (14)	25 (18)		
Level 3	59 (8)	45 (8)	14 (10)		
Level 4	37 (5)	32 (6)	5 (4)		
Level 5	19 (3)	10 (2)	9 (7)		
Household composition				12.7	0.002
Single	348 (50)	262 (47)	86 (63)		
With spouse	192 (27)	168 (30)	24 (18)		
With other(s)	160 (23)	133 (24)	27 (20)		
Length of care, year				36.1	<.001
< 2	312 (45)	277 (50)	35 (26)		
2 ~ 5	203 (29)	163 (29)	40 (30)		
5 +	179 (26)	119 (21)	60 (44)		
Comorbidity					
Cerebrovascular disease	170 (24)	140 (25)	30 (22)	0.5	0.493
Organic disease	33 (5)	25 (4)	8 (6)	0.5	0.477
User †					
Home help	261 (37)	124 (22)	137 (100)		
Other homecare	609 (87)	523 (92)	86 (63)		

† Percentage of subjects who used home help (or homecare services other than home help) is presented.

TABLE 2: Utilization proportions of total homecare services to benefit limits among the subsidized (N=567) and the non-subsidized (N=137), by beneficiaries' characteristics

Utilization proportion, %	Total homecare services, mean (SD)			
	Non-subsidized		Subsidized	
All	41	(25)	46	(29)
Age, year				
65-74	38	(21)	52	(32)
75-84	43	(27)	45	(29)
85+	40	(24)	46	(28)
Gender				
Male	37	(24)	54	(30)
Female	43	(25)	45	(28)
Care level				
Support-required	59	(26)	41	(25)
Level 1	34	(21)	39	(24)
Level 2	38	(21)	58	(31)
Level 3	37	(21)	36	(28)
Level 4	33	(25)	72	(34)
Level 5	33	(23)	78	(26)
Household composition				
Single	45	(26)	44	(26)
With spouse	37	(23)	51	(33)
With other(s)	39	(24)	49	(32)
Length of care, year				
< 2	44	(26)	41	(27)
2 ~ 5	40	(24)	51	(28)
5 +	36	(23)	46	(30)
Comorbidity				
Cerebro-vascular diseases				
Absent	43	(26)	47	(28)
Present	37	(22)	44	(30)
Organic disease				
Absent	41	(25)	47	(29)
Present	44	(27)	36	(25)

TABLE 3: Regression results predicting utilization proportions to the monthly benefit limit of total homecare services and home help

N=704	Utilization proportion (%)			
	Total homecare services		Home help	
	β	95% CI	β	95% CI
Subsidy status				
Non-subsidized †				
Subsidized	6.4	1.6 ~ 11.1	47.4	41.3 ~ 53.6
Age				
65-74 †				
75-84	0.3	-5.0 ~ 5.5	-1.7	-8.8 ~ 5.4
85-	-1.1	-6.6 ~ 4.5	2.3	-5.2 ~ 9.7
Gender				
Male †				
Female	0.7	-3.9 ~ 5.2	-1.2	-7.3 ~ 4.8
Care level				
Support-required †				
Level 1	-21.5	-26.1 ~ -16.9	4.7	-2.0 ~ 11.3
Level 2	-12.9	-19.1 ~ -6.7	12.0	3.5 ~ 20.5
Level 3	-17.6	-25.3 ~ -9.8	8.6	-2.2 ~ 19.5
Level 4	-15.8	-24.8 ~ -6.8	11.2	-1.3 ~ 23.6
Level 5	1.0	-11.2 ~ 13.3	31.6	16.5 ~ 46.6
Household composition				
Single †				
Couple	-3.8	-8.7 ~ 1.0	-4.6	-11.2 ~ 1.9
Other	-3.3	-8.1 ~ 1.6	-9.3	-16.3 ~ -2.4
Length of care, year				
5 + †				
2 to 5	-0.4	-4.7 ~ 3.9	-7.6	-13.7 ~ -1.4
< 2	-3.1	-7.8 ~ 1.5	-6.5	-12.9 ~ -0.1

†: Reference levels. Variables of comorbidity were not included in the model since they did not show a significant relationship with subsidy status ($p > 0.10$).

FIGURE 1:

Service utilization was expressed in thousand yen/month.

Rectangles behind columns indicate a benefit limit at each care level. Also see note 1.

Figure 1: Comparison of homecare services utilization between the subsidized and non-subsidized by care level

