eFigure 1. Flow diagram of study participants

Beneficiaries of the Later Elders' Health Insurance system (N=38,876) Participants aged 75 years or older (N=38,379) * We could not completely exclude people below 75 with disabilities and eligible for the Late Elders' Health Insurance system because of the data availability for 5-year ranges of birth year. Participants with data for long-term care insurance premiums at baseline (N=37,922)Participants contributed to the database for at least 12 months (N=30,872) Men N=12,852 Low income: N=1,704; Middle-to-high income: N=11,148 Women N=18,020 Low income: N=7,483; Middle-to-high income: N=10,537

eTable 1. Baseline characteristics of study population with inpatient services use

		N	I en	Women		
		Low income	Middle-to-high income	Low income	Middle-to-high income	
		(N=328)	(N=1,963)	(N=1,311)	(N=1,517)	
Age group, years	72–76 ^a	94 (28.7)	535 (27.3)	183 (14.0)	336 (22.2)	
	77–81	132 (40.2)	754 (38.4)	370 (28.2)	499 (32.9)	
	82–86	72 (22.0)	442 (22.5)	347 (26.5)	380 (25.1)	
	≥87	30 (9.2)	232 (11.8)	411 (31.4)	302 (19.9)	
LTC needs level	Independent	181 (55.2)	1,352 (68.9)	514 (39.2)	876 (57.8)	
	Support 1 & 2	26 (7.9)	117 (6.0)	128 (9.8)	114 (7.5)	
	Care 1 & 2	48 (14.6)	234 (11.9)	296 (22.6)	258 (17.0)	
	Care 3	33 (10.1)	108 (5.5)	116 (8.9)	96 (6.3)	
	Care 4	22 (6.7)	85 (4.3)	109 (8.3)	72 (4.8)	
	Care 5	18 (5.5)	67 (3.4)	148 (11.3)	101 (6.7)	

LTC, long-term care. Figures are shown as frequencies (%).

Participants who had at least one claim submitted for inpatient services, *excluding* some surgical procedures with episode-based bundled payment, during the 12-month study period.

Some categories were combined because of the small numbers of participants in some cases.

^a People <75 were only included if eligible for the Late Elders' Health Insurance system.

eTable 2. Baseline characteristics of study population with institutional care services use

		N	Ien	Women		
		Low income	Middle-to-high income	Low income	Middle-to-high income	
		(N=124)	(N=420)	(N=1,194)	(N=655)	
Age group, years	72–76 ^a	31 (25.0)	48 (11.4)	74 (6.2)	60 (9.2)	
	77–81	35 (28.2)	104 (24.8)	178 (14.9)	126 (19.2)	
	82–86	34 (27.4)	136 (32.4)	318 (26.6)	193 (29.5)	
	≥87	24 (19.4)	132 (31.4)	624 (52.3)	276 (42.1)	
LTC needs level Independent & Support 1 & 2 ^b		11 (8.9)	61 (14.5)	98 (8.2)	74 (11.3)	
	Care 1 & 2	30 (24.2)	128 (30.5)	360 (30.2)	205 (31.3)	
	Care 3	37 (29.8)	107 (25.5)	269 (22.5)	165 (25.2)	
	Care 4	33 (26.6)	78 (18.6)	233 (19.5)	105 (16.0)	
	Care 5	13 (10.5)	46 (11.0)	234 (19.6)	106 (16.2)	

LTC, long-term care. Figures are shown as frequencies (%).

Some categories were combined because of the small numbers of participants in some cases.

^a People <75 years were only included if they were eligible for the Late Elders' Health Insurance system.

^b This category includes people who were eligible for institutional care during the 12-month study period.

eTable 3. Baseline characteristics of study population with home care services use

			Men	Women		
			Middle-to-high income	Low income	Middle-to-high income	
		(N=352)	(N=1,700)	(N=2,245)	(N=2,375)	
Age group, years	72–76 ^a	103 (29.3)	284 (16.7)	214 (9.5)	296 (12.5)	
	77–81	118 (33.5)	503 (29.6)	539 (24.0)	623 (26.2)	
	82–86	77 (21.9)	508 (29.9)	696 (31.0)	718 (30.2)	
	87–91	43 (12.2)	316 (18.6)	556 (24.8)	506 (21.3)	
	≥92	11 (3.1)	89 (5.2)	240 (10.7)	232 (9.8)	
LTC needs level	Independent ^b	52 (14.8)	309 (18.2)	260 (11.6)	346 (14.6)	
	Support 1	27 (7.7)	177 (10.4)	276 (12.3)	254 (10.7)	
	Support 2	31 (8.8)	168 (9.9)	307 (13.7)	254 (10.7)	
	Care 1	66 (18.8)	328 (19.3)	491 (21.9)	531 (22.4)	
	Care 2	88 (25.0)	350 (20.6)	419 (18.7)	468 (19.7)	
	Care 3	42 (11.9)	213 (12.5)	241 (10.7)	276 (11.6)	
	Care 4	27 (7.7)	119 (7.0)	142 (6.3)	150 (6.3)	
	Care 5	19 (5.4)	36 (2.1)	109 (4.9)	96 (4.0)	

LTC, long-term care. Figures are shown as frequencies (%).

^a People <75 years were only included if they were eligible for the Late Elders' Health Insurance system.

^b This category includes people who were eligible for home care during the 12-month study period.

eTable 4. Annual medical services utilization by gender, household income category, and long-term care needs certification

		Men		Women		
Indicators		Low income	Middle-to-high income	Low income	Middle-to-high income	
Participants without LTC nee	ds certification					
N		1,246	9,287	4,437	7,825	
Physician visits, days	Mean (SD)	14.9 (8.3)	16.6 (8.8)	16.7 (8.9)	16.9 (8.8)	
	Median (IQR)	13.5 (10–19)	15 (11–21)	15 (11–22)	15 (11–22)	
Length of hospital stay, days	Mean (SD)	8.6 (46.3)	4.0 (24.6)	6.9 (41.3)	4.0 (27.7)	
- Users only ^a	N (%)	181 (15)	1,352 (15)	514 (12)	876 (11)	
	Mean (SD)	59.1 (108.8)	27.6 (59.3)	59.8 (107.6)	35.7 (75.6)	
	Median (IQR)	12 (3–36)	9 (3–23)	13.5 (4–41)	10 (4–26.5)	
Participants with LTC needs of	certification					
N		458	1,861	3,046	2,712	
Physician visits, days	Mean (SD)	11.9 (9.7)	14.1 (9.8)	12.0 (9.9)	13.8 (10.0)	
	Median (IQR)	11.5 (4–17)	13 (7–20)	11 (3–18)	13 (6–19)	
Length of hospital stay, days	Mean (SD)	27.2 (78.0)	23.7 (68.5)	18.4 (61.5)	18.9 (64.4)	
- Users only ^a	N (%)	147 (32)	611 (33)	797 (26)	641 (24)	
	Mean (SD)	84.8 (118.9)	72.0 (104.1)	70.3 (104.1)	80.1 (112.5)	
	Median (IQR)	29 (11–100)	28 (11–74)	27 (11–70)	28 (11–91)	

IQR, interquartile range; LTC, long-term care; SD, standard deviation.

^a Participants who had at least one claim submitted for inpatient services, *excluding* some surgical procedures with episode-based bundled payment, during the 12-month study period.

eTable 5. Annual medical and long-term care expenditures (in JPY 1,000) by gender and household income category

			M	len	Women		
Ту	Types of services		Low income	Middle-to-high income	Low income	Middle-to-high income	
Pa	rticipants without LTC needs o	certification					
N	N		1,246	9,287	4,437	7,825	
To	tal: Medical and LTC services	Mean (SD)	729 (1,319)	645 (1,032)	605 (1,006)	534 (830)	
		Median (IQR)	321 (179–632)	334 (191–632)	307 (188–537)	306 (183–529)	
	Subtotal: Medical services	Mean (SD)	698 (1,251)	631 (1,006)	555 (914)	510 (782)	
		Median (IQR)	318 (178–620)	332 (190–619)	300 (183–515)	303 (181–516)	
_	Inpatient services	Mean (SD)	313 (1,098)	245 (861)	227 (866)	171 (692)	
	- Users only ^a	N (%)	280 (22)	2,099 (23)	752 (17)	1,269 (16)	
		Mean (SD)	1,394 (1,967)	1,082 (1,542)	1,342 (1,714)	1,053 (1,423)	
		Median (IQR)	566 (226–1,725)	463 (194–1,334)	585 (225–1,745)	492 (235–1,206)	
	Outpatient services	Mean (SD)	245 (429)	249 (410)	192 (217)	209 (298)	
		Median (IQR)	141 (78–267)	159 (89–284)	141 (79–245)	152 (85–253)	
	Pharmaceuticals and pharmacy services by community pharmacy	Mean (SD)	139 (203)	137 (171)	135 (152)	130 (139)	
		Median (IQR)	100 (20–206)	101 (23–200)	106 (30–196)	98 (22–194)	

Subtotal: LTC services	Mean (SD)	32 (219)	15 (143)	50 (327)	24 (187)
articipants with LTC needs cert	tification				
		458	1,861	3,046	2,712
Total: Medical and LTC services Mean (SD)		2,629 (1,891)	2,537 (2,003)	2,700 (1,753)	2,351 (1,816)
	Median (IQR)	2,295 (1,043–3,842)	2,041 (937–3,748)	2,803 (1,068–3,902)	1,894 (861–3,600)
Subtotal: Medical services	Mean (SD)	1,173 (1,590)	1,273 (1,743)	956 (1,367)	1,000 (1,472)
	Median (IQR)	579 (249–1,338)	641 (319–1,395)	486 (238–1,020)	487 (239–978)
Inpatient services	Mean (SD)	719 (1,555)	738 (1,665)	532 (1,313)	557 (1,437)
- Users only ^a	N (%)	185 (40)	752 (40)	997 (33)	821 (30)
	Mean (SD)	1,780 (2,026)	1,826 (2,208)	1,626 (1,868)	1,841 (2,113)
	Median (IQR)	911 (428–2,500)	922 (390–2,395)	904 (393–2,062)	958 (408–2,439)
Outpatient services	Mean (SD)	281 (503)	347 (584)	250 (435)	269 (440)
	Median (IQR)	141 (46–371)	180 (74–410)	132 (51–307)	158 (66–331)
Pharmaceuticals and					
pharmacy services by	Mean (SD)	173 (189)	187 (214)	173 (170)	173 (179)
community pharmacy					
	Median (IQR)	136 (6–273)	151 (25–275)	143 (37–260)	134 (19–262)
Subtotal: LTC services	Mean (SD)	1,455 (1,316)	1,264 (1,203)	1,745 (1,392)	1,351 (1,271)
	Median (IQR)	1,042 (272–2,645)	873 (220–2,185)	1,522 (382–3,151)	948 (224–2,364)
Institutional care	Mean (SD)	723 (1,331)	507 (1,121)	1,107 (1,528)	606 (1,235)

- Users only ^a	N (%)	116 (25)	386 (21)	1,142 (37)	618 (23)
	Mean (SD)	2,854 (953)	2,446 (1,145)	2,954 (879)	2,657 (1,112)
	Median (IQR)	3,151 (2,581–3,435)	2,793 (1,662–3,338)	3,199 (2,664–3,522)	3,045 (1,972–3,490)
Home care	Mean (SD)	732 (951)	757 (899)	637 (923)	746 (913)
- Users only ^a	N (%)	300 (66)	1,391 (75)	1,985 (65)	2,029 (75)
	Mean (SD)	1,118 (975)	1,012 (907)	978 (987)	997 (930)
	Median (IQR)	857 (361–1,580)	728 (301–1,489)	632 (238–1,398)	689 (264–1,507)

IQR, interquartile range; LTC, long-term care; SD, standard deviation.

^a Participants who had at least one claim submitted for inpatient services, *including* some surgical procedures with episode-based bundled payment, institutional care, or home care services, respectively, during the 12-month study period.