# Public Long-Term Care — Insurance Program for the Elderly (LTCI)



- Performance Evaluation and Policy Implications

Duk Sunwoo



#### Public Long-Term Care Insurance Program for the Elderly(LTCI) - Performance Evaluation and Policy Implications

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# Introduction

- 1. Research Background
- 2. Research Purpose

Introduction ((

#### 1. Research Background

The South Korean government introduced the Long-Term Care Insurance for the Elderly (LTCI) in July 2008. This insurance is intended to benefit seniors who are unable to perform their daily living activities on their own due to disability or illness and draws upon the monthly LTCI premiums paid by citizens for its funding. Similar public long-term care insurances were adopted earlier in several other advanced countries, such as the Netherlands (1968), Germany (1995), and Japan (2000). The experiences of these early-adopting countries provided useful lessons for Korea in deciding to adopt the LTCI.

Since its introduction, the LTCI has produced numerous positive results, including: mitigation of the risk of long-term caregiving for the family members of seniors; decrease in the financial burden of caregiving on families; and improvement in the quality of life of elderly beneficiaries and their families.

Yet there is still much room for improvement in the LTCI, particularly with respect to its implementation. When compared to similar insurance programs in Germany and Japan, the shortcomings of the LTCI become clear. Unlike its German

counterpart, which benefits not only seniors but also younger people with disabilities, the LTCI targets and benefits seniors only. When compared to its Japanese counterpart, which provides a wide range of care-related services, from prevention to welfare support, it can be seen that the range of services provided by the LTCI remains quite limited.

Fortunately, Korean law requires the government to assess the performance of the LTCI every five years and update its master plan for the operation of the insurance program so as to ensure that continuous improvements are made to it over the years. Accordingly, the Korean government established the first Long-Term Care Master Plan (2013-2017) in 2012, and is currently developing the second master plan (2018-2022). In this study, we analyze the performance of the LTCI over the past seven years, with the goal of providing basic information and delineating policy implications that may be useful in the development of the second master plan.

#### 2. Research Purpose

This study is aimed to analyze the performance of the LTCI over the past seven years so as to identify and emphasize implications for its future improvement. To this end, I also developed and used specific performance indicators.

# Research Method 1. Performance Evaluation Method 2. Performance Indicators

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#### Research Method ((

#### 1. Performance Evaluation Method

Before evaluating the performance of the LTCI, a survey was conducted of the performance indicators recommended and used by major organizations. The World Health Organization (WHO, 2015), for example, lists the quality of life of service users, quality of care, burden of care, equity, and ability to choose as main performance indicators, while the European Union (EU, 2012) uses quality of care, improvement in service users' capabilities, burden of care, involvement of informal caregiver, and ability to choose. In consideration of these reports and other studies, such as Larizgoitia (2003), Reinhard (2011), and Wanless (2006), we chose equity, effectiveness, efficiency, and sustainability as the four main principles to which the LTCI should aspire, and, in light of these principles, identified performance indicators that could be used to assess the quality of LTCI services. We measured the performance of the LTCI across three areas, i.e., input, output, and outcome.

(Table 1) LTCI Performance Assessment Framework

Principle	Input	Output	Outcome
Equity	Quantity of infrastructure resources by region	Number of LTCI beneficiaries by region	N/A
Effectiveness	N/A	Quality of care	Outcome of care
Efficiency	N/A	Spending on and use of LTCI benefits	N/A
Sustainability Amounts of fiscal input		N/A	N/A

#### 2. Performance Indicators

As Table 1 shows, we sought to measure the equity, efficiency, effectiveness, and sustainability of the LTCI across three main areas, i.e., input, output, and outcome, in assessing the performance of the insurance program.

The equity indicators that measure inputs are: (1) admission rates of elderly care facilities by region, (2) number of beds per 1,000 eligible seniors by region, and (3) number of long-term elderly care facilities providing at-home services per 1,000 eligible seniors by region. The output equity indicators are: (4) proportion of seniors recognized as eligible for long-term care, and (5) proportion of seniors receiving long-term care by income level and disability grade.

The efficiency indicators, which measure outputs, are: (6) proportions of spending on at-home and institutional care

services and benefits, (7) amount of spending per senior receiving long-term care, (8) rate of increase in the amount of spending per senior receiving long-term care, and (9) proportion of spending on at-home care in comparison to the ceiling on spending on at-home care.

The indicators of effectiveness include: (10) at-home, long-term care retention rate, (11) proportion of seniors waiting to enter institutional care facilities, (12) experiences of seniors who have been subjected to abuse at home (abuse experience scores), and (13) proportion of eligible seniors who receive care from family members for at least half a day every day. These indicators measure the quality of long-term care services. The other effectiveness-related indicators, i.e., (14) proportion of seniors retaining disability grades for long-term care and (15) scores given by eligible seniors on their own quality of life, represent the outcomes of the use of long-term care.

Finally, the indicators of sustainability are: (16) insurance premium per capita, and (17) proportion of LTCI financing made up by government subsidies.



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#### Research Results (

#### 1. Structural Characteristics of the Current LTCI

The structural characteristics of the current LTCI are summarized below. Some of these characteristics are the same as those in Germany and Japan, which adopted similar programs earlier.

First, the beneficiaries of the LTCI are those who are enrolled in the National Health Insurance (NHI) scheme. In Korea, participation in the NHI scheme naturally entitles one to participate in the LTCI. While all working individuals aged 18 and older are required to contribute premiums to these universal healthcare schemes, adults under the age of 65 who are disabled but not receiving LTCI benefits are given discounts on or exemptions from these premiums. Not all insured premium-paying individuals are eligible to receive benefits under the LTCI. To be eligible, one must be aged 65 or older, or under the age of 65 and diagnosed with chronic and debilitating conditions, such as stroke or senile dementia. At present, it can be said that the Korean LTCI thus benefits seniors only. The National Health Insurance Service (NHIS), a public corporation responsible for the management of the NHI and insured people, also manages the LTCI and its beneficiaries.

Second, to receive benefits under the LTCI, candidates must

submit themselves to review and evaluation by NHIS branch offices, who determine eligibility based on whether candidates
have debilitating conditions that entitle them to long-term care
services. There are five grades of disability, and only individuals with severe disabilities (Grades 1 and 2) are permitted
to enter institutional care facilities. However, seniors with senile dementia can be admitted to institutional care facilities irrespective of their disability grades. When the LTCI was first
introduced, it distinguished among three disability grades only,
but the grade scheme was expanded to include five grades in
July 2015, with the fifth (least severe) grade exclusively assigned
to seniors with mild symptoms of senile dementia.

Third, although the Korean government has established the Standard Long-Term Care Use Plan to provide guidance on the available benefits and services that eligible seniors may use, the benefits and services that are actually provided for the elderly are determined according to separate agreements between seniors and care providers, with the Standard Long-Term Care Use Plan serving only as a guideline. The LTCI does not provide care planners or managers; instead, it allows care-providing organizations to plan and manage the services it provides for seniors. The NHIS, however, consults and advises seniors or their family members regarding the recommended and available services.

Fourth, the benefits of the LTCI are provided, in principle,

either in-kind or in the form of services. The LTCI provides cash allowances only for eligible seniors who live in remote or rural areas that lack professional caregivers and long-term care facilities and who are therefore dependent on care from family members. Currently, the LTCI provides cash allowances for only a small number of seniors living on remote islands that are inaccessible to professional caregivers. There is a ceiling on the total cash value of the benefits and services a eligible senior may receive, and seniors are required to pay all costs in excess of that ceiling. The LTCI is thus a partial insurance that requires every eligible beneficiary to pay certain amounts of out-of-pocket expenses for the benefits and services they receive.

Fifth, the benefits of the LTCI include medical services, assistance with physical movement, and domestic help. In reality, however, the LTCI provides a very limited range of medical services, requiring beneficiaries to seek healthcare under the NHI where necessary. The medical services currently covered by the LTCI include services provided only by doctors, nurses, nurses' aides, physical therapists, and occupational therapists affiliated with institutional care facilities and visiting nurses. The NHIS, as the insurance provider, pays for these services based on daily costs including facility's operation cost and the practitioner's wage (predetermined for each disability grade) and per visit, and adjusts the prices of the services annually.

Sixth, the LTCI draws upon the premiums paid by citizens, government subsidies, and out-of-pocket expenses paid by eligible seniors or their family members to fund the benefits and services it provides. The premium each citizen pays is proportional to the premium they pay for the NHI, while the government subsidy is fixed at 20 percent of the projected amount of premiums collected. As for out-of-pocket expenses, each eligible senior pays 20 percent of the total cost of using a institutional care facility and its services. However, seniors are required to pay out of their own pockets for higher-grade rooms (single or double rooms) and the costs of meals. Seniors using at-home services pay 15 percent of the total cost. Low-income groups, on the other hand, need to pay only half of the required co-payment, while those belonging to the lowest income quantile may use LTCI services free of charge.

Finally, the LTCI infrastructure in Korea includes care facilities set up by individuals, for-profit businesses, and nonprofit organizations alike. The chief operators of these facilities must be either licensed social workers or licensed medical practitioners. To provide LTCI services, these facilities must hire and manage qualified personnel who hold government-recognized licenses. The Korean government requires such care personnel to complete 240 hours of required training and pass the national license examination.

#### 2. Evaluation of LTCI Performance

#### 1) Equity

The equity of LTCI services and benefits can be assessed by region and income level of service users. In this study, we assess the equity of the LTCI program in terms of input (resources invested) and output. We focus particularly on the equity of the accessibility of LTCI services and benefits, measured in terms of the distribution of resources across regions.

#### (1) Admission rates of institutional care facilities by region

The equity of LTCI services and benefits, measured in terms of accessibility across regions using the coefficient of variation (COV), has been improving since the insurance program was introduced in 2008, when it had a COV of 0.10. Since 2010, however, the COV has increased from 0.05 to 0.07, suggesting a decline in the equity of LTCI services and benefits across regions. The gap between the maximum and minimum measures of equity amounted to 125 percent in 2010 and 136 percent in 2015.

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(Table 2) Admission Rates of Institutional Care Facilities by Region

(Unit: %)

	2008	2010	2011	2012	2013	2014	2015
Overall	79.2	78.6	79.2	83.0	84.3	84.8	84.4
Seoul	87.0	78.5	83.6	89.8	91.9	93.2	92.1
Busan	80.6	77.4	76.4	75.9	73.7	73.3	72.8
Daegu	89.2	79.0	76.8	80.9	82.0	86.2	84.7
Incheon	76.5	77.1	77.7	83.7	88.2	85.7	85.0
Gwangju	70.2	84.3	77.6	82.3	82.4	81.6	78.9
Daejeon	90.7	78.2	81.6	81.6	81.2	79.7	80.2
Ulsan	58.0	73.3	74.9	81.2	80.7	75.0	81.1
Sejong	-	-	-	-	73.3	73.1	67.6
Gyeonggi	77.8	78.3	80.9	85.4	86.0	87.0	85.9
Gangwon	79.5	80.4	78.4	82.3	84.6	85.4	86.1
Chungbuk	81.7	79.4	78.2	81.2	84.6	85.4	86.7
Chungnam	73.9	76.7	73.1	76.7	81.2	84.2	83.7
Jeonbuk	77.2	77.6	77.5	80.3	81.2	79.3	81.6
Jeonnam	81.2	81.9	77.7	78.8	84.3	82.4	83.7
Gyeongbuk	80.4	77.3	76.1	82.0	80.2	82.9	79.0
Gyeongnam	75.5	76.3	79.4	79.5	82.5	83.5	83.3
Jeju	89.6	91.8	89.8	95.3	90.1	88.5	86.9
COV	0.10	0.05	0.05	0.06	0.06	0.06	0.07

Note: Admission rate = [current number of seniors staying at institutional care facilities (including group homes) / maximum capacity of institutional care facilities (including group homes)]\* 100

Source: Ministry of Health and Welfare (MOHW), Current Overview of Elderly Care Facilities, each year.

## (2) Number of beds available at institutional care facilities per 1,000 eligible seniors by region

In this regard, the COV has improved slightly overall since 2008 (0.3), but has again risen from 0.2 to 0.3 since 2014, suggesting a slight decline in equity. In addition, the gap between the minimum and maximum values increased from 243 percent in 2010 to 264 percent in 2015. As of 2015, eligible seniors' access to available beds at institutional care facilities was quite

limited, due to the shortage of facilities in comparison to the demand. Seniors on Jeju Island, however, had little difficulty gaining admission to institutional care facilities.

(Table 3) Number of Beds per 1,000 Eligible Seniors by Region

(Unit: number of beds)

	(Chit: hamber of be					cr or beds)	
	2008	2010	2011	2012	2013	2014	2015
Overall	321.6	432.0	381.3	385.5	369.9	354.7	340.7
Seoul	147.5	246.4	224.2	226.3	205.9	201.9	211.1
Busan	269.1	329.2	304.9	326.6	307.3	265.0	269.3
Daegu	246.8	401.4	377.2	391.2	388.6	364.4	372.9
Incheon	278.1	491.8	437.1	389.3	402.1	408.5	445.9
Gwangju	284.9	386.4	375.7	363.0	343.7	305.6	300.6
Daejeon	253.3	351.2	311.2	345.1	355.7	356.8	369.4
Ulsan	444.5	423.5	347.6	333.3	323.9	294.3	295.2
Sejong	-	-	-	393.7	352.6	286.4	238.4
Gyeonggi	422.6	574.5	471.6	482.8	466.4	464.9	480.8
Gangwon	504.8	552.8	461.3	465.8	436.6	432.0	436.3
Chungbuk	461.2	599.5	512.4	501.8	480.0	452.4	461.8
Chungnam	305.4	396.9	359.6	363.4	358.0	336.0	339.3
Jeonbuk	443.0	457.8	415.5	411.0	390.5	348.9	322.8
Jeonnam	285.4	394.5	378.7	366.6	342.1	309.1	295.7
Gyeongbuk	296.6	460.8	398.3	410.5	392.7	371.9	373.9
Gyeongna	331.0	415.6	393.1	402.4	371.2	343.7	331.4
m	331.0	41).0	393.1	402.4	3/1.2	343./	JJ1.4
Jeju	425.2	511.7	468.3	525.8	533.4	540.2	557.0
COV	0.3	0.2	0.2	0.2	0.2	0.2	0.3

Note: (number of beds available at institutional care facilities and group homes / number of eligible seniors per city or province)

Source: NHIS, Yearbooks of Long-Term Care for the Elderly Statistics, each year.

# (3) Number of long-term care facilities providing at-home services per 1,000 eligible seniors by region

The COV in this regard improved from 0.22 in 2008 to 0.19 in 2012, but began increasing again after 2012, returning to 0.22

in 2015. This suggests a decline in equity. The gap between the maximum and minimum numbers amounted to 243 percent in 2010 and 264 percent in 2015. In particular, long-term care facilities providing at-home services tend to be concentrated in large cities, which provide relatively greater pools of eligible seniors and professional caregivers than small cities or rural towns.

(Table 4) Number of Long-Term Care Facilities Providing At-Home Services per 1,000 Eligible Seniors by Region

(Unit: number of facilities)

					(		,
	2008	2010	2011	2012	2013	2014	2015
Overall	46.4	73.8	60.1	56.3	52.1	48.9	49.0
Seoul	45.7	71.3	59.0	55.1	52.2	50.3	54.6
Busan	55.3	89.2	73.6	69.9	60.9	56.7	61.4
Daegu	63.9	108.3	80.2	75.7	71.5	65.0	68.7
Incheon	42.2	73.9	61.2	56.7	54.1	52.3	57.8
Gwangju	57.1	94.2	84.6	78.3	71.6	64.4	66.7
Daejeon	54.4	99.5	76.2	68.9	66.6	64.2	71.0
Ulsan	49.8	76.0	68.7	66.5	59.1	53.6	54.3
Sejong	· -	-		48.5	40.0	33.3	33.3
Gyeonggi	46.6	74.1	59.1	54.7	50.7	47.6	50.8
Gangwon	80.8	53.9	43.6	42.8	40.2	37.8	39.7
Chungbuk	38.2	60.2	48.7	43.4	38.2	36.3	38.5
Chungnam	44.6	65.6	52.3	50.0	45.7	42.9	44.9
Jeonbuk	40.5	67.1	56.2	54.6	52.5	49.8	51.5
Jeonnam	45.8	64.5	53.8	48.6	45.2	41.1	42.1
Gyeongbuk	41.3	69.3	54.8	53.9	50.7	46.6	48.5
Gyeongnam	44.1	75.5	65.4	59.7	51.5	47.3	50.1
Jeju	38.3	49.1	45.5	44.3	42.3	37.8	40.7
COV	0.22	0.22	0.20	0.19	0.20	0.20	0.22

Note: The figures listed here are simple sums of all long-term care facilities providing at-home services, irrespective of the disability grades of eligible seniors.

Source: NHIS, Yearbooks of Long-Term Care for the ElderlyStatistics, each year.

# (4) Proportion of seniors recognized as eligible for long-term care by region

The proportion of seniors aged 65 and older nationwide who were recognized as eligible for long-term care increased significantly from 4.2 percent in 2008 to 7.0 percent in 2015. The COV, as a measure of disparity among regions, decreased significantly from 0.23 to 0.13 over the same period. As of 2015, the region with the greatest proportion of eligible seniors was Daejeon (7.8 percent), and the region with the smallest proportion was Busan (4.6 percent), with the gap amounting to 170 percent. This regional disparity appears to reflect differences in the number of care facilities available, extensiveness of the local care infrastructure, and proportion of applicants recognized as eligible.

(Table 5) Proportion of Seniors Recognized as Eligible for Long-Term Care by Region

(Units: number of persons, %)

	2008	2010	2011	2012	2013	2014	2015
Proportion of applicants recognized	214,480 (4.2)	315,994 (5.8)	324,412 (5.7)	341,788 (5.8)	378,493 (6.1)	424,572 (6.6)	467,752 (7.0)
Seoul	3.0	4.6	5.4	5.3	5.5	5.9	5.8
Busan	3.8	4.0	4.3	4.2	4.4	4.7	4.6
Daegu	4.0	4.1	5.2	5.2	5.5	5.9	5.8
Incheon	4.4	6.0	6.9	7.1	7.5	7.7	7.6
Gwangju	5.5	6.3	6.5	6.3	6.6	7.1	7.1
Daejeon	4.6	6.3	7.3	7.3	7.7	8.1	7.8
Ulsan	2.8	5.1	5.5	5.3	5.4	5.7	5.4
Sejong	-	_	-	5.9	6.1	6.7	6.9
Gyeonggi	3.6	5.4	6.4	6.4	6.6	7.1	7.1
Gangwon	4.9	5.0	6.2	6.2	6.8	7.4	7.5
Chungbuk	4.9	4.5	5.5	5.7	6.1	6.7	6.8
Chungnam	4.9	5.3	6.3	6.4	6.8	7.2	7.3
Jeonbuk	6.2	5.2	5.8	5.7	6.1	6.7	7.0
Jeonnam	5.9	4.8	5.4	5.6	6.1	6.9	7.2
Gyeongbuk	5.7	4.5	5.6	5.7	6.2	6.8	7.0
Gyeongnam	4.6	4.7	5.1	5.2	5.7	6.3	6.3
Jeju	6.2	6.6	7.4	7.2	7.7	7.9	7.6
COV	0.23	0.15	0.14	0.14	0.14	0.13	0.13

Notes: 1) The figures in parentheses indicate the proportion of seniors aged 65 and over who were recognized as eligible for care.

Source: NHIS, Yearbooks of Long-Term Care for the Elderly Statistics, each year.

# (5) Proportion of seniors receiving long-term care by income level and disability grade

Of all seniors qualified, based on their income levels, for

<sup>2)</sup> Proportion of seniors recognized = (number of seniors recognized as eligible for care / total senior population) x 100

long-term care, 87.5 percent were actually receiving long-term care as of March 2016. More specifically, 90.5 percent of seniors in the general income brackets, 92.9 percent of seniors receiving National Basic Livelihood Security (NBLS) benefits, 85.2 percent of seniors receiving Medicare benefits, and 84.5 percent of seniors eligible for co-payment discounts were receiving long-term care. NBLS recipients widely enjoy long-term care, because they are required to pay no out-of-pocket expenses, while seniors eligible for co-payment discounts do not enjoy long-term care as extensively, because they still view the discounted out-of-pocket expenses as excessive compared to their income. As for disability grades, seniors in Grade 5 used long-term care the least, while those in Grades 3 and 4 used long-term care services more often than seniors in other grades.

Table 6. Seniors Receiving Long-Term Care by Income Level and Disability Grade (March 2016)

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Overall				
(Number of eligible seniors) (Units: no. of persons)										
General income	5,896	10,511	26,593	29,631	2,564	75,195				
NBLS recipients	7,186	14,495	35,073	31,677	3,629	92,060				
Medicare recipients	24,747	45,333	112,523	104,795	15,322	302,720				
Co-payment discounts	400	777	2,055	2,074	260	5,566				
Overall	38,229	71,116	176,244	168,177	21,775	475,541				

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	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Overall			
(Number of seniors actually receiving long-term care) (Units: no. of persons)									
General income	5,133	9,532	24,535	27,228	1,614	68,042			
NBLS recipients	6,235	13,495	33,422	29,926	2,439	85,517			
Medicare recipients	19,644	39,053	99,974	90,566	8,643	257,880			
Co-payment discounts	315	642	1,818	1,787	144	4,706			
Overall	31,327	62,722	159,749	149,507	12,840	416,145			
(Proportion of	eligible senic	ors receiving	long-term	care) (Units:	%)				
General income	87.1	90.6	92.2	91.8	62.9	90.5			
NBLS recipients	86.7	93.1	95.2	94.4	67.2	92.9			
Medicare recipients	79.3	86.1	88.8	86.4	56.4	85.2			
Co-payment discounts	78.7	82.6	88.4	86.1	55.3	84.5			
Overall	81.9	88.2	90.6	88.9	58.9	87.5			

Source: NHIS, Monthly Statistics on Long-Term Care for the Elderly, March 2016.

#### 2) Efficiency

## (6) Proportions of spending on at-home and institutional care services

Spending on long-term care for the Elderlycan be divided largely between spending on institutional care services and spending on at-home services. The proportion of the former decreased from 61.6 percent in 2008 to 51.3 percent in 2015, while that of the latter increased from 38.4 percent to 48.7 percent over the same period. Interestingly, the proportion of gov-

ernment spending on institutional care decreased steadily from 2008 to 2010, before starting to rise again in 2011 and maintaining a positive trend until 2014.

The proportion of spending on institutional care services is larger than that of spending on at-home services because the unit prices of institutional care services are much higher than those of at-home services. While in principle only seniors in disability grades 1 and 2 are admitted to institutional care facilities, seniors with less severe conditions, such as senile dementia, can also enter these institutional care facilities. In addition, the demand for institutional care services is greater than that for at-home services, due mainly to the shortages of effective at-home care services.

(Table 7) Government Spending on At-Home and Institutional Care Services (Benefit Expenses excluding co-payment)

(Units: KRW 100 million, %)

	2008	2009	2010	2011	2012	2013	2014	2015
in- stitu- tional care	2,628 (61.6)	7,513 (43.3)	10,283 (42.8)	12,178 (47.1)	13,874 (51.1)	15,966 (51.8)	18,234 (52.1)	20,441 (51.3)
At-h ome serv- ices	1,640 (38.4)	9,856 (56.7)	13,740 (57.2)	1,3,704 (52.9)	13,303 (48.9)	14,864 (48.2)	16,748 (47.9)	19,376 (48.7)
Total	4,268 (100.0)	17,369 (100,0)	24,023 (100.0)	25,882 (100.0)	27,177 (100.0)	30,830 (100.0)	34,981 (100.0)	39,816 (100.0)

Source: NHIS, Yearbooks of Long-Term Care for the ElderlyStatistics, each year.

#### (7) Amount of spending per beneficiary on long-term care

The per capita long-term care spending was 3.4 times greater on institutional care services than on at-home services. The gap between the two types of spending decreased somewhat from 2011 onward, until reaching a gap of 340 percent again in 2015. From 2010 to 2015, the amount of spending per beneficiary on long-term institutional care rose by 42 percent, from KRW 9,175 per year in 2010 to KRW 13,030 per year in 2015, while the amount per beneficiary spent on at-home care increased by only 10 percent, from KRW 3,439 to KRW 3,785, over the same period. In other words, the unit prices of institutional care services have increased much more dramatically than those of at-home services.

(Table 8) Amount of Spending per Beneficiary on Long-Term Care (Insurer Spending + Co-Payment)

(Unit: KRW 1,000)

	2008	2010	2011	2012	2013	2014	2015
institutional care (A)	4,615	9,175	9,757	10,231	9,458	12,427	13,030
At-home services (B)	1,345	3,439	3,490	3,376	3,443	3,612	3,785
(A)/(B)	3.4	2.7	2.8	3.0	2.7	3.4	3.4

Notes: 1) Amount of spending per beneficiary = cost of services (insurer spending + co-payment) / number of beneficiaries receiving care

<sup>2)</sup> The numbers of beneficiaries receiving care are simple sums of all beneficiaries receiving care irrespective of the types of services they use. Source: NHIS, Yearbooks of Long-Term Care for the Elderly Statistics, each year.

### (8) Rates of increase in the amount of spending per beneficiary on care

From 2009 to 2015, the average annual rate of increase in the amount of spending on institutional care services per beneficiary was 6.62 percent, while that of spending on at-home services per beneficiary was 4.28 percent. During the same period, the gross domestic product (GDP) grew at an average annual rate of 4.70 percent; the wage level, at 4.32 percent; and the consumer price index, at 2.24 percent. In other words, the amount of spending on institutional care per beneficiary has been increasing much more rapidly than all other economic indicators, while the rate of increase in the amount of spending on at-home services per senior has been consistently lower than all other economic indicators, except for the consumer inflation rate. This suggests that institutional care services have been growing more rapidly over time, along with the demand for such services, than at-home services. The increases in LTCI spending are therefore mostly attributable to the increasing cost of institutional care.

(Table 9) Comparison of Annual Increases in Spending Per Beneficiary on Care (Insurer Spending + Co-Payment) with Annual Increases in Economic Indicators

(Unit: %)

	2010	2011	2012	2013	2014	2015	Avg. rate of increase
Rate of increase in spending on institutional care per beneficiary	-0.2	6.3	4.9	-7.6	31.4	4.9	6.62
Rate of increase in spending on at-home services per beneficiary	15.8	1.5	-3.3	2.0	4.9	4.8	4.28
Rate of increase in GDP per capita	9.4	4.5	2.9	3.3	3.5	4.6	4.70
Rate of wage increase	4.8	5.1	4.7	3.5	4.1	3.7	4.32
Consumer price index	3.0	4.9	2.2	1.3	1.3	0.7	2.23

Notes: 1) Rate of increase in spending on institutional care (or at-home services) per senior = spending on institutional care (or at-home services) per beneficiary for the given year / spending on institutional care (or at home services) per beneficiary for the preceding year

- 2) GDP per capita is the nominal GDP per capita.
- 3) The rate of increase in wages reflects the rate of increase in wages indicated by labor contracts or union agreements at workplaces employing 100 or more full-time workers each.
- 4) The data on the GDP per capita, wage increases, and the consumer price index were obtained from Statistics Korea's e-Country Indicators.

Sources: NHIS, Yearbooks of Long-Term Care for the ElderlyStatistics, each year; Statistics Korea, e-Country Indicators (http://www.index.go.kr).

# (9) Proportion of spending on at-home care in comparison to the ceiling on spending on at-home care

There are six types of at-home care services covered by the LTCI, including care provided by visiting nurses, and each eligible senior may use up to five of these services. Korean law

limits the amount of LTCI spending on at-home care services that eligible seniors can use on a monthly basis. The proportion of eligible seniors' total monthly spending in comparison to the monthly ceiling on LTCI spending on at-home care rose steadily from 2008 to 2013. The proportion ranged from 57 percent to 66 percent of the ceiling, depending on the disability grade, as of 2013. Annual statistics, however, include the cases of beneficiaries who use both institutional care facility and at-home care services. For these mixed users, the proportion of monthly spending on at-home care in comparison to the ceiling can even be lower.

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(Table 10) Comparison of LTCI Spending per Eligible Senior on At-Home Care with the Ceiling on LTCI Spending

(Units: KRW 1,000, %)

		2008	2010	2011	2012	2013	2014	2015
LTCI	Gr. 1	204	574	557	514	656	462	449
spen	Gr. 2	177	526	514	504	661	466	473
ding	Gr. 3	137	433	462	475	537	437	507
per se-	Gr. 4	-	-	-	_	-	241	488
nior	Gr. 5	_	-	-	_	_	147	349
Spend	Gr. 1	1,097	1,141	1,141	1,141	1,141	1,185	1,185
ing	Gr. 2	879	971	971	971	1,004	1.044	1.044
ceil-	Gr. 3	760	815	815	815	879	965	965
ing per	Gr. 4	-	-	-	_	-	904	904
senior	Gr. 5	-	-	-	_	_	767	767
Propo	Gr. 1	18.6	50.3	48.8	45.0	57.5	39.0	37.9
rtion	Gr. 2	20.1	54.2	52.9	51.9	65.8	44.6	45.3
of	Gr. 3	18.0	53.1	56.7	58.3	61.1	45.3	52.5
spen ding	Gr. 4	-	-	-	-	-	26.7	54.0
ceil- ing	Gr. 5	-	_	-	_	-	19.2	45.5

Notes: 1) Monthly LTCI spending on at-home care per beneficiary = (LTCI spending by grade / number of beneficiaries receiving care) / 12

Source: NHIS, Yearbooks of Long-Term Care for the Elderly Statistics, each year.

#### 3) Effectiveness

#### (10) At-home long-term care retention rate

The average proportion of seniors remaining on at-home long-term care across the disability grades has been increasing steadily, from 65 percent in 2009 to 29 percent in 2011 and 74.6 percent in 2013. The same trend has been observed for

<sup>2)</sup> Proportion of spending ceiling = (monthly LTCI spending per beneficiary / spending ceiling per beneficiary on at-home care) x 100

each disability grade as well, with patients in lower disability grades particularly more likely to retain at-home care services than those in higher grades. This is mainly because, currently, only seniors in high disability grades can enter institutional care facilities.

Among eligible seniors in Grades 1 and 2, who can choose between institutional care and at-home care, the at-home care retention rates have also been increasing, from 61.6 percent and 64.7 percent for Grades 1 and 2 in 2009 to 66.0 percent and 67.0 percent in 2011, respectively, and from 69.9 percent and 69.5 percent in 2013 to 70.6 percent and 70.5 percent in 2015, respectively. Nevertheless, approximately 30 percent of beneficiaries receiving at-home care are unable to receive at-home care continuously for more than two years, due to either their admission to institutional care facilities or death.

(Table 11) At-Home Long-Term Care Retention Rates

(Units: number of persons, %)

Year	Disability	At-home	e care users	institut us	Total		
	grade	N	%	N	%		
	All grades	59,711	65.0	5,653	6.2	91,808	
2009	Grade 1	9,521	61.6	1,307	8.5	15,456	
	Grade 2	12,284	64.7	1,943	10.2	18,986	
	Grade 3	37,906	66.1	2,403	4.2	57,366	
	All grades	119,533	69.0	10,531	6.1	173,201	
2011	Grade 1	10,414	66.0	838	5.3	15,788	
	Grade 2	17,754	67.0	2,231	8.4	26,485	
	Grade 3	91,365	69.8	7,462	5.7	130,928	
	All grades	125,238	74.6	10,715	6.4	167,817	
2013	Grade 1	7,629	69.9	426	3.9	10,919	
	Grade 2	14,688	69.5	1,577	7.5	21,149	
	Grade 3	102,921	75.8	8,712	6.4	135,749	
	All grades	154,668	75.5	13,293	6.5	204,752	
2015	Grade 1	6,916	70.6	399	4.1	9,798	
	Grade 2	14,548	70.5	1,451	7.0	20,639	
	Grade 3	64,588	76.0	5,687	6.7	84,997	
	Grade 4	65,488	77.3	5,219	6.2	84,726	
	Grade 5	3,128	68.1	537	11.7	4,592	

Note: A senior is said to "retain" at-home care if he or she is found to have received at-home care services in January of each given year, as he or she did in the January of the preceding year.

Source: NHIS, Analysis on LTCI Statistics.

## (11) Proportion of beneficiaries waiting to enter institutional care facilities

The numbers of seniors waiting to enter institutional care facilities were analyzed in terms of proportions of seniors waiting in comparison to the capacities of institutional care facilities (including group homes) and day and night care centers of different evaluation grades. As of May 2016, the proportions of seniors waiting to enter group homes amounted to 7.0 percent, 4.0 percent, 4.2 percent, 3.0 percent, and 3.3 percent of the capacities of facilities that received grades of A, B, C, D, and E, respectively, on their evaluations. In other words, there are significant numbers of seniors waiting to enter even D- and E-grade facilities, which performed relatively poorly on the evaluations.

The proportions of seniors on the waiting lists of Grade-A facilities amounted to 15.0 percent for facilities admitting 10 to 29 people, 20.5 percent for facilities admitting 30 to 99 people, and 31.6 percent for facilities admitting 100 or more people. The larger the capacity, the higher the proportion of seniors waiting to enter the facility. Korean seniors thus tend to prefer institutional care facilities that are larger in size. The fact that there are seniors waiting to enter even facilities in Grades D and E suggest that either there are not enough care facilities for the Elderly that seniors do not care how these facilities perform on evaluations.

In general, larger facilities tend to provide care environments and services of higher quality, thereby attracting greater numbers of seniors waiting to enter them. It is also unsurprising that the numbers of seniors waiting to enter these facilities increase in proportion to the grades these facilities received on the evaluations. Recognizing this, it is important to expand and strengthen the at-home care service network in order to reduce the numbers of seniors waiting to enter institutional care facilities.

(Table 12) Proportions of Seniors Waiting to Enter Institutional Care Facilities (Way 2016)

(Units: number of persons, %)

Capacity per	Facility	Nu	mber of perso		Proportion o	f seniors on
facility	grade	Total capacity (A)	Current tenants (B)	Seniors on waiting list C /		C / B
	А	398	381	28	7.0	7.3
	В	1,397	1,342	56	4.0	4.2
5 to 9	С	2,793	2,643	117	4.2	4.4
	D	6,207	5,661	189	3.0	3.3
	Е	3,476	3,119	114	3.3	3.7
	А	2,072	1,985	310	15.0	15.6
	В	4,865	4,545	445	9.1	9.8
10 to 29	С	5,021	4,531	102	2.0	2.3
	D	4,323	3,732	70	1.6	1.9
	E	4,843	4,056	118	2.4	2.9
	А	18,281	16,675	3,755	20.5	22.5
	В	18,057	15,963	917	5.1	5.7
30 to 99	С	14,663	11,973	382	2.6	3.2
	D	13,784	11,123	406	2.9	3.7
	Е	5,823	4,678	139	2.4	3.0
	Α	15,547	13,495	4,913	31.6	36.4
	В	9,225	7,383	799	8.7	10.8
100+	С	3,026	2,513	105	3.5	4.2
	D	717	535	7	1.0	1.3
	Е	679	486	13	1.9	2.7
	А	36,298	32,536	9,006	24.8	27.7
	В	33,544	29,233	2,217	6.6	7.6
Overall	С	25,503	21,660	706	2.8	3.3
	D	25,031	21,051	672	2.7	3.2
-	Е	14,821	12,339	384	2.6	3.1

Note: The analysis concerned only the institutional care facilities that had been authorized by the government to provide elderly care services and were listed on the NHIS website as of May 2016. The analysis does not include newly created facilities or facilities exempt from government evaluations. Of the 3,359 facilities analyzed, 1,233 had capacities of fewer than 10 people; 922, fewer than 30 people; 1,019, fewer than 100 people; and 185, 100 people or more.

Source: NHIS website (www.longtermcare.or.kr).

### (12) Abuse experience score

We also sought to determine whether seniors receiving at-home care who have deficiencies in any of the activities of daily living (ADL) or instrumental activities of daily living (IADL) had ever experienced abuse. The types of abuse included: (1) physical abuse inflicted by others, (2) verbal or emotional abuse inflicted by others, (3) financial losses caused by others, (4) neglect by family members or caregivers, and (5) abandonment by family members or caregivers. The abuse experience score for the elderly with ADL deficiencies was 0.17, while that for the elderly without ADL deficiencies was 0.11. In other words, ADL deficiencies increased seniors' risk of experiencing abuse (t = -4.52\*\*\*, p  $\langle$  .001). Judging from these findings alone, we may conclude that the Korean government is not doing enough to protect seniors with ADL deficiencies from abuse. With proper policy support and attention, the number of seniors with ADL deficiencies experiencing abuse could be lowered to the level of seniors without ADL deficiencies.

(Table 13) ADL Deficiencies and Abuse Experience Score

(Units: points and number of persons)

ADL deficiency	Abuse experience score	T-value	
Yes	0.17(1,735)	/ E )***	
No	0.11(8,544)	4.52***	

<sup>\*</sup>p<.05, \*\*p<.01, and \*\*\*p<.001

Notes: 1) Seniors unable to perform any of the IADL or ADL are regarded as having ADL deficiencies.

2) The abuse experience score ranges from 1 (zero abuse) to 5 (frequent and severe abuse).

Source: Jeong and Sunwoo et al. (2014), Fact-Finding Survey on the Welfare of Seniors 2014, MOHW-KIHASA (raw data re-analyzed).

Of seniors with ADL and IADL deficiencies, those who were recognized by the government as eligible for long-term care and given disability grades gave an abuse experience score of 0.22, while those who were not given such disability grades scored 0.18. Seniors who are given disability grades by the government are likely to have more severe forms of ADL deficiencies than seniors without disability grades, and are thus more prone to the risks of abuse involved in care and other activities. However, as there are no statistically significant differences between the scores of seniors with and without disability grades, the differences in their experiences of abuse may be marginal in reality. This, in turn, could confirm the importance and value of the LTCI program as a form of social security protecting seniors from abuse.

(Table 14) Abuse Experience Scores and Disability Grades

(Unit: points and number of persons)

Disability grade	Abuse experience score (N)	T-value
With disability grades	0.22 (236)	570
Without disability grades	0.18 ( 62)	.5/9

<sup>\*</sup>p<.05, \*\*p<.01, and \*\*\*p<.001

Notes: 1) Seniors unable to perform any of the IADL or ADL are regarded as having ADL deficiencies.

2) The abuse experience score ranges from 1 (zero abuse) to 5 (frequent and severe abuse).

Source: Jeong and Sunwoo et al. (2014), Fact-Finding Survey on the Welfare of Seniors 2014, MOHW-KIHASA (raw data re-analyzed).

# (13) Proportion of seniors eligible for long-term at-home care who are still dependent on care from family members for at least half a day every day

Of seniors with ADL/IADL deficiencies who have been recognized as eligible for long-term care (given disability grades), many were still dependent upon care provided by family members. While 49.7 percent of seniors with ADL/IADL deficiencies who were not given disability grades required family care almost every day (either all day long or for at least half a day), 79.0 percent of seniors who were given disability grades required family care. Notwithstanding the LTCI, eight out of every 10 seniors are still dependent on family care. Seniors with disability grades are likely suffering from more severe forms of ADL deficiencies and, as a result, are more dependent on family care than seniors without disability grades. Yet the very high proportion of eligible seniors dependent on family care (almost

80 percent) suggests that the at-home care service system needs to be expanded and improved further.

(Table 15) Dependency of Eligible Seniors on Family Care

(Unit: % and number of persons)

Туре	All day long, every day	Half a day, every day	Three to four days a week	One to two days a week	Once a week or less	Total (N)
Seniors without dis- ability grades	10.7	39.0	8.6	14.2	27.5	100.0(1,430)
Seniors with disability grades	22.0	57.0	6.8	7.0	7.2	100.0( 279)

Source: Jeong and Sunwoo et al. (2014), Fact-Finding Survey on the Welfare of Seniors 2014, MOHW-KIHASA (raw data re-analyzed).

# (14) Proportion of seniors retaining the same disability grades for long-term care

Seniors who received Grade 1 in 2008 retained their original grade for 3.3 years on average, including seniors who died while retaining that grade, while those who received the same grade in 2009 retained it for 3.2 years on average. Those who received Grade 1 in 2010 retained it for 3.0 years. As the length of time over which seniors retain their original disability grades differs depending on when they first received their grades, it is difficult to determine the exact differences in the times during which seniors retain their original grades. If a tracing period for all seniors were to be set, it is possible that no statistically significant difference would be found.

(Table 16) How Long Seniors Retain Their Original Disability Grades

(Unit: number of years)

	Retaining Grade 1			
Disability grade first granted	Including the	Excluding the		
	deceased	deceased		
2008 (Tracing period: 6.2 years)	3.3	4.2		
2009 (Tracing period: 5.5 years)	3.2	4.0		
2010 (Tracing period: 4.5 years)	3.0	3.6		

	Retaining Grade 2			
Disability grade first granted	Including the deceased	Excluding the deceased		
2008 (Tracing period: 6.2 years)	3.2	3.5		
2009 (Tracing period: 5.5 years)	3.0	3.4		
2010 (Tracing period: 4.5 years)	2.8	3.2		

	Retaining Grade 3			
Disability grade first granted	Including the	Excluding the		
	deceased	deceased		
2008 (Tracing period: 6.2 years)	4.0	4.4		
2009 (Tracing period: 5.5 years)	3.7	4.1		
2010 (Tracing period: 4.5 years)	3.2	3.5		

Note: The numbers of seniors who died in the previous years and seniors who did not apply for or failed to receive disability grades were excluded from the analysis. "Excluding the deceased" means that seniors of the given disability grade who died during the tracing period were excluded from the analysis.

Source: NHIS, Analysis on LTCI Statistics.

# (15) Scores given by seniors receiving at-home long-term care on their own quality of life

Seniors with ADL/IADL deficiencies receiving at-home care were asked to rate their quality of life in terms of: (1) health condition, (2) financial condition, (3) quality of relationship with spouse, (4) quality of relationships with children, (5) participation in social and recreational activities, and (6) quality of relationships with friends/communities. Seniors with ADL/IADL

deficiencies gave an average score of 17.2 points, as opposed to the 20.0 points of seniors without such deficiencies, suggesting a general decline in quality of life associated with disability (t = -22.0\*\*\*, p  $\langle .001$ ). This finding suggests that the Korean government should increase its social and policy support for disabled seniors.

(Table 17) Disability and Quality of Life (N = 6,280)

(Unit: points and number of persons)

ADL deficiency	Quality of life (N)	T-value
Yes	17.2 ( 699)	-22.0***
NO	20.0 (5,581)	-22.0***

<sup>\*</sup>p<.05, \*\*p<.01, and \*\*\*p<.001

Notes: 1) Seniors unable to perform any of the IADL or ADL are regarded as having ADL deficiencies.

Source: Jeong and Sunwoo et al. (2014), Fact-Finding Survey on the Welfare of Seniors 2014, MOHW-KIHASA (raw data re-analyzed).

Seniors with ADL/IADL deficiencies were again divided between those who were given disability grades (and hence eligible for long-term care) and others who were not given such grades. The former gave an average score of 16.2 points for their current quality of life, while the latter gave an average score of 15.2 points. The latter have less severe forms of physical disability than the former, and were therefore expected to give relatively higher scores. In reality, however, seniors with more severe forms of disability (who received disability grades) fared slightly better in terms of quality of life. However, the

<sup>2)</sup> The quality of life score ranges from 1 (very unsatisfactory) to 5 (very satisfactory).

number of seniors with ADL deficiencies who did not receive disability grades was too small (13) to give this finding statistical significance. There is, in fact, little difference between the average score of all seniors with ADL deficiencies (both with and without disability grades) and the average score of seniors with disability grades (17.2 vs. 16.2). The small difference between seniors with disability grades and seniors without may support the conclusion that the LTCI is working properly to support and protect seniors in need of long-term care.

(Table 18) Disability Grades and Quality of Life

(Unit: points and number of persons)

Disability grades	Quality of life (N)	T-value
With disability grades	16.2 (101)	513
Without disability grades	15.2 (13)	515

Source: Jeong and Sunwoo et al. (2014), *Fact-Finding Survey on the Welfare of Seniors* 2014, MOHW-KIHASA (raw data re-analyzed).

### 4) Sustainability

### (16) Insurance premium per the insured

The current LTCI determines the premiums to be paid by the insured by multiplying the premiums they are already paying to the NHI by the rate of the LTCI premiums. In other words, the LTCI premiums are proportional to the NHI premiums and the LTCI premium rate. While the NHI premiums have been in-

creasing over the years, the LTCI premium rate has been fixed at 6.55 percent since 2010. Increases in the LTCI premiums are thus the result of increases in the NHI premiums. The monthly LTCI premium paid by a workplace-based participant rose from KRW 3,177 in 2009 to KRW 6,572 in 2015, on average, and the premium for a region-based participant rose from KRW 2,968 to KRW 5,279.

(Table 19) Monthly LTCI Premium per Participant

(Unit: KRW)

	2009	2010	2011	2012	2013	2014	2015
Per work- place-based insured person	3,177	4,700	5,383	5,792	6,025	6,244	6,472
Per region-based insured person	2,968	4,400	4,712	4,915	5,078	5,135	5,279

Source: NHIS, Yearbooks of Long-Term Care for the Elderly Statistics, each year.

# (17) Proportion of LTCI financing made up by government subsidies

At present, the LTCI draws upon the premiums paid by individual participants, out-of-pocket expenses paid by users, and national subsidies for the financial resources it needs. Government subsidies consist of the funds provided by the national government for the administration and operation of LTCI services and benefits, in addition to the funds it provides for the services and benefits of NHI participants. By law, these subsidies are to amount to 20 percent of the total amount of the LTCI premiums collected. In the first year of the LTCI, the Korean government exceeded this threshold by providing 25.3 percent of the amount of premiums as subsidies. The proportion of national subsidies, however, fell dramatically to 17 percent of the premiums collected in 2009, remaining at 17.9 percent by 2015, which is far below the 20-percent threshold.

This is most likely because the total LTCI premiums collected in the early days of the insurance were quite small. As the NHI and LTCI premium rates increased in the ensuing years, the proportion of government subsidies took a drop. Although the proportion remains under the legal threshold, the LTCI has been generating surpluses since its introduction. Financing thus poses little threat to the sustainability of the LTCI.

(Table 20) Proportion of Government Subsidies

(Units: %)

	2008	2010	2011	2012	2013	2014	2015
Proportion of national subsidies	25.3	18.1	18.1	17.5	18.1	18.6	17.9

Note: Proportion of government subsidies = (government subsidies / annual amount of LTCI premiums collected)  $\ge 100$ 

Source: NHIS, Yearbooks of Long-Term Care for the Elderly Statistics, each year.

# Conclusion: Findings and Policy Implications



# Conclusion: Findings and (( Policy Implications

I evaluated and analyzed the performance of the LTCI in South Korea using 17 indicators.

Regarding the effectiveness of the LTCI, although the proportion of eligible seniors in all disability grades who remain on long-term at-home care continues to increase year in and year out, almost 30 percent of all eligible seniors fail to retain at-home care services (due to admission to institutional care facilities, death, or other reasons) for more than two years. The fact that there is a significant number of seniors waiting to enter institutional care facilities—even the facilities that have performed poorly on government evaluations—reflects either the poor quality of at-home care services or the difficulty of receiving consistent family support at home. In the meantime, no statistically significant differences were noted between eligible seniors and ineligible seniors in terms of their experiences with abuse or satisfaction with their current quality of life. This may suggest that, on the whole, the LTCI is having the intended effect. Yet, families in Korea are still extensively involved in providing support and care for eligible seniors, indicating that the current at-home care service system in relying in part on the dedicated participation of families. From the perspective of families, the LTCI falls far short of achieving any significant reduction in their burden of caring for elderly family members.

Let me now examine how the LTCI has been faring in terms of efficiency. Since the program's inception, the proportion of LTCI-related spending on institutional care has consistently exceeded the proportion of spending on at-home care. While the amount of LTCI spending per capita has always been greater for institutional care than for at-home care, the disparity between the two types of spending has widened especially dramatically in recent years, with the former increasing to over three times the latter. This excessive proportion of spending on institutional care could undermine the financial sustainability of the LTCI in the long term. Moreover, the fact that spending on institutional care continues to rise at such a steep rate, outpacing GDP per capita, wage level, and inflation, strongly suggests that the limited national resources are being utilized quite inefficiently.

Let me now look at equity. There is a significant disparity across regions in terms of the numbers of institutional care facilities and facilities providing at-home care, suggesting increasing inequality in access to care services. However, the existence of institutional care facilities in certain regions that fail to admit elderly patients up to their maximum capacities also suggests growing competition among institutional care facilities. This much is evident in the changes in the rate of se-

niors in each region recognized as eligible for long-term care. In regions with relatively greater elderly care resources, the proportions of institutional care facilities operating at maximum capacity and proportions of seniors recognized as eligible are both declining. In the meantime, long-term care remains relatively unpopular among low-income seniors, most likely because it is still perceived by such seniors as too costly.

Finally, as for the sustainability of the LTCI, the LTCI premiums have been increasing consistently, driven by the continued increase in the NHI premium rate, while the proportion of government subsidies in the financing of the LTCI has remained steady, albeit below the legal threshold.

The policy implications of our analysis of the performance of the LTCI program can be summarized as follows.

First, although the LTCI currently appears to be faring relatively well in terms of effectiveness, there are still too many seniors waiting to enter institutional care facilities and too many families burdened by caring for their elderly family members receiving at-home care services. The operation of the current at-home care service system depends largely on the dedication of families, thus fueling the continued rise in the popularity of institutional care facilities. The at-home care service system should therefore be revisited and redesigned to reduce the burden on family caregivers as much as possible.

Second, the LTCI has much room to improve with respect to

efficiency, as the system still favors institutional care —with much higher unit prices of services—over at-home care. LTCI spending per patient in institutional care facilities has been increasing rapidly, even faster than the major indicators of the national economy. Left uncorrected, the current spending structure will likely increase the burden on taxpayers. Although there are relatively few seniors across Korea in disability grades 1 and 2, seniors with minor forms of disability in Grade 3 or below make up almost two-thirds of all seniors admitted to institutional care facilities, due to the excessive number of facilities being run. This, too, raises the overall cost of the LTCI.

Third, the equity of the LTCI can be improved by encouraging seniors to use the relatively more affordable at-home care services more than the services of institutional care facilities. To achieve this, however, the distribution of long-term care service resources across regions needs to be made more even. In addition, facilities providing at-home care should redefine their roles with respect to the roles of institutional care facilities and hospitals, so that the two types of facilities can complement each other rather than compete. However, the rates of seniors using long-term care services differ by income level, requiring policy-makers to revisit the current co-payment rates. Policy-makers may also need to consider reimbursing a portion of the out-of-pocket expenses paid by NHI and LTCI participants with very low incomes.

Finally, now that the cumulative amount of LTCI premiums is increasing steadily, the LTCI appears to be well established with respect to its financial sustainability, despite the fact that the proportion of government subsidies is consistently below the legal threshold. Pegging the LTCI premiums to the rising NHI premium rate, however, could lead to inefficiency in the financial management of the LTCI in the long term.

Our analysis on the performance of the LTCI shows that the at-home care system needs to be strengthened in order to ensure the long-term financial sustainability of the LTCI and reduce the regional inequality in access to available service resources.

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