Health Care Reform in Korea: Key Challenges

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Soonman KWON, Ph.D.
Professor of Health Economics & Policy
School of Public Health
Seoul National University, South Korea

ROAD MAP

1. Financial Protection and the Extension of Benefit Coverage
2. Financial Sustainability and Provider Payment System
3. Pharmaceuticals
4. Long-term Care Insurance

Health Care System in Korea

1. Health Care Financing

- Universal coverage of population through social health insurance (SHI) since 1989
- High out-of-pocket payment, amounting to 35-40% of total health expenditure: rapid increase in the provision of un-covered services
- Social insurance for long-term care, introduced in July 2008

2. Health Care Delivery

- Private delivery (90% of hospitals are private)
- Strong profit orientation and very strong opposition to payment system reform

I. Financial Protection and the Extension of Benefit Coverage

1. Benefit Coverage in Korea

Policy Priority on extending population coverage in Korea

- **Some Protection Mechanisms**

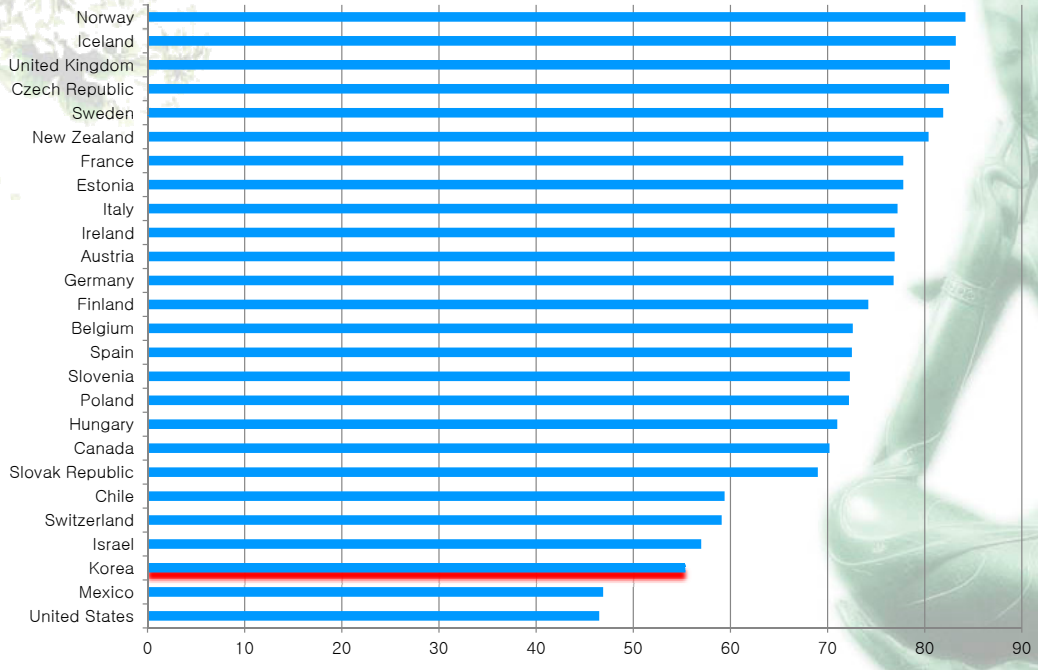
- Discounted copayment: elderly, patients with chronic conditions (e.g., renal dialysis)
- 5% OOP pay for catastrophic conditions: e.g., cancer
- Exemptions of copayment: the poor (Medical Aid program)
- Ceiling on out-of-pocket payment for covered services:
  3 different ceilings for 3 income groups (lower 50%, middle 50-80%, upper 80-100%)

Health Expenditure in Korea

Year	2002	2003	2004	2005	2006	2006	2008
Total Health Expenditure (THE) as a percentage of GDP	5.1	5.4	5.4	5.7	6.1	6.3	6.5
Public Expenditure on Health as a percentage of THE	51.3	50.4	51.1	52.1	54.7	55.2	55.3

Source: OECD Health Statistics, 2010.

% Public in Total Health Expenditure, 2008



Source: OECD Health Data 2010

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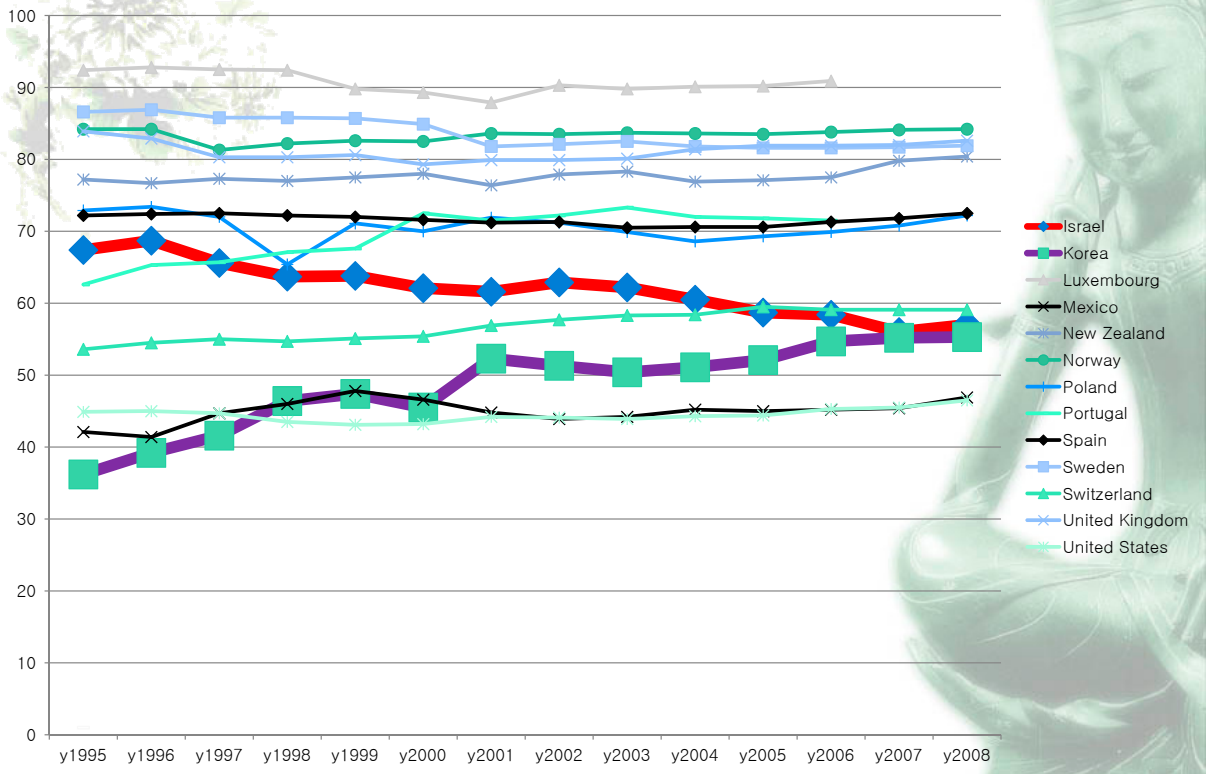

2. Why OOP payment is still high in Korea (about 35%) in spite of universal coverage of population?

- Cost sharing for covered services in inpatient care is only 20%

a. Provision of more and more of uninsured services (many of those services are not provided in other countries): rapidly increasing denominator (total H expenditure)

b. Physician and patient attitude toward technology

-> early adopters of technology

c. Perverse financial incentive by regulated FFS

d. Extra billing allows the provision of uninsured services bundled with insured services at the same episode of care/visit

3. Private Health Insurance (PHI)

Current regulation: PHI coverage of maximum 90% of the OOP payment under NHI (to minimized moral hazard)

More than half of population purchase PHI in Korea, and Taiwan (Kwon, Lee, and Ikegami, forthcoming, 2011)

- Over-insurance in the private insurance market, in general (e.g., very popular life insurance, which often provide coverage for health)
- People with higher socio-economic status tend to buy PHI

Recent study in Korea (Jeon and Kwon, 2010)

- Control selection bias by propensity score matching
- People with PHI show higher utilization of outpatient care, in volume and expenditure
- Little effect of PHI in the inpatient care

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Thirty years of national health insurance in South Korea: lessons for achieving universal health care coverage

Soonman Kwon*

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South Korea introduced mandatory social health insurance for industrial workers in large corporations in 1977, and extended it incrementally to the self-employed until it covered the entire population in 1989. Thirty years of national health insurance in Korea can provide valuable lessons on key issues in health care financing policy which now face many low- and middle-income countries aiming to achieve universal health care coverage, such as: tax versus social health insurance; population and benefit coverage; single scheme versus multiple schemes; purchasing and provider payment method; and the role of politics and political commitment. National health insurance in Korea has been successful in mobilizing resources for health care, rapidly extending population coverage, effectively pooling public and private resources to purchase health care for the entire population, and containing health care expenditure. However, there are also challenges posed by the dominance of private providers paid by fee-for-service, the rapid aging of the population, and the public-private mix related to private health insurance.

Keywords Health care financing, health insurance, universal coverage, Korea

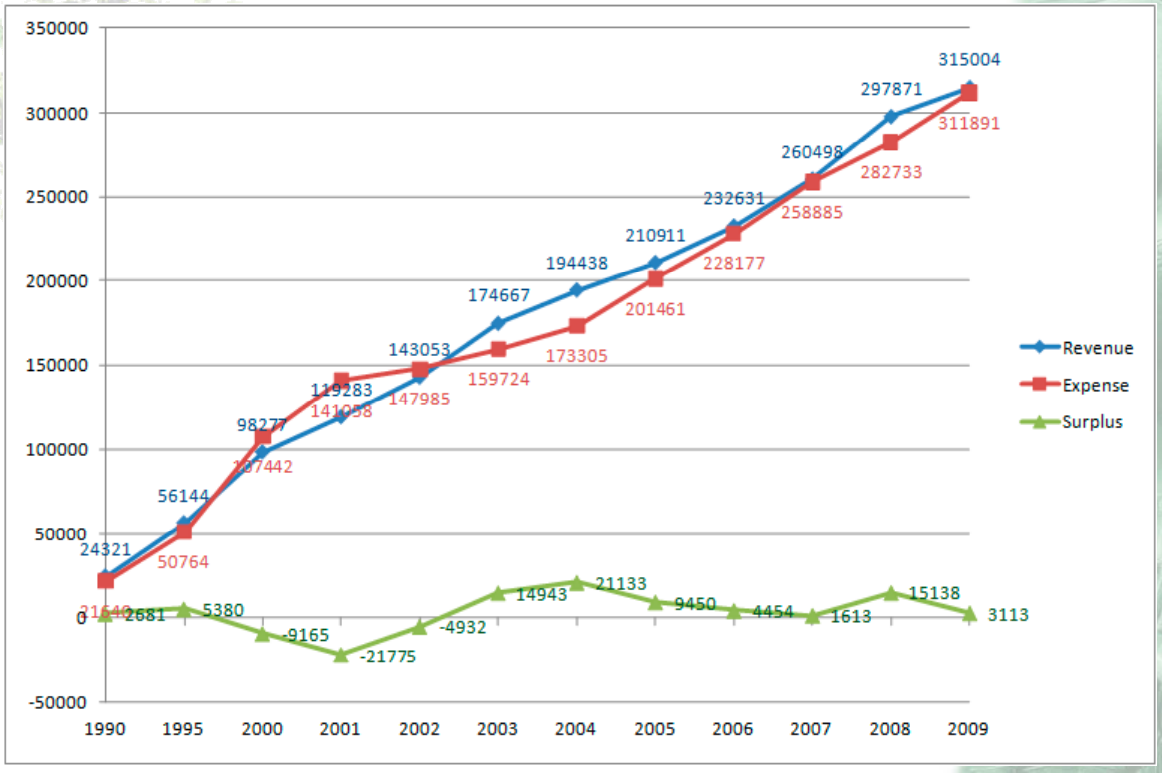
II. Financial Sustainability and Provider Payment System

Concern on Financial Sustainability and Cost Containment

- Increasing expectation on quality
- Rapid aging
- Private providers
- FFS payment

Fiscal Status of NHI

unit: 100 mil won



Health Insurance Contribution Rate, Korea (% of wage income)

	2004	2005	2006	2007	2008	2009	2010	2011
HI Cont. Rate (%)	4.21	4.31	4.48	4.77	5.08	5.08	5.33	5.64

Revenue for National Health Insurance, Korea

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
HI Contribution (%)	76	76	78	80	81	82	84	85	83	84
Government Subsidy (%)	23	22	20	19	18	17	15	14	15	15
Others (%)	1	2	2	1	1	1	1	1	2	1
Total (%)	100	100	100	100	100	100	100	100	100	100

1. Fee for Service Payment and RBRV (Resource-Based Relative Value)

Fee = conversion factor * Relative Value

Negotiation between NHIC (Nat H Insurance Corporation) and provider organization over conversion factor

Setting of the conversion factor need to take into account the expenditure or volume (or based on whether actual expenditure exceeds the target expenditure)

- Volume Performance Standard should be introduced

2. DRG-based Prospective Payment

As of 2007 (for 7 disease categories, voluntary participation)

a. 69% of HC providers participates :
- 78% of Physician clinics (used to be 60% in 2002)
- 41% of Hospitals (49% in 2002)
- 38% of General hospitals (45% in 2002)

b. DRG payment accounts for
- 8.4% of inpatient cases
- 6.0% of H insurance expenditure for inpatient care

-> Limited effect on the overall behavior of health providers

EVALUATIONS (HIRA, 2009: Choi and Kwon, 2009)

- Amount of service is lower for providers paid by DRG than those paid by FFS

- Tests and medications; Length of stay

- Little difference between providers paid by DRG and those paid by FFS

- in medically necessary services: contributes to little negative impact of DRG payment on outcomes

- in re-admission: because the disease categories paid by DRG system are non-severe types

DRG effect on LOS is the greatest in the earlier years of participation and diminishes as participation continues

Overall, there was a substitution effect (substitution of unregulated inputs for regulated ones), but the total effect was positive (reduction in cost)

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Payment system reform for health care providers in Korea

SOONMAN KWON

Department of Health Policy and Management, School of Public Health, Seoul National University, Korea

Since its introduction in 1977, the national health insurance programme in Korea has paid health care providers on a fee-for-service basis. Regulated fee-for-service payment has resulted in an increased volume and intensity of medical care. It has also distorted the input mix of treatment because physicians have substituted more profitable and uninsured (no coverage) medical services for those with lower margins, as is evidenced by the sharp increase in the caesarean delivery rate. This paper examines two recent supply-side reforms in Korea: Diagnosis Related Group (DRG) and Resource-based Relative Value (RBRV). Since 1997, through a pilot programme covering a selected group of diseases for voluntarily participating health care institutions, the DRG-based prospective payment system has proven to be effective in containing cost with little negative effect on quality. RBRV-based payment was implemented in 2001, but led to an almost uniform increase in fees for physician services without a mechanism to control the volume and expenditure. Challenges and future issues in the reform of the payment system in Korea include the expansion of benefit coverage, quality monitoring and improvement, strategic plans to overcome the strong opposition of providers and the introduction of global budgeting.

Key words: health insurance, provider payment, DRG, RBRV, Korea

III. Pharmaceuticals

1. Reimbursement to Medical Providers

Reimbursement of real cost of purchase

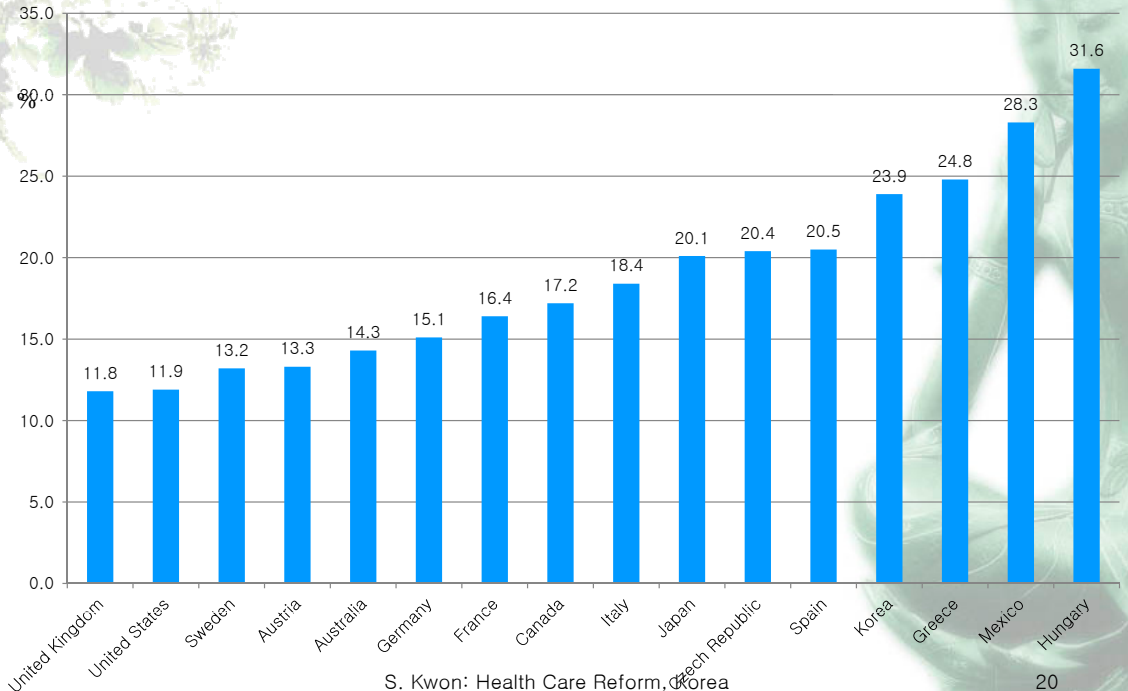
(No margin on medicines)

- No incentive for providers to purchase medicines in a cost-effective way
- Beneficial to pharmaceutical manufacturers and distributors
- Pharmaceutical manufacturers and distributors provide informal pay-back to hospitals/physicians

-> Finally changed in 2010: Now allow providers to keep a given portion of the difference between real cost of purchase and prevailing market price

% Pharmaceutical Expenditure in THE, 2008

Source: OECD Health Data 2010



2. Pricing of Pharmaceuticals

Pricing Policy in the Past

a. Pricing of New Medicines

Average of manufacturing prices (65% of list price) in 7 countries (USA, UK, Germany, France, Italy, Swiss, Japan) plus VAT and distributors' margin

-> External Reference Pricing

b. Pricing of non-new (copy) Medicines in Korea

1st generic medicine: 80% of the price of existing original medicine (price of the originator is down to 70% when generic enters)

2nd-5th: 80% of the price of the existing generic medicine

6th- : 80% of the price of 2nd-5th copy medicines

International Price Comparisons of Generics: Price Index (1) (Kim, Kwon, et al., 2010)

	No M/P/S	USD				USD-PPP			
		Laspeyres	Paasche	Walsh	Fisher	Laspeyres	Paasche	Walsh	Fisher
USA	62	0.539	0.418	0.446	0.475	0.381	0.295	0.315	0.335
Norway	46	0.540	0.304	0.366	0.405	0.233	0.131	0.158	0.175
Sweden	47	0.628	0.275	0.370	0.415	0.312	0.136	0.184	0.206
UK	62	0.760	0.301	0.415	0.479	0.437	0.173	0.239	0.275
Spain	65	0.768	0.435	0.628	0.578	0.486	0.275	0.397	0.366
Germany	67	0.784	0.496	0.603	0.624	0.439	0.277	0.338	0.349
Belgium	53	0.895	0.638	0.711	0.755	0.471	0.336	0.374	0.397

International Price Comparisons of Generics: Price Index (2) (Kim, Kwon, et al., 2010)

	No M/P/S	USD				USD-PPP			
		Laspeyres	Paasche	Walsh	Fisher	Laspeyres	Paasche	Walsh	Fisher
Italy	57	0.901	0.628	0.742	0.752	0.515	0.359	0.424	0.430
Netherlands	59	0.919	0.490	0.576	0.671	0.500	0.267	0.313	0.365
Australia	50	0.993	0.845	0.915	0.916	0.555	0.472	0.511	0.512
Austria	59	1.130	0.726	0.902	0.905	0.607	0.390	0.485	0.487
France	54	1.131	0.881	1.024	0.998	0.590	0.460	0.535	0.521
Swiss	44	1.205	1.098	1.141	1.150	0.559	0.509	0.530	0.534
Japan	33	1.477	1.086	1.109	1.267	0.924	0.679	0.693	0.792

3. Reform in Benefit Decision and Pricing

a. Economic Evaluation (EE)

Introduction of **positive listing** (included in the benefit package) based on cost effectiveness, starting in 2008

-> HIRA (Health Insurance Review and Assessment) reviews the data submitted by pharmaceutical manufacturers

b. Pharmaceutical Pricing

Instead of formula-based pricing (average price in 7 countries)

-> Introduce *price negotiation* between NHIC (National Health Insurance Corporation) and pharmaceutical manufacturers with *price-volume* consideration

Pharmaceutical Policy in South Korea

Soonman Kwon

As patients age and financial barriers to use are removed, the resultant growth of drug consumption and spending can negatively impact the financial sustainability of a nation's health-care system (Davis 1997). South Korea (hereafter Korea) is facing these challenges and more. Before 2000, physicians and pharmacists were allowed to both prescribe and dispense drugs; driven by economic incentives, this resulted in drug overuse and overspending. But despite an urgent need, the strong opposition of physicians and pharmacists was a critical and longtime barrier to reform.

On July 1, 2000, the Korean government mandated the separation of drug prescription and dispensation. The reform aimed to fundamentally change the inefficient pattern of pharmaceutical provision and consumption, reduce the resultant overuse and misuse of drugs, and contain pharmaceutical expenditures. But the reform triggered severe physician strikes, since profits from drug prescriptions had been a major source of physicians' income. These strikes distorted the contents of the pharmaceutical reform and reduced the social benefits from the policy change, which in turn affected government plans for other health-care reforms.

In this chapter, I examine the pharmaceutical reform in Korea—including the separation of drug prescribing from dispensing—and evaluate its impacts. I analyze several aspects of the reform, including its context, contents, policy formulation, implementation, and evaluation. I also evaluate the impact of the pharmaceutical reform on physician behavior and the pharmaceutical market. In particular, I look at how the new policy affected vested economic interests and thus changed the pharmaceutical sector—and the entire health-care system—in Korea. I also address more recent changes to Korean pharmaceutical policy such as pharmaceutical pricing and economic evaluation.

The Pharmaceutical Reform: Context and Contents

Korea's national health insurance provides universal coverage of its population. Rapid expansion of population coverage was made at the expense of limited-benefit coverage with low contributions. Despite social insurance for health care, public financing accounts for less than 60 percent of total health-care expenditures in Korea.[1] Health-care providers are reimbursed on a fee-for-service basis. Since fees are strictly regulated, physicians have strong incentives to provide more profitable services and higher-margin products (that is, drugs)—in other words, those services and products for which the difference between the government reimbursement and actual cost is the greatest.

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Profit-maximizing behavior is the norm among health-care providers because

IV. Population Aging

1. Structure of LT Care Insurance (LTCI)

1) Social Insurance for LT Care

Introduced July 2008

Insurer (National Health Insurance Corporation, NHIC)
(e.g., sickness funds in Germany,
local governments in Japan)

2) Population Coverage

Targeted coverage: 3-4% of the elderly
-> tradeoff between LTC needs and financial sustainability

a. Long-term care for the elderly (+65), and
b. Age-related long-term care of the younger (<65 years)
-> will be very few

Political compromise: Everybody should pay contribution, and everybody is eligible when he/she has LT care needs due to *age-related* health problems

Mix of German and Japanese model
- Germany: all types of disability regardless of age
- Japan: long-term care of the elderly (+65) and age-related LT care for 40-64 years old

2) Population Coverage (continued)

As of April 2010 (following statistics are from NHIC)

Service users: about 250,000 (4.8 % of the elderly)

Those certified to be eligible for the benefits:
about 310,000 (5.7% of the elderly)
- 80 years and older (45%), 70-79 years old (37%), 65-69 years old (10%), below 65 years old (8%)
- about 11% (Germany), 17% (Japan)

2) Population Coverage (continued)

	July 2008	July 2009	May 2010
Nr. Applied (% of the Elderly)	295,715 (5.9%)	513,749 (9.8%)	676,966 (12.6%)
Nr. Certified to be Eligible (% of the Elderly)	146,643 (2.9%)	268,071 (5.2%)	308,126 (5.7%)
Nr. Used Services (% of Those Eligible)	78,370 (53.4)	184,434 (68.9)	244,669 (79.4)

3) Assessment

3 levels of functional status (3-4% of the elderly):
Level 1 (very severe), Level 2 (severe), Level 3 (moderate)

Level 3 is eligible only for visiting/home-based care

As of May 2010
- Among those who are certified to be eligible:
  17% level 1 (most severe), 25% level 2, 58% level 3

4) Level of Benefits

Contribution rate:
4.05% of health insurance contribution (2008)
-> 4.78% (2009) -> 6.55% (2010)

Financing mix
- Government subsidy: 20%
- Copayment: 20% (institution), 15% (home-based)
-> exemption or discount for the poor
- Contribution: 60-65%

Meals, private rooms are not covered by LT care insurance

5) Type of Benefits

Service benefit in principle, cash benefit in exceptional cases (e.g., when no service providers in the region)

Payment to providers
- pay per hour: visiting care, visiting nursing
- pay per visit: visiting bath
- pay per day: institutional care, day/evening care

Ceiling on benefit coverage for non-institutional care: depending on the (three) levels of functional status

5) Type of Benefits (continued)

Role of cash benefits needs to be re-considered

a. Pros

- Preserving the role of family
- Consumer choice (competition among formal and informal care givers)
- Potential cost savings (level of cash benefits lower than service-in-kind)

b. Cons

- Potential abuse, low quality of care, gender perspective?
- Against the philosophy of socialization of care

2. Challenges

1) Excess Supply of LT care providers

Number of LTC workers certified:
70,355 (June 2008) -> 935,607 (June 2010)
Number employed, about 200,000
(6 weeks of training only->Exam was recently introduced)

Size of LTC residential facilities:
too small, diseconomy of scale, excess competition
-> 70 persons + (13%), 30-70 persons (25%),
below 30 persons (62%)

2) Financial Sustainability

Average service days per user of LTCI benefits (2009):
Institution-based (239.5 days),
Home-based (137.1 days)

Average monthly LTC expenditure per user paid by LTCI (2009): Institution-based (731,531 KRW),
Home-based (367,387 KRW) * 1 USD = about 12,000 KRW

LTC expenditure as a % of GDP:
0.07 (2008) -> 0.19 (2009)

2) Financial Sustainability (continued)

Financial Projections (Kwon, et al., 2011): PSSRU model

a. LTC expenditure as a % of GDP
0.23% (2020) -> 0.28% (2030) -> 0.4% (2040)

b. Proportion of the elderly who use LTC insurance
6.7% (2020) ->6.5% (2030) -> 7.6% (2040)

Bad news: rapid aging
Good news:
- Ceiling on benefits
- Compared with health care, less potential of supplier-induced demand, smaller role of expensive high technology

The introduction of long-term care insurance in South Korea

Soonman Kwon

Background

In July 2008, Korea introduced a new social insurance scheme for long-term care (LTC). Several important demographic and social changes have contributed to the introduction of LTC insurance, including the rapid ageing of the population as a result of the increase in life expectancy and the sharp decline in fertility which fell below 1.1 in 2005.[1] The proportion of older people (those over sixty-five) in Korea was 9% in 2005, but is forecast to increase at an unprecedented rate. Older people are expected to account for 16% of the population by 2020 and 38% by 2050, resulting in an old-age dependency ratio of 70%.[1]

With population ageing the demand for LTC has increased. Family structures have also contributed; the proportion of older people living with adult children had decreased to 38% by 2004. The availability of informal or family caregivers is diminishing, given that female labour participation is increasing and thus they are less willing to provide care. Only 36% of those who receive LTC also receive care from their spouse. However there are difficulties in obtaining residential care because the supply of LTC facilities is limited and, unlike health care which is covered by the health insurance programme, there had been no similar system for LTC.

In response to these challenges, the government established a Planning Committee for Long-Term Care for Older People in 2000, and President Kim DJ formally suggested the need to introduce LTC insurance in 2001. In 2003, President Rho MH decided to launch a LTC insurance scheme in 2007. Legislation was passed in April 2007, but its implementation was delayed by a year, with the scheme finally coming into operation in July 2008. LTC insurance had been proposed, and indeed was ultimately implemented, by a series of progressive governments that strongly supported the expansion of the welfare state.[2] The government's reluctance to expand the public assistance programme for long-term care of (poor) older people has also contributed to the rather early adoption of a universal financing scheme based on premium contributions.

Social Insurance for long-term care

Tax-based financing was never given serious consideration from the beginning of discussions on a possible LTC financing system. Contribution-based social insurance financing was adopted because the Korean welfare state is based on various social insurance schemes such as health insurance, pensions, unemployment insurance, and workplace injury compensation. By making use of the existing administrative structure of the health insurer, the National Health Insurance Corporation (NHIC), LTC insurance can minimise administrative costs.

Path dependency also affects the financing mix: LTC insurance in Korea is not a pure social insurance, but financing from contributions has a greater role than tax subsidies. As in the case of health insurance, the Ministry of Health Welfare and the Family (MHWF) will play a key role in the policy for LTC insurance and tightly monitor the insurer. The NHIC, the single payer of health insurance, also strongly supports LTC insurance as an opportunity to extend its own operation and mitigate against the pressure of downsizing/employment adjustment within its own organisation.

LTC insurance, separate from health insurance, also has the potential benefit of being able to the 'de-medicalise' LTC. It is also easier for the government to persuade the public to pay contributions which are exclusively for LTC. However, the separation of LTC financing from health insurance may be a barrier to coordination between health and LTC if the two different financing schemes try to offload their financial burdens on each other.

Population coverage

The new LTC insurance scheme provides coverage for all those over the age of sixty-five, as well as age-related LTC needs for younger people. As a result, the Korean LTC insurance scheme does not provide coverage for disability-related care needs. The government has prioritised population ageing and related problems, rather than aiming to solve problems related to LTC. Thus the new LTC insurance, targeted to cover only aged-related care needs, will have a limited effect on social solidarity.

In contrast to health insurance, individuals need to obtain prior approval for services through an assessment of functional limitations. In order to determine eligibility, a visit team from the local branch office of the NHIC assesses the functional status of individuals using a fifty-six item evaluation. There are three levels of functional status/limitations, each with different benefit levels. Local assessment committees comprise no more than fifteen members, including a social worker and medical doctor (or traditional medical doctor). All decisions of the committee are based on the assessment of ability to perform activities of daily living (ADL) undertaken by the visit team, alongside a doctor's report.

The difference in entitlements compared to health care may not immediately be understood by older people. Initially there may be many appeals for reassessment of eligibility (functional status) as the LTC scheme is rolled out. The current

Soonman Kwon is Professor of Health Economics and Policy, School of Public Health, Seoul National University, South Korea. Email: kwons@snu.ac.kr

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V. Directions for Future Reform

a. Health Care Financing

Contributions based on wage income:

inequitable and inefficient (distortion in labor participation)

-> contributions should be collected not only on wages but also on other forms of income

Cost containment through payment system reform

- Prospective case-based payment (e.g., DRG)
- Global budgeting

V. Directions for Future Reform

b. Pharmaceuticals

- Budget cap on pharmaceutical expenditure: physicians and pharmaceutical industry share the responsibility when pharmaceutical expenditure exceeds the cap
- Mandatory generic prescription, financial incentives for physicians to prescribe less costly medicines (e.g., payment system reform), discounted copayments for consumers who choose generics (e.g., reference pricing).
- Reduce the price of generic medicines to decreased the price gap between branded drugs and generics -> facing strong oppositions by domestic manufacturers

V. Directions for Future Reform

c. Long-term Care Insurance

- Balance between institutional care and home-based (community-based) care
- Coordination between LT care insurance and health insurance in terms of benefit coverage and provider reimbursement: health promotion for the elderly, reduce social admissions
- Coordination between LC care insurance and welfare services (provided by local governments)

THANK YOU !

Prof. Soonman KWON

kwons@snu.ac.kr (Seoul National Univ.)
http://plaza.snu.ac.kr/~kwons (Homepage)