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

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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

KEY MESSAGES

- A mix of social insurance and tax can work well for health care financing systems in low- and middle-income countries.
- Political commitment and family-based membership contribute to rapid population coverage moving toward universal health care coverage.
- Effective health care purchasing and the regulation of health care providers are key factors in the sustainability of health care financing.

Introduction

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. Therefore, from the introduction of social health insurance, it took only 12 years for Korea to achieve universal coverage of its population. National health insurance in Korea used to have multiple insurance societies covering employees and the self-employed separately, although claim review and payment to health care providers were centralized, and statutory benefit packages were identical across schemes. In 2000, there was a major change in the structure of the health insurance programme, and all insurance societies were merged into one single payer.

The Korean experience of the rapid development of social health insurance can provide valuable lessons for countries

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(mainly low- and middle-income) which aim to achieve health care coverage for their entire population. There are many key issues in health care financing, and different countries may adopt different approaches. For example, the mode of health care financing matters, such as tax versus social health insurance, and each mode of financing has its own strengths and weaknesses. Just how to extend population coverage and how to design benefit coverage are important considerations; there can be a trade off between these two coverage decisions. Having a single health insurance scheme or multiple schemes can have different effects on the efficiency and equity of health care financing. The purchasing function of a health care financing system, together with the provider payment method and the regulation of health care providers, have critical effects on the quality of care and financial sustainability. Finally, health care financing policy depends on politics, and political commitment and strategy affect the entire process of health financing policy and reform. These challenges are not unique to Korea, and as such, the paper contributes to the international debate on health financing (Palmer *et al*. 2004; Carrin and James 2005; WHO 2005; Gottret and Schieber 2006).

This paper aims to provide a discussion on the key issues involved in achieving universal health care coverage, based on the experience of Korea. The paper will first review the historical development of health insurance in Korea, its major characteristics, performance and recent reforms. Then it examines key lessons from the Korean experience of health insurance for countries aiming to provide health care coverage for their entire population. The paper concludes by presenting some of the future challenges the Korean health insurance system will face.

Evolution of national health insurance

Introduction and extension of national health insurance

The Health Insurance Law was enacted in December 1963 by the military government immediately after its *coup d'état*. Due to the country's weak economic and social infrastructure, the law eliminated mandatory insurance coverage, and social insurance for health care was not actually implemented until the mid-1970s. The Health Insurance Law was revised substantially in December 1976 in order to include the *mandatory* enrolment of the population in health insurance (Kwon 2005).

Employees of corporations with more than 500 workers were the first group to be covered by health insurance in 1977. Health insurance was extended to workers in firms with more than 300 employees in 1979, was further extended to firms with more than 100 employees in 1981, and to those with more than 16 employees in 1983. A Medical Aid programme (Medicaid) started for the poor in 1977, and government employees and teachers joined the health insurance programme in 1979. To extend health insurance to the self-employed, the government implemented a pilot programme in three rural areas in 1981, and in one urban area and two additional rural areas in 1982. The health insurance programme achieved universal coverage of the population by including the rural self-employed in January 1988 and the urban self-employed in 1989 (Figure 1). From the beginning, the health insurance

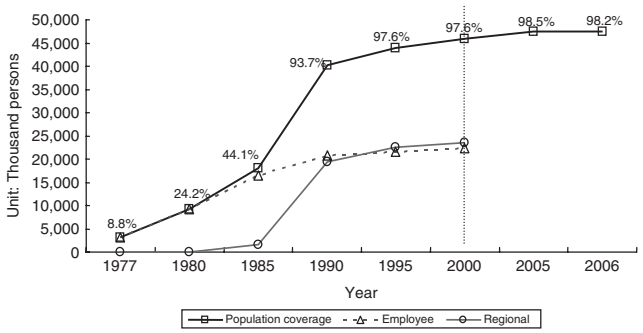


Figure 1 Population coverage of health insurance
Note: All insurance societies were merged into one in 2000.

system adopted family-based membership, with dependents becoming members of the scheme that their household head was enrolled in. Health insurance for employees was based on workplaces, and that for the self-employed on their region of residence. For the employee health insurance scheme, large corporations had individual firm-level insurance societies, while small and medium-sized firms were pooled to join an insurance society in their geographic area.

Political and economic contexts

Introduction of health insurance

The authoritarian political regime and its motivation for political legitimization played a key role in the introduction and extension of social health insurance for health care in Korea (Kwon 1999). Contrary to western welfare states, labour movements or class struggles played no role in the development of health insurance in Korea; there was no labour party or social democratic political party, and labour unions became active only in the late 1980s. Commencing in the early 1960s, a series of 5-year Economic Development Plans, formulated by President Park Chunghee, substantially improved the country's economic well-being through export-driven economic policy. The Government began to recognize the importance of a welfare system, and the Fourth Economic Development Plan of 1977–1981 placed emphasis on social development, aiming to distribute the fruits of economic development to workers.

Extension of health insurance to the self-employed

The extension of health insurance to the self-employed or workers in the informal sector is a major challenge in the universal coverage of a population. Both economic and political factors contributed to the rapid extension of health insurance to the self-employed, the last group to join the national health insurance (NHI) in 1989 (Kwon 2005). Firstly, the booming economy of the late 1980s substantially improved the ability of the self-employed to pay for social insurance. The economy of Korea enjoyed record high annual growth rates of about 12% between 1986 and 1988. Thus the government had the fiscal capacity to provide a subsidy for health insurance for the self-employed. Secondly, as a political factor, President Chun Doowhan and the presidential candidate of the ruling party, Roh Taewoo, were former military generals and wanted to obtain political support and legitimacy by proposing universal health insurance coverage. The impending 1987 presidential

election prompted the ruling party to announce an expansion of social welfare programmes as a major item on their campaign agenda. In 1986, the government announced plans to include the self-employed in the NHI, to introduce a national pension scheme, and to implement a minimum wage system.

The government was also prompted to provide health insurance to the self-employed because of the increasing inequity between the amounts paid for medical care by the (insured) employed and the (uninsured) self-employed. The social health insurance system reimbursed providers based on a regulated fee schedule, which induced health care providers to charge higher (unregulated and market) fees to the uninsured. The difference between the fees paid by the insured (employees) and the unregulated price paid by the uninsured (self-employed) increased over time. This cost-shifting from the employed sector to the worse-off self-employed sector caused concerns around the lack of equity in payments for health care.

The government wanted employees and the self-employed to be covered by separate insurance societies to avoid problems associated with different degrees of income assessment between the two groups. Contrary to the rather smooth extension of health insurance to industrial workers, its extension to the self-employed faced tough resistance. Farmers requested an increase in government subsidy to their health insurance scheme and an expansion of health care facilities in rural areas for better access to medical care. Consequently, the government subsidized the health insurance contribution of the self-employed and provided financial support for hospitals to open in rural areas. The amount of tax subsidy to the self-employed was initially about the half of the total revenue of the health insurance scheme for the self-employed.

Table 1 presents some economic and health indicators for 1977 (when health insurance was first introduced), 1989 (when universal coverage was achieved) and 2005. Korea has experienced big improvements in economic conditions and health outcomes such as life expectancy and mortality during this period. The supply of health care personnel and facilities and health care utilization have increased substantially, along with both economic development and health insurance.

National health insurance in Korea

Organizational structure

Before the merger of all health insurance societies in 2000, there were three types of social health insurance schemes for: (1) government employees and teachers and their dependents, administered by a single insurance society; (2) industrial workers and their dependents, with about 140 insurance societies; and (3) the self-employed and workers in firms with less than five employees, with about 230 insurance societies (see Figure 1). There was, and remains, a separate programme for the poor, Medicaid, covering the remaining 3–5% of the population, with an annual assessment of poverty status. The Medicaid programme is financed by the general revenue of the central and local governments, but administered (e.g. payment to providers) through the health insurance system (Shin 2006). There was no difference in the statutory benefit coverage between social insurance societies. Before the merger in 2000, each insurance scheme consisted of quasi-public insurance societies, which were subject to strict regulation by the Ministry of Health and Welfare. Beneficiaries were assigned to insurance societies based on employment (employees) and residential area (self-employed). There was no competition among health insurance societies to attract the insured and no selective contracting with health care providers.

Contributions and benefits

For industrial workers and government and school employees, contribution is proportional to wage income and shared equally between the employee and employer. Before the merger of insurance societies in 2000, the average contribution rate was 5.6% (of wage income) for government and school employees, and 3.75% for industrial workers, with a range of 3.0–4.2% depending on the insurance society (subject to approval by the Ministry of Health and Welfare). As of 2006, the contribution rate was 4.48% (NHIC 2007). There is a wages ceiling for contribution assessment, but it is very high (monthly wage of 50 000 USD) and only a small number of people are in this category. Because reliable information about the incomes of the self-employed is only partially available, the contribution formula for the self-employed is based on both income and property.

Table 1 Economic and health indicators in Korea

	1977	1989	2005
GDP per capita (in US$)[a]	1042	5430	16 306
Life expectancy[b]	64.8	71	77.4 (2003)
Mortality (per 100 000 persons)[c]	690	542.3	504.3
Infant mortality (per 1000 births)[b,c]	38 (average for 1970–75)	12	3.8 (average for 2000–05)
No. of physicians per 10 000 persons[b]	5 (1981)	8	16 (2004)
No. of beds per 10 000 persons[b]	17 (1981)	30	73
No. of physician visits per capita[b]	3.7	6.2	10.6 (2002)
No. of admissions per capita[c]	–	0.06 (1990)	0.12
No. of hospital days per admission[b]	12	14	13.5 (2003)

Note: 1977 = introduction of health insurance; 1989 = universal coverage.
Source: [a]Bank of Korea, 2006;
[b]OECD Health Data, 2006;
[c]National Statistical Office, 2006.

The benefit package of health insurance mainly includes curative services, but includes biannual health check ups and vaccination is provided free of charge in public health centres. For services covered by the NHI, the co-insurance rate is uniformly 20% for inpatient care. The co-insurance rate is 35–50% for outpatient care in hospitals depending on the type of hospital concerned. In outpatient care, the co-payment is set higher for hospitals than for physician clinics in order to encourage people to visit physician clinics before visiting hospital outpatient centres. Beneficiaries of the Medicaid programme, people over 65 years and those who need long-term treatment due to chronic or catastrophic conditions (such as chronic renal failure, haemophilia, leukaemia, and cancer in those under 18 years) pay discounted co-payments for out-patient care. One of the major contributions of health insurance is to reduce out-of-pocket (OOP) payments. The share of OOP payments in total health expenditure has decreased from 63% in 1983 to 38% in 2004 (Figure 2). However, the share of OOP payments in Korea is still greater than the OECD average although the gap has decreased.

Health care delivery and payment to providers

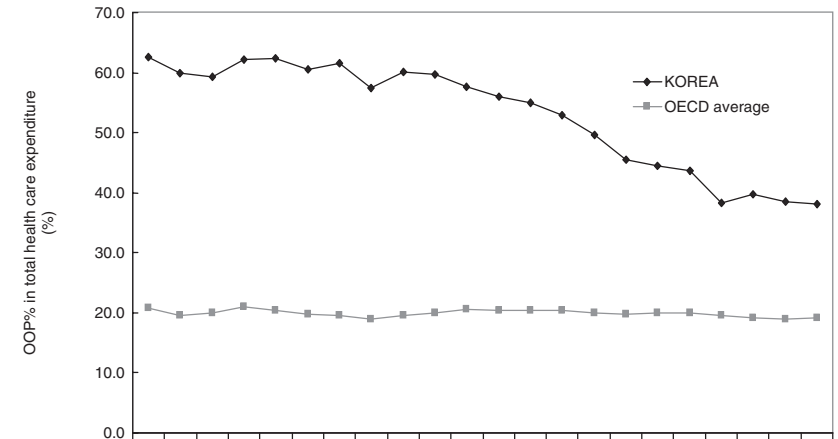
Health care delivery in Korea relies heavily on the private sector; only about 10% of hospitals are public. There is no difference for the health insurer in its dealings—for example, in fee schedules—with private or public hospitals. Most office (or clinic) based physicians are board-certified specialists, and those in the area of surgery even have small inpatient facilities. There is no formal gate-keeping, and clinics and hospitals perform similar functions, resulting in a limited role of primary care, and competition rather than coordination among physician clinics and hospitals.

Health care providers in Korea have been reimbursed by the regulated fee-for-service system since the beginning of the national health insurance. The fee-for-service system has led to an increase in volume and intensity of services, the provision of services with a greater margin, and distortion in the supply of medical specialties in the long run. As a first step in the transition from fee-for-service reimbursement to a prospective payment system for inpatient care based on diagnosis-related group (DRG), the government launched a DRG pilot programme in February 1997 for voluntarily participating health care institutions. This pilot programme had a positive impact on the behaviour of health providers, such as reductions in the length of stay, medical expenses, the average number of tests and the use of antibiotics, without a negative effect on quality of care (Kwon 2003a), but strong opposition by providers has been a stumbling block to the extension of the DRG payment system to all health care providers.[1]

Regulation of provider behaviour also affects the financial burden on patients. As fees are regulated for covered services, providers have financial incentives to provide more non-covered services, mainly new technology, for which they can charge the market price. In a recent survey (Chung and Kim 2005), the average OOP payment as a percentage of total medical expenses for inpatient care was found to be 41% for hospitals (18% for co-payment for covered services and 23% for non-covered services) and 28% for physician clinics (18% and 10%, respectively). For outpatient care, the average OOP payment was 50% for hospitals (27% for co-payment for covered services and 23% for non-covered services) and 34% for physician clinics (26% and 8%, respectively). Therefore, in order to decrease the financial burden of OOP payments, the government needs to regulate provider behaviour and the adoption and use of new health care technology.

Health expenditure

In 2004, Korea spent 5.6% of its GDP on health care, an increase from 4.1% in 1985 (OECD 2006). This level of expenditure is rather low compared with other OECD countries (the OECD average is 8.9%), to some extent due to Korea's success in the containment of health care costs. However, real health expenditure per capita has increased rapidly following the introduction of universal coverage in the late 1980s, to a level twice the average of OECD countries. At the same time, low health expenditure as a percentage of GDP is partly due to Korea's rapid GDP growth. Since the growth of GDP in the future will not be as high as in the past, the proportion of GDP



	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	Year
KOREA	62.5	60.0	59.3	62.2	62.4	60.5	61.5	57.5	60.1	59.8	57.7	56.0	54.9	52.9	49.6	45.6	44.4	43.6	38.3	39.7	38.4	38.1	
OECD average	20.8	19.6	19.9	20.9	20.4	19.7	19.6	18.9	19.6	20.0	20.5	20.4	20.4	20.4	19.9	19.8	19.9	20.0	19.5	19.2	19.0	19.2	

Figure 2 Share of out-of-pocket payment in total health expenditure
Source: OECD Health Data, 2007.

that is spent on health care is expected to increase. Partly because the benefit coverage is not very extensive, taxation and social insurance related to health care (national health insurance, Medicaid, workers' compensation) accounted for about 52% of total health care expenditure in 2004 (OECD 2006).

Fiscal sustainability and cost containment have been of concern for the national health insurance system in Korea, as in many public financing systems for health care in developed countries. National health insurance as a whole has experienced a deficit since 1997, but an accumulated surplus delayed a fiscal crisis until 2001. An aging population, little incentive for physicians to provide cost-effective care under the fee-for-service system, and increasing demand for health care have contributed to health care cost inflation. However, the fiscal instability of the national health insurance has provided an opportunity to increase its premium contribution substantially, which to some extent has contributed to the extension of benefit coverage (Kwon 2007). The national health insurance is now financially stable. As a result of the increase in contribution and benefits, the average real growth of health expenditure was 8.9% per year in 1999–2004, which was greater than the average for OECD countries (5.2%) (OECD 2006).

Health care financing reform: single payer system

In 2000, all health insurance societies were merged into a single national health insurer, the National Health Insurance Corporation (NHIC). Inequity in health care financing and the financial distress of many health insurance societies for the self-employed were major driving forces behind the reform (Kwon 2003c). Before the merger, for members of insurance societies for the self-employed in poor areas, the burden of the contribution as a proportion of their income was greater than for those in wealthy regions. Horizontal inequity, whereby people with the same earnings paid different social insurance contributions depending on which insurance society they were (mandatorily) enrolled in, despite identical statutory benefits, caused concerns about the unfair burden of health insurance contributions. In addition, many of the health insurance societies for the self-employed in rural areas experienced financial distress due to expanding health expenditure and reduced ability to pay of their members as a result of decreasing population, poor health status, and the aging population.

Before the merger, many health insurance societies were too small in terms of the number of enrolees to pool the financial risks of their members efficiently. Many small insurance societies were not able to utilize economies of scale in management either, and the merger was expected to reduce administrative costs. Before the merger, the proportion of administrative costs in total expenses was lowest (4.8%) in the health insurance scheme for government and school employees (single insurance society) and highest (9.5%) in the health insurance scheme for the self-employed (NHIC 2000). As of 2006, the administrative cost of the national health insurance is 4% of total expenses (NHIC 2007). In addition to improved equity in contribution payments and reduced administrative costs, the single payer system of health insurance is expected to have greater bargaining power as a monopsonistic purchaser relative to health care providers.

The breakdown of the former policy equilibrium with multiple insurance funds was also driven by the change in politics, and subsequently by the active players who tried to take advantage of the opportunities given by the change in the political arena (Kwon and Reich 2005). The political changes and the new president opened a window of opportunity for the reform and substantially empowered the supporters of the reform. The new president, Kim Dae Joong, had a progressive political ideology and a keen interest in social policy. Politicians who had constituents in rural areas supported the merger of insurance societies so as to maximize votes. Farmers, the urban poor, progressive academics and civic groups are long-time supporters of the integrated health care financing system. Business, which pays half of the contribution for employees, was a potentially powerful opponent because it was concerned that a unified health insurance system would result in a bigger burden for employers and industrial workers in paying the contribution, due to the difficulty in assessing the income of the self-employed. But business gave little attention to financing reform because at the same time it faced tough challenges from structural adjustment following the economic crisis of 1997 (Kwon 2001).

Key lessons for achieving universal health care coverage

Tax-based financing versus health insurance

A tax-based system has the benefit of rapid extension to the informal sector, such as the 30 Baht scheme of Thailand (Tangcharoensathien *et al*. 2004). If tax-based financing is based on income tax, it can be more progressive than social health insurance, where the contribution may be proportional to income or just at a flat rate. However, there are questions around the inequity associated with subsidizing the non-poor self-employed, in addition to the budgetary burden on the government in the tax-based health care system.

For many countries, where free care through a public health delivery system does not work because of the lack of resources, a health insurance contribution designated solely to the health care sector is an attractive source of resources for health care. Health insurance can also have the benefit of being participatory, with a sense of ownership among enrolees, although this type of advantage can diminish as the size of risk pool increases. However, health insurance is associated with a non-trivial enrolment/enforcement cost of covering the informal sector because of problems related to assessing income and collecting contributions. Even mandatory enrolment can face non-compliance depending on economic conditions. In Korea, the government did not want to bear the direct (budgetary and administrative) burden associated with tax-based health care financing, and instead played the role of regulator rather than a financer (or provider) of health care. The role of government in the provision of health, education and welfare services is very limited in Korea.

The health insurance contribution for the self-employed in Korea takes into account both income and property. The property-based part of the contribution depends on the property and car that a household owns. The income part of the

contribution is based either on taxed income (for those whose annual income is over US$5000) or on estimated income (for those whose annual income is below US$5000). The calculation of estimated income takes into account the age and sex of the insured, household property, and the car tax of the household. Non-payment of the monthly contribution for more than 3 months results in the denial of health insurance benefits. The hard-working culture of new organizations (localized health insurance societies for the self-employed before the merger in 2000) to some extent contributed to the active enforcement and collection of premium contributions from local residents.

Tax-based financing and social health insurance have been converging, and both income tax and income-related insurance contributions suffer from the problem of mis-targeting and cross-subsidy when income assessment of the self-employed is difficult. In such circumstances, a mixed system of tax-based financing and health insurance can be a solution. The health insurance schemes in Korea, Japan and Taiwan provide a partial subsidy to the self-employed, which contributes to a smooth extension of health insurance (Cheng 2003; Chiang 2005; Ikegami 2005). If a social health insurance system includes a not-insignificant tax subsidy, the difference between tax and health insurance becomes smaller. In 1988, the proportion of government subsidy in the total revenue of the health insurance scheme for the self-employed was 44.1%, which fell to 25.6% in 1999 just before the merger of insurance societies (NHIC 2000). Now Korea has a single health insurance scheme and, as of 2006, general tax subsidy accounts for 12.8% of the total revenue of the unified health insurance system, and subsidy from tobacco tax accounts for 4.3% of health insurance revenue (NHIC 2007).

Population coverage and benefit coverage

Mandatory enrolment is more efficient than voluntary enrolment in order to avoid problems of adverse selection. An authoritarian political regime and rapid economic development in Korea were together effective in enforcing mandatory enrolment and compliance of employers to pay half of the contribution for employees, with few notable problems associated with false reporting of wages and evasion of registration. Family-based membership in Korea contributed to rapid extension of population coverage, by making the employees' health insurance scheme cover the dependents of employees. To ease the financial burden on small businesses, employers of firms with fewer than five employees were exempted from paying their contribution for their employees until 2000. A full subsidy for the poor and partial subsidy for the self-employed have also contributed to the extension of coverage.

National health insurance in Korea started with a low benefit package and benefit coverage was extended incrementally. The government put a higher priority on the extension of population coverage because extending benefit coverage (with a high contribution) can be a barrier to the rapid extension of population coverage. Korea introduced outpatient care coverage from the beginning, which, compared with coverage for inpatient or catastrophic expenses only, provided enrolees with more opportunities to experience the benefits of health insurance, and consequently helped to minimize drop outs.

While there are positive effects of providing limited benefits to a large number of people, there have been negative consequences as well. Although the percentage of the public share (social health insurance and tax) of national health expenditure has increased from 32% in 1989 to 53% in 2004 (Table 2), it is still much lower than that in other OECD countries. High OOP payment leads to limited financial protection, and this can still be a barrier to medical care utilization, which results in inequity and differential medical care utilization across different socio-economic groups (Lu *et al*. 2007). Lee *et al*. (2003) showed that when the poverty line was set at one-third of average daily expenses (the relative poverty line), 5.1% of the households were below the poverty line before spending on health care. This increased to 5.2% after medical care spending, which implies that medical expenditure does not significantly impoverish households. When the poverty line was set at the level of the minimum expenses of living (the national poverty line), the proportion of households below the poverty line increased from 10.8% to 12.5% after spending on medical care, implying that household expenditure on health care can impoverish households to some extent. Exemption from OOP payments for disadvantaged groups seems to contribute to mitigating the impoverishment effect of health expenditure.

The government has perceived the high OOP payment as a key problem and has recently increased the benefit package together with reducing OOP payments for cancer patients and decreasing the ceiling on (cumulative) OOP payments. However, once health insurance is fully established, major change becomes difficult due to path dependency. For example, raising the premium contribution to allow more extensive benefit coverage will face opposition from those groups who will have to pay more, such as the wealthy. Changing the

Table 2 Trends in national health expenditure in Korea (percentages)

	1989	1991	1993	1995	1997	1999	2001	2003	2004
Government	8.6	8.4	7.9	7.3	8.5	10.7	10.5	10.6	10.9
Social insurance	23.0	25.9	26.2	28.4	32.9	36.2	42.5	41.3	41.6
Public total	31.6	34.4	34.1	35.7	41.4	46.9	53	51.9	52.6
Household	61.5	60.1	57.7	54.9	49.6	44.4	38.3	38.4	38.1
Private insurance	–	–	1.8	2.1	2.5	3.0	3.3	3.6	3.4
Others	6.9	5.5	6.4	7.3	6.4	5.7	5.4	6.1	5.9
Private total	68.4	65.6	65.9	64.3	58.6	53.1	47.0	48.1	47.4

Source: OECD Health Data, 2007.

benefit structure by increasing the co-payment for outpatient care and reducing cost sharing for inpatient care will face opposition from office-based physicians. Korea now plans to adopt a cost-effectiveness framework to decide on benefit coverage, including pharmaceuticals and medical technology.

Single scheme versus multiple schemes

Managing health insurance through a single fund or through multiple funds will have different effects on the efficiency and equity of health care financing. Korea started with multiple schemes, but changed to a single scheme in 2000, 11 years after achieving universal coverage of health care. In terms of the efficiency of risk pooling or financial sustainability, a single fund is preferred, although there may be a threshold above which marginal efficiency gain becomes smaller. The monopolistic behaviour of a single fund can decrease the efficiency of a health insurance system, but when there is no consumer choice of funds even under the system of multiple funds, as in many developing countries, the potential efficiency loss of a single scheme may become insignificant. Some of the functions of health insurance can be decentralized; the single payer of Korean health insurance uses local branches for enrolment and premium collection. Even before the merger of insurance schemes, medical claims made by providers for reimbursement were reviewed by a central review agency.

In many countries (e.g. China, Thailand), there are separate schemes for public sector workers, private employees, and the self-employed, and these schemes have different benefit coverage, with formal sector workers enjoying more generous benefits (Tangcharoensathien *et al*. 2004; Bloom 2005). Benefits coordination across schemes has faced opposition by those who are currently enjoying generous benefits. Differences in benefit coverage across health insurance schemes results in social stratification and problems of portability, especially when there is a huge migration (from rural to urban areas). Thanks to government-driven extension, statutory benefit coverage was uniform across all insurance societies in Korea even before the merger of insurance societies in 2000.[2]

When there are multiple health insurance schemes, risk adjustment or risk equalization across schemes is necessary. However, as the role of risk adjustment across schemes gets bigger, multiple schemes become similar to a single scheme. Korean health insurance system used risk adjustment based on the proportion of the elderly and catastrophic expenditure of each scheme, and health insurance societies for the self-employed were the major beneficiaries of the risk adjustment mechanism. In 1998, before the merger of insurance societies, revenue from the risk equalization fund formed 10.9% of the total revenue of the health insurance scheme for the self-employed (NHIC 2000). But the financial distress of health insurance societies in some rural areas continued, and the government finally decided to merge all insurance schemes into one in 2000.

Purchasing and regulation

Purchasing and payment to health care providers is critical for the financial sustainability of, and quality of care provided by, the health care financing system. For effective purchasing where money follows the patient, the health insurer should account for a large share of the revenue of health care providers through, for example, the increases in population coverage and in benefit coverage by health insurance. Furthermore, pooling of funds can contribute to more efficient purchasing. For example, reducing the role of state budget allocation to public providers, and instead channelling it to the health insurer in the form of a premium contribution increases the leverage that the health insurance scheme can use on health care providers. The introduction of some form of financial and managerial autonomy for public hospitals may need to follow the above change in funding stream. Most public hospitals in Korea have been corporatized since the introduction of health insurance, and they depend largely on patient revenue for financial resources.

The payment system is an essential element of the financial incentives of health care providers and is a key factor affecting provider behaviour. Fee regulation applied to all providers (public and private) in Korea has contributed to overall cost containment, as in Japan (Ikegami and Campbell 1999), and consequently to a rapid extension of population coverage. From the beginning, the health insurance programme in Korea has used centralized claim review and payment to providers, owing to the uniform fee schedule enforced by the Ministry of Health and Welfare. In that sense, even before the merger of insurance schemes in 2000, national health insurance of Korea has had single (pooled) purchasing. In the initial stage of the development of health insurance, Korea had a relatively limited supply of physicians and health care facilities, and the government mandated all providers to participate in the health insurance programme—no health care provider can deny health insurance patients. Now, Korea has sufficient supply of health care providers, and the health insurance programme needs to adopt selective contracting with providers for effective purchasing and quality control.

At the beginning of the health insurance programme, health care providers in Korea accepted fee regulation because they were able to charge market (unregulated) prices to the uninsured. As population coverage was extended, the effect of fee regulation became more restrictive on provider practices. By the time that universal coverage was achieved, it was too late for providers to resist fee regulation. Therefore, if a health insurance programme wants to introduce payment regulation to providers, it may find it easier to do at an early stage of population coverage. Now, changing the payment system to one of DRG payment or capitation is a major challenge for the Korean health insurance system. There is also an interrelationship between payment system and benefit coverage. When a health insurance scheme tightens the payment level or payment method to providers, they tend to substitute non-covered services (e.g. new health care technology), which are not subject to fee regulation, for covered ones. Therefore, policies on benefit coverage and payment system need to be coordinated, and government needs to regulate the rapid adoption of new medical technology.

Governance

The governance of the health insurance agency affects the accountability and efficiency of the health insurance system. The National Health Insurance Corporation (NHIC),

a not-for-profit single purchaser in Korea, is not a government agency but under strict supervision and regulation by a single government agency, i.e. the Ministry of Health and Welfare. Close coordination between the health insurance agency and the Ministry of Health helps health insurance better serve the goals of health policy. But if the Ministry of Health directly administers the health insurance programme when health care is provided mainly by public providers, an effective purchasing function can suffer because purchaser is not separated from providers.

Similarly, established social security agencies, specializing in pension and other programmes for formal sector workers, are not likely to have the capacity to effectively purchase services and manage health care providers. Furthermore, in many countries (e.g. Mongolia and China), health care financing functions are spread over ministries such as Ministry of Health, Ministry of Labour, Ministry of Finance, etc, leading to coordination failure among them (Bayarsaikhan *et al*. 2005). A separate single organization dedicated to the health insurance programme, as in Korea, Japan and the Philippines, seems more effective than multiple ministries or administrative agencies in building skills and harmonizing health insurance policy.

Politics

Economic development contributed to the rapid extension of health insurance by improving the capacity to pay of employers, employees and government in Korea. However, the critical role of politics in the development of health insurance cannot be over-emphasized. The authoritarian government pushed the idea of health insurance for political legitimization, and mobilized capable technocrats at the Ministry of Health and Welfare. In the introduction and extension of health insurance, the authoritarian regime was able to implement major policy changes based on a top-down process, with the oppression of some key interest groups such as medical providers. However, recent democratization in the policy process has empowered vested interest groups, and government capacity to manage diversified interests becomes key to major health policy changes. Mobilizing civic groups can be effective in policy change by counteracting the dominance of interest groups, as in the case of Korean health care financing reform in 2000 (Kwon and Reich 2005).

Government capacity and political will have been key factors in the development of health care financing policy in the Philippines, Taiwan, and Thailand recently (Tangcharoensathien *et al*. 2004; Wong 2004; Obermann *et al*. 2006). Political will and commitment are crucial for universal coverage of the population in these countries. Without government subsidy to the poor and informal sector workers, universal coverage seems unfeasible in many low- and middle-income countries. Good governance, transparency and accountability of the health insurance programme, as well as payment system design and regulation of health care providers, all need strong support from the government.

Future challenges

National health insurance in Korea has been successful in mobilizing resources for health care, rapidly extending population coverage, effectively pooling resources to purchase health care for the entire population, and containing health care expenditure reasonably. Rapid economic development, strong political commitment to health insurance, and capable bureaucrats all contributed to the rapid extension of health insurance and to universal coverage. The Korean health insurance system also shows that a mixture of insurance contribution and tax financing works well for health care financing, that social health insurance can use an income-related contribution formula for the self-employed, and that there is a positive benefit to having a single payer system relative to a system of multiple funds. However, when the majority of the population works in the informal sector, as in many low income countries, a flat premium contribution may be inevitable, at least in the early stages. The social health insurer can try to incrementally segment the informal sector by occupation types for the purpose of differentiating premiums.

There are also many challenges for national health insurance in Korea. *Public* financing based on social health insurance combined with effective purchasing of health care from *private* providers in Korea can have the benefit of efficient service provision and equitable payment for health care. However, competition among private providers has often increased costs without substantial improvement in quality of care. The predominance of private providers in the health care delivery system has been a challenge for government regulation and the cost-containment goal of the health insurance programme. Payment system reform will be a key factor for fiscal sustainability of the programme in the long run. At the same time, expansion of benefit coverage is necessary to further improve the financial protection provided.

The rapid aging of the population is a major challenge, which will affect national health insurance along with other social insurance programmes in Korea. As of 2006, the proportion of elderly (over 65) in the population is 8.6%, but they account for 25.9% of health insurance expenditure, increasing from 17.7% in 2001 (NHIC 2007). To ease the burden of population aging on health insurance, the government introduced a new social insurance scheme for long-term care in 2008, separate from health insurance (Kwon 2008). Public-private mix is another concern in health care in Korea, including the role of private health insurance. Faced with increasing health care demand and expectation, social insurance for health often cannot afford to cover all new services and technology. Some maintain that private health insurance should be encouraged to ease the fiscal burden of social health insurance and to improve its efficiency, but others believe that the role of social health insurance should be further extended with increases in contributions for social solidarity.

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Endnotes

[1] Health care providers gained an increased voice and bargaining power in health policy making after several nationwide strikes against health care reforms in 2000 (Kwon 2003b).

[2] Health insurance in the Philippines also has a uniform benefit package across different schemes (Obermann *et al*. 2006).

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