



## **COUNTRY CASE STUDY**

### **NATIONAL HEALTH INSURANCE**

### **IN SOUTH KOREA**

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### **1. OVERVIEW OF POLITICAL, SOCIO-ECONOMIC AND HEALTH CONTEXT**

The Republic of Korea, commonly known as South Korea, is a democracy which was separated from the communist Democratic Republic of Korea, commonly referred to as North Korea, in the 1960s after the Korean War. In 1961, following the war and separation from North Korea, the country was on record for being among the most impoverished developing nations with a Gross National Product (GNP) per capita of USD82. Twenty years later this figure had risen to USD1,734, and by 2004 this figure had risen to USD 14,040. The country has clearly experienced tremendous post war economic growth, boasting an impressive GDP of 787.6 Billion US\$ in 2005, growing at a rate of 4% per annum. The government's plans for economic development which resulted in the massive strides in GDP and GNP per capita changed the country from being a highly agricultural country to one that is highly industrialised and urbanised.

<b>Macro- &amp; socio-economic and demographic indicators</b>	
GDP (USD 2005 Billions)	787.6
GNI per capita (USD 2005)	15 830
Gini coefficient (2000)	31.6
Urbanisation (% total population)(2003)	80.3
Literacy (% population aged 15+)(2002)	97.9
Population (Millions 2004)	48
Unemployment rate (2003)	2.9

<b>Health sector financing/expenditure indicators (2003)</b>	
Health expenditure, total (as a percentage of GDP)	10.7
Health expenditure, public (as a percentage of GDP)	2.6
Health expenditure, public (% of total health expenditure)	49.4
Health expenditure per capita (\$)	982

<b>Health status indicators</b>	
Infant mortality rate (per 1000 live births)(2004)	5
Under 5 mortality rate (per 1000 live births)(2004)	6
Maternal mortality (per 100, 000 live births)(2000)	20
Life expectancy at birth (years)(2004)	77

Sources: WHO National Health Accounts website for health care financing statistics; World Bank website for all other data

South Korea has a relatively low unemployment rate, with 2.9% of the working age population being unemployed and in 2003 was ranked 28<sup>th</sup> out of 177 countries in terms of human development.

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South Korea is among the most densely populated countries in the world. The rapid economic growth which the country experienced resulted in rapid urbanisation. While only 43.7% of the population lived in the urban areas in the early 1960s this figure rose to 80.3% in 2003.

Rapid economic growth brought about by government's economic development plans, and significant investments in health infrastructure resulted in significant improvements in living standards and the health status of citizens. Life expectancy is amongst the highest in the world. In common with other industrialised countries, South Korea has an ageing population with almost 10% of the population over the age of 65 years old. This demographic transition was also aided by government efforts to control population growth and the increasing participation of women in the labour force.

## **2. CURRENT STRUCTURE AND FUNCTIONING OF THE HEALTH SYSTEM**

The health system in South Korea was non-existent after the Korean War and evolved in harmony with the economic development of the country. The development of the health sector was driven by the government as part of its plan to ensure that every citizen should have access to acceptable quality health care. The distribution of health resources was traditionally concentrated in the urban areas because of the private sector's bias. In order to distribute health resources more equitably, the government invested in rural hospital infrastructure and also provided incentives to the private sector to invest in these areas by offering them low cost loans. The provision of health care occurs mainly through the private sector, which owns almost all hospitals and clinics.

Currently, health care in South Korea is funded through the National Health Insurance Corporation (NHIC). This system of National Health Insurance (NHI) was developed by government with three main guiding principles set as health policy, namely: compulsory coverage; contributions based on individual income; and benefit levels independent of individual contributions. The impetus to initiate the NHI came from the increased economic capacity arising from the successful implementation of 3

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consecutive Economic Development Plans between 1962 and 1977. In 1976 the government, confident that it had the capacity to tackle the development of a NHI system announced its plan to initiate this programme in 1977 with the aim of achieving universal coverage within 12 years. This momentous task was accomplished in 1988, a year earlier than planned.

### **3. THE ROAD TO NATIONAL HEALTH INSURANCE**

In 1963, South Korea introduced the Health Insurance Act to promote voluntary coverage. In 1976 the government amended the Health Insurance Act to legislate compulsory health insurance. In line with this change, compulsory health insurance was initiated in private companies by government mandating that all large corporates with more than 500 employees must offer health insurance as a condition of service for their employees. Over the years, this mandate expanded incrementally to include companies with 300, 100, 16 and finally those with 5 employees, until all the formally employed were covered.

<b>Milestones to Universal Health Insurance Coverage in Korea</b>	
1963	Health Insurance Act introduced to promote voluntary coverage
1977	Insurance compulsory for firms with more than 500 employees
1977	Federation of Korean Medical Insurance Societies established
1977	Government programme for low-income individuals established (Medical Aid)
1979	Insurance compulsory for government employees and private school teachers
1979	Insurance compulsory for firms with more than 300 employees
1981	Insurance compulsory for firms with more than 100 employees
1981	Societies for self-employed established
1981	Demonstration programmes in rural areas started
1982	Insurance compulsory for firms with more than 16 employees
1988	Rural regional health insurance program introduced for rural and fishing population
1988	Mandatory health insurance for all citizens. Covered 96% of population, with remainder covered by a medical aid program for the poor fully subsidised by the government.
1999	National Health Insurance Act to integrate multiple insurance societies into a single insurer system
2000	All insurers integrated into a single National Health Insurance Corporation. Contract system for determining medical fee was introduced. The separation of prescribing and dispensing of drugs was implemented
2002	Special Act for Financial Stabilization of National Health Insurance
2004	Co-payment Ceiling System was introduced to reduce financial burden on households against catastrophic payments
2005	Road map for extending benefit package introduced

**Sources:** Anderson (1989); Yang (2001); National Health Insurance Corporation (2007)

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In the same year that compulsory insurance was introduced in the private sector, government established a health insurance program called Medical Aid which would cater for the indigent, the vulnerable and low income earners who would not be able to pay contributions. Medical Aid is funded through general taxes.

In 1988, the rural regional health insurance program was introduced to cover the rural and fishing population. In 1989, the urban regional health insurance program was introduced which covered the self-employed and unemployed populations. In the same year, the government mandated health insurance for the entire population, covering almost 96% of the total population. The remaining 4% of the population are covered by a medical aid program for the poor fully subsidised by central and local governments. The Medical Aid program provides beneficiaries with the same benefit package as that of contributors to the NHI program.

The Korean experience of achieving universal health insurance in a period of 12 years is unique, particularly given that it combines a publicly regulated health care financing system with a privately owned health care delivery system, with reimbursements based on a fee-for-service payment system. The growth of the private health sector has been spurred on by the increase in per capita income and the expansion of health insurance coverage. In 1962, out of a total of 10,477 beds, 41.8% were in the private-for-profit sector. Three decades later, the private sector accounts for 76.8% of the total 124,597 beds. The private sector dominates the delivery of health care.

There are two Acts that regulate the National Health Insurance Program. One is the National Health Insurance Act which was introduced in 1999 and the second is the Special Act for Financial Stabilization of National Health Insurance, introduced in 2002. A key objective of the National Health Insurance Act was to “integrate multiple insurance societies into a single insurer system” and this was achieved in 2000. The Special Act for Financial Stabilization of National Health Insurance was legislated to resolve the financial crisis in the NHI which deteriorated rapidly from 1999 because of cost escalation.

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The law also established the Health Insurance Policy Review Committee under the Minister of Health & Welfare to play a role in setting or determining the standards of health insurance benefits (regarding method, procedure, scope, upper limit, etc.), health care benefit costs (reimbursements), the monthly contribution amount for the self-employed and the monthly contribution rate for employees.

#### **4. STRUCTURE AND FUNCTIONING OF THE NATIONAL HEALTH INSURANCE SYSTEM**

As part of the 'Integration Reform', the NHIC has drawn into its administrative fold 139 separate private sector medical-insurance associations, 227 insurance associations for the self-employed, and numerous associations for government and private school employees. The objectives of this reform were firstly to increase equity in health care financing. Although the insurance benefits each insurance society offered were all the same, individual insurance society had widely different methods for assessing contributions of the insured. Hence, individuals with similar incomes paid different contributions for the same benefits across different insurers. The second objective was to improve efficiency of the NHI administrative system. Because the multiple insurers system could not take advantage of economies of scale in management, administrative costs tended to be high. The NHIC began managing all of these organisations centrally in 1998, and in 2000, re-launched itself as a single entity providing national coverage. This has served to increase the capacity for economies of scale and improve risk-pooling among beneficiaries.

#### **4.1. Key characteristics of health insurance in Korea**

##### **4.1.1. Contributions and Funding**

According to the National Health Insurance Act, the Health Insurance Committee has the responsibility for setting the contribution rate for the insured within the range of less than 8% of monthly wages or salaries. Insured persons under National Health Insurance Programme are classified into two categories: the employed insured (employees in private sector, government sector, private schools) and the self-employed insured (self employed in urban and rural areas).

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### *The Employee Insured*

The contribution of insured employees is based on the gross salary or wage of the insured. The contribution rate for the employee insured is 4.21% for employees in the private sector and for government and private school employees as well. The contribution of the employee insured is borne by both employee and employer. For private sector and government employees, the employer pays 50% of the contribution and the employee or public servant pays the other 50%. For private school employees, however, the owner of the private school pays only 30%, the government subsidises 20% of the contribution and the employee pays the remaining 50%.

### *The Self-employed Insured*

For the self-employed insured, contributions are calculated on the basis of income. Contributions are calculated by using a formula in which the insured person's properties, income, motor vehicles, age and gender are taken into consideration. The government subsidises about 50% of total expenditures relating to the payment of benefits for the self-employed insured and related administrative costs.

#### 4.1.2. Benefit Structure

All members of the NHIC are entitled to the same benefit package. The standards of health insurance benefits regarding types and scope of health care and procedures, limits etc. are determined by the regulations of the Ministry of Health & Welfare. The government mandates a minimum level of services.

Not all health services are covered by the NHI. The health care benefits include diagnostic tests, drugs, medical materials, treatment, surgery, preventive care, rehabilitation, hospitalisation, nursing, and transportation. In order to ensure the early detection and treatment of chronic degenerative diseases such as hypertension, diabetes, liver diseases and pulmonary tuberculosis, a health check-up for the insured and their dependents is provided for once every two years, free of charge. Eligible beneficiaries who are 40 years or older can apply each year for examinations for stomach, colon and rectum cancer. The costs of breast and liver cancer tests are shared equally by NHIC and the beneficiary covered.

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### 4.1.3. Co-payments and Limits

There are high levels of co-payments in these standardised benefit packages. For inpatient hospital care, there is a co-payment of 20% of the total hospital bill. The co-payments for out-patient services are even higher and include various complicated deductibles and co-payments designed to prevent unnecessary care seeking and to limit visits to tertiary care facilities. In 1988 these co-payments were set at 55% at tertiary care facilities, 50% at community hospitals and 20% at physicians offices. Despite this being a national health insurance system, utilisation is very affected by the affordability of care for the insured; high income earners are more able to afford the high co-payments leading to higher utilisation among high- than low-income groups. The Co-payment Ceiling System was introduced in 2004 as a health insurance safety net and is applicable for inpatient, outpatient and pharmaceutical services.

### 4.1.4. Health Care Delivery

More than 90% of the medical care services are provided by the private sector. All pharmacies are owned and operated by individual pharmacists. The health care delivery system is a three tiered system consisting of: primary care clinics which provide outpatient and preventive care; secondary services which are provided at community clinics and affiliated hospitals that have 40-200 beds; and tertiary care general hospitals and university affiliated hospitals.

Health care benefit costs are reimbursed on a fee-for-service basis. Since providers' profit is closely linked to the dispensing of pharmaceuticals and medical supplies, they have incentives to increase the volume of drugs and medical supplies or substitute more of them for their own services in treatment. For example, from 1990 to 1998, the average annual rates of increase in expenditure for medical supplies and pharmaceuticals per claim case were 13.6 and 11.4%, respectively, both of which are greater than the average annual rate of increase in total medical expenditure per claim case of 8.2%. In order to address this, the Ministry of Health & Welfare sets upper limits for the reimbursement of drugs and medical treatment materials. In addition, under the Separation Reform, the functions of prescribing and dispensing drugs were separated and specialised between doctors and pharmacists. The payment of medical care claims is made by the NHIC. The Health Insurance Review Agency reviews and

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evaluates the claims submitted by the medical care institutions and reports the results to the NHIC.

### 4.1.5. Cross subsidies and Risk Pooling

The system aims to ensure access to adequate health care for all Koreans, and is designed to ensure that the contributions are based on income and that benefits are independent of income. Since the contributions are a fixed percentage of income, higher income earners pay more in absolute terms than low-income earners. High- and middle-income earners therefore subsidise the contributions of the indigent and to some degree low-income earners. There is no cross-subsidisation for co-payments which are essentially out-of-pocket payments.

## **5. KEY ISSUES**

The rapid increase in the elderly population and the shrinking labour force means that the NHI will have an increasing number of aging dependants and a smaller number of working people to financially contribute towards the system. Innovative financing mechanisms need to be sought to ensure the financial sustainability of the NHI.

The unequal distribution of providers between urban and rural areas also compromises access. The other problem is that most providers and facilities are in the for-profit sector and are reimbursed on a fee-for-service basis which has contributed significantly to cost escalation. This has been a serious challenge for the sustainability and performance of the system and has prompted reforms (e.g. enhancement of patient rights for information and separating the functions of prescribing and dispensing drugs between doctors and pharmacists). As a pilot project for a new payment mechanism, a diagnosis-related group (DRG) system for 7 diagnostic categories was introduced to pay medical institutions for inpatient services in January 2002. This was met with immense resistance from providers.

Most users prefer using tertiary facilities which have the latest and most expensive technologies. This has resulted in utilisation patterns which are skewed towards sophisticated tertiary facilities even for less complicated procedures. The system of co-payments has not been successful in changing these practises. A strict referral system was introduced to reduce this problem.

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