Health Systems in Transition
Vol. 11 No. 7 2009

Republic of Korea

Health system review

Chang Bae Chun • Soon Yang Kim
Jun Young Lee • Sang Yi Lee

European Observatory on Health Systems and Policies

Health Systems in Transition

Chang Bae Chun, *National Health Insurance Corporation*
Soon Yang Kim, *Yeungnam University*
Jun Young Lee, *University of Seoul*
Sang Yi Lee, *Jeju National University*

Republic of Korea:
Health System Review

2009

The European Observatory on Health Systems and Policies is a partnership between the World Health Organization Regional Office for Europe, the Governments of Belgium, Finland, Norway, Slovenia, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

Keywords:
DELIVERY OF HEALTH CARE
EVALUATION STUDIES
FINANCING, HEALTH
HEALTH CARE REFORM
HEALTH SYSTEM PLANS – organization and administration
REPUBLIC OF KOREA

Printed and bound in the United Kingdom.

Suggested citation:

Chun C-B, Kim S-Y, Lee J-Y, Lee S-Y. Republic of Korea: Health system review. *Health Systems in Transition*, 2009; 11(7):1–184.

ISSN 1817-6127 Vol. 11 No.7

Contents

Preface

The Health Systems in Transition (HiT) profiles are country-based reports that provide a detailed description of a health system and of reform and policy initiatives in progress or under development in a specific country. Each profile is produced by country experts in collaboration with the Observatory's research directors and staff. In order to facilitate comparisons between countries, the profiles are based on a template, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a profile.

HiT profiles seek to provide relevant information to support policy-makers and analysts in the development of health systems in Europe. They are building blocks that can be used:

- to learn in detail about different approaches to the organization, financing and delivery of health services and the role of the main actors in health systems
- to describe the institutional framework, the process, content and implementation of health care reform programmes
- to highlight challenges and areas that require more in-depth analysis
- to provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries.

Compiling the profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health system and the impact of reforms. Because of the lack of a uniform data source, quantitative data on health services are based on a number of different sources, including the World Health Organization (WHO) Regional Office for Europe Health for All database, national statistical offices, Eurostat, the Organisation for Economic Co-operation and Development (OECD) Health

Data, the International Monetary Fund (IMF), the World Bank, and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary but typically are consistent within each separate series.

A standardized profile has certain disadvantages because the financing and delivery of health care differ across countries. However, it also offers advantages, because it raises similar issues and questions. The HiT profiles can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health systems. This series is an ongoing initiative and material is updated at regular intervals.

Comments and suggestions for the further development and improvement of the HiT series are most welcome and can be sent to: info@obs.euro.who.int. HiT profiles and HiT summaries are available on the Observatory's web site at www.euro.who.int/observatory. A glossary of terms used in the profiles can be found at the following web page: www.euro.who.int/observatory/glossary/toppage.

Acknowledgements

The HiT profile on the Republic of Korea was written by Chang Bae Chun (National Health Insurance Corporation), Soon Yang Kim (Yeungnam University), Jun Young Lee (University of Seoul) and Sang Yi Lee (Jeju National University). It was edited by Anna Maresso (European Observatory on Health Systems and Policies). The Research Director for the HiT profile was Elias Mossialos.

The European Observatory on Health Systems and Policies is especially grateful to Dr Minah Kang, Professor in the Department of Public Administration, Ewha Womans University in Seoul, Ki Jong Yoon, Researcher in the Health and Social Policy Program at the OECD–Korea Policy Centre in Seoul (seconded from the National Health Insurance Corporation), and Jae Won Jang, Ho Gyun Ryu and Dong Hyun Kim at the Ministry for Health, Welfare and Family Affairs (MIHWFA) for their extensive reviews of the report and for their important contributions.

The authors would like to thank many individuals who have helped in the preparation of this report. Professor Elias Mossialos (London School of Economics and Political Science) gave them an invaluable opportunity to write this report. Anna Maresso, editor of the report, greatly helped with the whole process of writing this report. Gyu Beom Park, Research Assistant in the Social Welfare Department at the University of Seoul, contributed to data collection and provided many materials for the report.

The current series of HiT profiles has been prepared by the staff of the European Observatory on Health Systems and Policies. The European Observatory on Health Systems and Policies is a partnership between the WHO Regional Office for Europe, the Governments of Belgium, Finland, Norway, Slovenia, Spain and Sweden, the Veneto Region of Italy, the European

Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

The Observatory team working on the HiT profiles is led by Josep Figueras, Director, Elias Mossialos, Co-director, and Martin McKee, Richard Saltman and Reinhard Busse, heads of the research hubs.

Technical coordination and production is led by Jonathan North, assisted by Caroline White and Aki Hedigan.

Special thanks are extended to the OECD for the data on health services. Thanks are also due to national statistical offices that have provided data. This report reflects data available in June 2009.

List of abbreviations

APN	Advanced practice nurse
CAM	Complementary and alternative medicine
CPD	Continuing professional development
CT	Computed tomography
DRG	Diagnosis-related group
DUR	Drug Utilization Review
EDI	Electronic data interchange
FFS	Fee for service
FKI	Federation of Korean Industries
FKTU	Federation of Korean Trade Unions
FPH	For-profit hospital
GDP	Gross domestic product
GNP	Gross national product
GP	General practitioner
HCIC	Health Care Industrialization Committee
HIPDC	Health Insurance Policy Deliberation Committee
HIRA	Health Insurance Review and Assessment Service
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
HTA	Health technology assessment
ILO	International Labour Organization
IMF	International Monetary Fund
KCDC	Korean Centres for Disease Control and Prevention
KCTU	Korean Confederation of Trade Unions

KEF	Korean Employers Federation
KFDA	Korean Food and Drug Administration
KHA	Korean Hospital Association
KHIDI	Korean Health Industry Development Institute
KIHASA	Korean Institute for Health and Social Affairs
KLWC	Korean Labour Welfare Corporation
KMA	Korean Medical Association
KMIC	Korean Medical Insurance Corporation
KPA	Korean Pharmaceutical Association
KTC	Korean Tripartite Commission
MAP	Medical Aid Programme
MEST	Ministry of Education, Science and Technology (2008–present)
MHSA	Ministry of Health and Social Affairs (1955–1994)
MIHWFA	Ministry for Health, Welfare and Family Affairs (1998–present)
MOHW	Ministry of Health and Welfare (1994–1998)
MOSF	Ministry of Strategy and Finance
MRI	Magnetic resonance imaging
MRP	Medical Relief Programme
NCNP	National Congress for New Politics
NGO	Nongovernmental organization
NHI	National Health Insurance
NHIC	National Health Insurance Corporation
NMIC	National Medical Insurance Corporation
OECD	Organisation for Economic Co-operation and Development
OOP	Out-of-pocket (payments)
OTC	Over-the-counter (medicines)
PET	Positron emission tomography
PSPD	People's Solidarity for Participatory Democracy
VHI	Voluntary health insurance
WHO	World Health Organization

List of tables and figures

Tables

Figures

Abstract

The Health Systems in Transition (HiT) profiles are country-based reports that provide a detailed description of a health system and of policy initiatives in progress or under development. HiTs examine different approaches to the organization, financing and delivery of health services and the role of the main actors in health systems; describe the institutional framework, process, content and implementation of health and health care policies; and highlight challenges and areas that require more in-depth analysis.

The Republic of Korea has a National Health Insurance (NHI) system that provides health care benefits to the population. The Ministry for Health, Welfare, and Family Affairs (MIHWFA) plays a supervisory role, while the National Health Insurance Corporation (NHIC), as the single insurer, has responsibility for managing the NHI system. The Health Insurance Review and Assessment Service (HIRA) reviews the cost of health care benefits and evaluates the reasonableness of the health care services provided. Financing for the health care system is mainly funded through social health insurance contributions, government subsidies and out-of-pocket (OOP) payments by users of health services. South Korea has a relatively low level of health care expenditure, at 6.8% of gross domestic product (GDP) in 2007. Health care delivery is characterized by the dominance of private providers, with approximately 90% of total medical institutions being private facilities.

Major health care reforms have been implemented in the last 10 years. Following intense discussions and negotiations, a single insurer system was established in 2000 by integrating all existing health insurance funds. The incremental expansion of the benefit package has also contributed to the development of the health care system. MIHWFA has emphasized the importance of evidence-based health care in many parts of the health care

system. A concerted focus on technology assessment led to the establishment of the National Evidence-based Healthcare Collaborating Agency in 2008. Prior to this, technology assessment in pharmaceutical pricing and the re-evaluation of drug costs were already standard procedures. These policy efforts, based on evidence-based approaches, will continue to be a meaningful tool for the development of the health insurance system in a rapidly changing health care environment in the 21st century. The future development of the health care system will rely on major stakeholders taking responsibility to secure a paradigm shift from the current prevalence of acute care towards a greater focus on preventive health care. This goal is central, in terms of maintaining both the sustainability of the NHI system and the health of the population in an era of rising chronic diseases.

Executive summary

The Republic of Korea is located on the north-eastern edge of continental Asia. To the north, it is bordered by the Democratic People's Republic of Korea. At the end of the Second World War, the Korean peninsula was divided into southern and northern zones at the 38th parallel. In 2007, the population was approximately 48.2 million, of whom 9.5% were 65 years old or older. The low fertility rate, with 1.13 births per woman in 2006, is likely to threaten the long-term sustainability of the health insurance system, as well as other social insurance schemes. Life expectancy is among the highest in developed countries, with an average of 82.4 years for women and 75.9 for men in 2006. South Korea is a representative democracy, with both the president and members of parliament directly elected by citizens. In terms of economic development, South Korea has witnessed a remarkable expansion in the last 50 years, transforming itself from one of the poorest agrarian societies to a highly industrialized wealthy nation.

Organization

South Korea has a compulsory National Health Insurance (NHI) system with universal coverage. This social health insurance system was established in 1977, when only 8.79% of the total population was covered. After 12 years of rapid coverage expansion, in 1989 the system covered the majority of the population, with the exception of a small portion (3–4%), who are now covered by an alternative welfare programme for the poor (the Medical Aid Programme, MAP). Until 2000, the NHI system operated as a multi-insurance fund system, with more than 370 insurers established on a regional or occupational basis.

After nearly 20 years of discussion, these funds were integrated to form a single-payer system in July 2000.

The Ministry for Health, Welfare and Family Affairs (MIHWFA) has overall responsibility for the health of the population and has a supervisory role in health insurance policy. The National Health Insurance Corporation (NHIC) is the single insurer, responsible for providing health care benefits to the population, as well as collecting contributions and reimbursing providers. The Health Insurance Review and Assessment Service (HIRA) reviews the cost of health care benefits and evaluates the reasonableness of health care services provided by medical institutions.

Financing

South Korea has a relatively low, but rapidly growing, level of health care expenditure compared to other OECD countries. Total health care expenditure was 6.8% of GDP in 2007. The NHI contribution rate is 5.08% of salary or income as of 2009. Since July 2008, all beneficiaries of the NHI system also pay an additional contribution for long-term care insurance. The long-term care contribution rate is 4.78% of a person's NHI contribution.

The NHI system is predominantly funded through contributions, government subsidies and OOP payments by users of health services. In 2007, public financing was about 54.9% of total health care expenditure, while private financing was about 45.1%. Of the latter, 35.7% was made up of OOP payments, 4.1% came from private health insurance and the remainder was financed by voluntary and charitable funds.

Delivery of health services

South Korea has a heavy reliance on private sector providers of medical services, with approximately 90% of hospital beds being private. There was a total of 52 914 health care facilities in 2007, 1536 of which were hospitals, including general, oriental medicine and dental hospitals. The total number of hospital beds increased rapidly from 134 176 in 1990 to 450 119 in 2007. The number of acute care beds has doubled since 1990, amounting to 6.8 beds per 1000 population in 2006, well above the OECD average of 3.9. In 2006, there were a total of 88 776 physicians, 22 366 dentists and 224 142 nurses working in the health care system. Although the numbers of these medical professionals has

increased since the NHI system was implemented in 1977, the number of each category per 1000 population is still low compared to the OECD average.

Health care services are provided through somewhat idiosyncratic primary and secondary care facilities. While primary care services are provided through clinics, hospitals and general hospitals (including dental and oriental medicine hospitals), patients can access secondary care through tertiary hospitals. Patients themselves can choose their medical providers, giving them access to medical institutions without too many restrictions. With no strict gatekeeping system, it is relatively easy for patients to access secondary care in tertiary hospitals.

For secondary care services, patients can receive specialized high quality care in 43 tertiary hospitals with an easily obtainable referral from a primary care physician. Public health services are provided by the central and local governments for the improvement of people's health. Public health focuses on health promotion, disease prevention and other forms of health intervention to improve the health status of the whole population. For the improvement of public health, there were 92 public hospitals, 251 public health centres, 1314 sub-public health centres and 1908 primary health care posts that carried out public health functions across the nation in 2007.

The system of health and welfare for the elderly with age-related disabilities has developed significantly since the launch of the long-term care insurance scheme in July 2008. Beneficiaries of the long-term care scheme are entitled to access home care and institutional care.

Dental care is covered under the NHI system, but OOP payments are relatively high due to the large number of treatment exclusions from the NHI benefit package. The government has announced a benefit expansion plan for dental care to include additional items, such as dentures.

Utilization of complementary and alternative medicine (CAM) is a traditional and important part of South Korea's health services framework, and is increasing. As a part of CAM, oriental medical treatments, such as acupuncture and herbal medicines, are included in the NHI benefit package. The expenditure on oriental medicine was about 5.97% of total health care expenditure in 2007.

Reforms and future challenges

Several major health care reforms have taken place since 2000. The separation of drug prescribing and dispensing functions in July 2000 aimed to provide the public with better quality medical services and to prevent the adverse effects of medicines by ensuring that two major health care professionals – physicians

and pharmacists – operate within a framework of checks and balances. In the same year, the integration of the numerous health insurance funds sought to restructure the health care system to increase macro-efficiency under a single-payer system.

The implementation of the long-term care insurance scheme in July 2008 provides services for the elderly population. Amid rapid growth in the ageing population and changes to the traditional family structure, the long-term care scheme was a necessary choice for the government. With the fertility rate falling to 1.13 per woman in 2006, the lowest rate in the world, reliance on family care for elderly people is no longer a sufficient or sustainable option. As of March 2008, there were 1543 residential facilities in service, while some 1644 facilities provided home care.

Reforms targeting the expansion of the NHI benefit package have been an ongoing process since the 1990s. At the start of the statutory health insurance scheme, a 'low contribution and low benefit' policy was followed, with many services being excluded from benefit coverage. Thus, until the early 2000s, the benefit coverage rate was about 60%. Each government since then has set the goal of achieving a benefit coverage rate of 70%.

The South Korean health care system has developed quite successfully in several dimensions. Achieving universal health insurance coverage within a very short period was an unprecedented outcome. Providing good quality care to all of the population with low health care expenditure and securing access to medical institutions without restrictions are examples of positive achievements. However, important challenges lie ahead. In broad terms, the major tasks are to control health care expenditure and improve quality of care. For these tasks, it is important to find a payment method that can encourage a reasonable use of health care services for both patients and providers.

A paradigm shift from the current prevalence of acute care towards a greater focus on preventive health care, particularly in an era of rising chronic diseases, is necessary in terms of maintaining both the sustainability of the NHI system and the health of the population. Pursuing a culture of evidence-based health care is also a crucial strategy towards achieving a sustainable health care system.

1 Introduction

1.1 Geography and sociodemography

The Republic of Korea is located on the north-eastern edge of continental Asia, in the southern part of the Korean peninsula, bordered by the Yellow Sea to the west and the Democratic People's Republic of Korea to the north (Fig. 1.1). The Korean peninsula as a whole is some 1000 km long and has over 3500 islands. Its total area is 221 000 km^2, with approximately 45% (99 461 km^2) making up the territory of the Republic of Korea, whose capital city is Seoul.[1] At the end of the Second World War, the peninsula was divided into northern and southern zones at the 38th parallel. Following the end of the Korean War in 1953, a new border was set along the Demilitarized Zone, at around the 38th parallel (Vegdahl and Hur, 2005), which extends from the east to the west coast, and is approximately 241 km long and 4 km wide. Over 70% of the total land mass of the peninsula consists of mountains, influencing the population's lifestyles, while internal geographical divisions created by mountains and rivers allow each province to preserve a sense of self-identity through its own dialect and cultural practices (Connor, 2002).

The climate is generally temperate with four distinctive seasons, usually with a short spring and autumn and a long summer and winter. The summer season can be very hot and humid, and also has a rainy season, with typhoons frequently striking the peninsula between July and September. The winter season is dry and cold, influenced by high atmospheric pressure from Siberia, and has frequent heavy snow falls (Williams, 1999).

In 2007, the country's population was approximately 48.2 million (WHO, 2009). After decades of rapid population growth, averaging an annual rate of

[1] The Republic of Korea is conventionally also known as South Korea. The two appellations will be used interchangeably in this HiT profile.

Fig. 1.1 Map of the Republic of Korea

Source: WHO, 2006.

3% during the 1960s and 2% during the 1970s, growth slowed considerably and was estimated at 0.33% in 2006 (WHO WPRO, 2008). As a result of lower birth rates and extended life expectancy, South Korea's population is ageing (see Table 1.1). Approximately 9.5% of the total population was 65 years old or older in 2006, with 71.9% aged between 15 and 64 and 18.6% under the age of 14 (MOHW, 2007a) (Table 1.1).

These changes in population structure not only impact negatively on economic development, but also will place a heavy burden on the health care system – that is, the low birth rate impedes economic growth and this may force the government to slash welfare expenditure, including that dedicated to health care.[2] The country's ageing society and increasing age dependency

[2] One of the many viewpoints on the relationship between low birth rates and economic development postulates that low fertility eventually leads to low productivity due to shortages in labour supply.

Table 1.1 Population and demographic indicators (selected years)

	1970	1980	1990	2000	2001	2003	2005	2006
Total population (millions)	32.2	38.1	42.9	47.0	47.4	47.9	48.1	48.3
Female population (% total)	15.9	18.9	21.3	23.3	23.5	23.8	23.9	24.0
Population growth (annual %)	2.21	1.57	0.99	0.84	0.74	0.50	0.21	0.33
Population density (people per km^2)	320.4	378.8	437.7	463.9	482.4	485.8	489.6	491.5
Age dependency ratio	5.7	6.1	7.4	10.1	10.5	11.6	12.6	13.2
Population 0–14 years (% total)	42.5	34.0	25.6	21.1	20.8	20.1	19.2	18.6
Population 65 and over (% total)	3.1	3.8	5.1	7.2	7.6	8.3	9.1	9.5
Population 15–64 (% total)	54.4	62.2	69.3	71.7	71.6	71.6	71.7	71.9
Birth rate (crude/ per 1000 people)	31.2	22.7	15.4	13.4	11.6	10.2	9.0	9.2
Death rate (crude/ per 1000 people)	8.0	7.3	5.8	5.2	5.1	5.1	5.0	5.0
Fertility rate (births per woman)	4.53	2.83	1.59	1.47	1.30	1.19	1.08	1.13

Sources: National Statistical Office, 2008a; 2008b.

Note: The age dependency ratio is the ratio of the combined child population (aged 0–14) and the elderly population (aged 65 and over) to the working age population (aged 15–64). This ratio is presented in Table 1.1 as the number of dependants for every 100 people in the working age population.

ratio are already exerting pressure on the health care system by rapidly increasing demand for services and facilities, and by steeply raising health insurance premiums.

Except for a very small Chinese minority (approximately 20 000 people), South Korea has one of the most ethnically and linguistically homogeneous populations in the world (Connor, 2002). Korean (*Hangul*) is the official language, with English, Chinese and Japanese being widely taught in primary and secondary schools.

In terms of religious affiliation, just under one half of the population (49.3%) does not practise a faith. In the rest of the population, 26.3% are Christian (19.7% Protestant, 6.6% Roman Catholic), 23.2% are Buddhist and the remaining 1.2% practise other religions such as Confucianism (CIA, 2008).

1.2 Economic context

South Korea has witnessed remarkable economic development in the last 50 years, transforming itself from one of the world's poorest agrarian societies to a highly industrialized, wealthy nation. When the peninsula was liberated from Japanese colonial rule in 1945, its economy was almost devastated. Moreover, the Korean War had destroyed about two thirds of the country's productive capacity (Williams, 1999). Thus, the economy in the 1950s was sustained by foreign aid, and in the early 1960s the per capita gross national product (GNP) was under US$ 100, one of the world's lowest. Under these discouraging circumstances, the Park Chung Hee Government spearheaded a series of five-year economic development plans to increase industrial infrastructure, and paved the way for significant economic growth (Cumings, 1997). By 1970, the per capita GNP was US$ 249, more than double that of 1965, while exports had increased almost fivefold. In the 1970s, fiscal policies were directed towards promoting heavy and chemical industries, consumer electronics and automobiles (Kim S-Y, 2008).

The growth-oriented policies of the 1960s and 1970s brought about side-effects. The authoritarian political system concentrated political and governmental power in the presidency under the pretext of achieving economic growth through the maintenance of political stability. Moreover, the economic ideology of the 1960s and 1970s that placed top priority on economic growth impeded income redistribution and made social policy a subsidiary of economic and industrial policies (Kim S-Y, 2008). During the 1960s–1970s, welfare expenditure remained under 3–4% of total government expenditure and the labour force worked more than 50 hours a week. Moreover, the growth-oriented economy concentrated national wealth in the hands of small numbers of conglomerates (known as *chaebols*) and allowed the government to direct the economy in the name of increased economic efficiency (Hoare and Pares, 2000). Other negative side-effects of the growth-focused economic strategy included a government-dominated financial system.

To counteract these negative effects, the Chun Doo Hwan Government (1980–1987) attempted to harmonize economic growth with income redistribution functions in order to aid social development. Despite very unstable economic conditions in 1980, with an economic growth rate of -5.2%, a trade deficit of US$ 4787 million and a consumer price index rising to 28.7% (Bank of Korea, 1981), the Chun Government pursued reform policies by opening up commercial markets, retrenching government finances, and undertaking industrial restructuring. In particular, the tobacco market was opened up in 1986, and food and agricultural markets in 1987, following accelerated pressure from abroad. With the introduction of the Uruguay Round

of the General Agreement on Tariffs and Trade (GATT) in 1986, which aimed to fully open up global markets, including agricultural and service industries, South Korea liberalized imports, which reached 91.5% in 1985, compared to 68.6% in 1980. The Chun Government also stabilized consumer prices through a low-wage policy and cutbacks in public spending (Jwa, 2001). In addition, the government coordinated over-investment in the heavy and chemical industries, providing relief loans and liquidating faltering enterprises through industrial mergers and restructuring.

Due to these policies, the economy entered an up-phase from the mid-1980s onwards. In particular, the country achieved big consecutive trade surpluses for the years 1986–1989 thanks to low interest rates and low oil prices. Even though the trade balance went into reverse from 1990, due to retarded productivity and sharp wage increases, the volume of the economy grew continuously with the expansion of the domestic market, especially in durable consumer goods and the construction industry (Connor, 2002).

Entering the 1990s, the government extended the opening up of commercial markets and liberalized the foreign exchange market in order to meet the competitive pressures of other advanced countries and to properly manage the influx of foreign money caused by a current account surplus. The capital market was liberalized in 1988 and the stock market was completely opened up in 1991. In 1995, the agriculture industry, including the rice market, was partly opened up through the Uruguay Round agreement. With the country's affiliation to the OECD in 1996, the Kim Young Sam Government (1993–1998) liberalized the market further to meet the standards of other OECD countries. The regulation of capital markets was completely abolished and policies based on globalization were adopted in many areas. The 1990s was also a period of unprecedented turbulence. Despite economic growth, this was much lower than in previous years, and economic instability increased with high wage levels and a trade balance deficit (see Table 1.2).

At the beginning of 1997, the economy began to show symptoms of insolvency. Conglomerates such as the Hanbo Group and Kia Motors went into bankruptcy, and mismanagement of the foreign exchange market depleted the country's foreign currency reserves. In November, the government officially made public its application for an IMF relief loan. Against this situation of economic crisis, the Kim Dae Jung Government (1998–2002) carried out a multidirectional restructuring of the economy and labour market (Kim D, 2005). In the business sector, the government orchestrated the 'Big Deal' of mergers and takeovers among enterprises within the country's five biggest conglomerates and enforced insolvent companies to shut down (Tat, 2000). In the financial sector, many commercial banks were liquidated through merger and acquisition. In restructuring the labour market, in 1998 the government attempted to introduce

Table 1.2 Macroeconomic indicators, 1986–2006

	Economic growth rate (%)	Per capita GDP (US$)	Balance of current accounts (million US$)	Growth in manufacturing productivity index (%)	Inflation (consumer prices (%))	Unemployment rate (%)	Employed labour force (millions)
1986	11.6	2 701	4 617	22.1	2.7	3.8	15.5
1988	11.3	4 465	14 161	13.5	7.1	2.5	16.9
1990	9.5	6 151	-2 179	8.9	8.6	2.4	18.1
1992	5.1	7 539	-4 529	5.9	6.2	2.4	19.0
1994	8.4	9 483	-4 530	11.0	6.2	2.4	19.8
1996	7.0	12 244	-23 120	8.3	4.9	2.0	20.8
1998	-6.9	7 477	40 371	-6.6	7.5	7.0	19.9
2000	8.5	10 888	12 251	17.1	2.3	4.4	21.2
2002	7.0	11 485	5 394	8.2	2.7	3.3	22.2
2004	4.7	14 161	28 174	10.5	3.6	3.7	22.6
2005	4.0	16 438	14 981	6.2	2.7	3.7	22.9
2006	5.0	18 373	18 373	10.5	2.2	3.5	23.2

Sources: Bank of Korea (various years), *Economics statistics yearbook*; National Statistical Office, 2008c.

a social consensus by establishing the Korean Tripartite Commission (KTC), a body that facilitates dialogue and compromise between government, business and labour representatives during public policy negotiations (Song, 2003). It also tried to boost the economy by promoting internal consumption. As a result of these crisis management policies, South Korea exited the IMF relief loan system in 2000 and re-embarked on a path of economic growth and stability. In particular, the government strengthened support for small and medium-sized companies and the venture capital sector in an attempt to break away from the country's heavy dependence on big enterprises.

The Rho Moo Hyun Government (2003–2007) stressed economic redistributive policies, as well as greater commercial competitiveness both domestically and globally. Other stated policy goals included strengthening corporate social responsibility, promoting small- and medium-sized enterprises, and emphasizing fair trading and transparency by large corporations (Chung, 2008).

1.3 Political context

The Republic of Korea was constitutionally established in the southern part of the Korean peninsula in 1948, while, that same year, a communist state was installed in the north (the Democratic People's Republic of Korea (DPRK)). The Korean War (1950–1953) led to almost 3 million Koreans being killed or wounded and many millions became homeless or were separated from their families. In 1953, the partition of the peninsula was set along the Demilitarized Zone, where the eventual ceasefire line lay (Williams, 1999) (however, no formal armistice or peace treaty has ever been signed). Relations between the two states historically have been limited and strained, although the last decade has seen some renewed efforts at dialogue directed towards the resolution of security issues, particularly the DPRK's nuclear policies (Oberdorfer, 1997).

The first few decades of the country's existence were characterized by political turmoil and authoritarian presidential governments, which were often based on a nationalistic political culture. The lack of real democratic process was often justified on the grounds of economic necessity. However, popular pro-democracy protests in 1987 resulted in the restoration of direct presidential elections and a revision of the Constitution, limiting the presidency to a single five-year term. Since then, democracy has increased steadily with free party competition and the increasingly active political participation of civic groups in the political sphere, including trade unions (Connor, 2002).

South Korea is a representative democracy with both the president and members of parliament directly elected through universal suffrage. Powers are nominally shared between the executive, the legislature and the judiciary but, as the president holds both the positions of head of state and chief executive, traditionally the powers of this office have dominated. As the head of the executive, the president presides over a cabinet of between 15 and 30 members (the State Council) who are collectively and individually responsible only to the president. They are appointed by the president on the recommendation of the prime minister (Ha et al., 1998). In turn, the prime minister acts as the principle executive assistant to the president, can deliberate over issues of national importance, and has overall supervision of the ministries run by cabinet members. The prime minister is appointed by the president with the consent of the parliament.

The parliament is made up of the unicameral National Assembly, with its 299 elected members (243 elected from single-seat districts and 56 chosen by proportional representation) serving four-year terms, with no restrictions on the number of times they can be elected (http://www.assembly.go.kr). The National Assembly's 'checks and balances' function over the executive is achieved via a number of powers, including the ability to impeach the president, the prime minister and other members of the State Council; debate and approve national budgets; approve the ratification of international treaties; consent to the declaration of war, the dispatch of armed forces abroad and the stationing of foreign forces on national territory; investigate specific government matters; and pass recommendations to remove the prime minister or cabinet members from office (Arts. 54 and 65 of the Constitution of the Republic of Korea).

The Constitution guarantees the free establishment and internal democracy of the country's multiple political parties. However, traditionally, the political sphere has been characterized by a dominant two-party system, with various ruling and opposition parties holding the main roles over the years (Kim S-Y, 2006). Historically, parties have tended to be conservative in respect of the country's northern neighbour, and have been ruled by charismatic political leaders, with little internal democratic process and a heavy reliance on regional support bases (Kim Y, 2003). However, since 1997, when the opposition candidate Kim Dae Jung won the presidential election, some relatively progressive parties have entered office, including the National Conference for New Politics (1998–1999), the New Millennium Democratic Party (2000–2003), the Uri Party (2003–2007) and the United New Democratic Party (2007).

The current President, Lee Myung Bak (since 25 February 2008) is from the conservative Grand National Party, which also won an overall majority of 153 seats in the April 2008 parliamentary elections. The main opposition party, the United Democratic Party, won 81 seats, the Liberty Forward Party took

18 seats, the Park Geun Hye Coalition 14 seats and the Democratic Labour Party 5 seats (with the remaining going to a selection of smaller parties) (http://www.assembly.go.kr).

The judicial system is made up of the Supreme Court, appellate courts and the Constitutional Court, with the judiciary being independent under the Constitution.

The country has nine provinces and seven administratively separate cities – the capital Seoul, Busan, Daegu, Daejeon, Gwangju, Incheon and Ulsan. Under the local autonomy system introduced in the early 1990s, local governments enjoy some level of autonomy in the areas of finance and self-governance (http://www.mopas.go.kr).

South Korea is affiliated to a diverse set of international organizations, including Asia-Pacific Economic Cooperation, the Food and Agriculture Organization, the Group of 77, the International Atomic Energy Agency, the International Bank for Reconstruction and Development, the International Labour Organization (ILO), IMF, the International Olympic Committee, OECD, the United Nations, the World Health Organization (WHO) and the World Trade Organization (http://www.korea.kr/expdoc/view/Document).

1.4 Health status

As society and the economy have developed, the health status of the population also has improved (see Table 1.3). Above all, average life expectancy has increased consistently: while women's life expectancy at birth was 66.7 years in 1970, it grew to 82.4 in 2006, much higher than the world average (Table 1.4). For men, life expectancy at birth increased from 59.8 years in 1970 to 75.7 in 2006. Meanwhile, the crude death rate decreased to 5 persons per 1000 in 2006 (from 8 in 1970). These improvements in life expectancy and the crude death rate are largely attributable to improvements in nutrition, the population's enhanced concerns about its health, the development of medical technology and the increased provision of health care services.

The infant mortality rate, which is frequently quoted as an index of health care conditions in a country, was 23 per 1000 live births in 1985, but dramatically decreased to 4.7 in 2005, comparable to the low levels of infant mortality in other major advanced countries (Table 1.5).

Interestingly, despite general improvements in the measurable indices of health care conditions and health status, the population's subjective evaluation of their health conditions has not improved since the first national data were

Table 1.3 Birth and death statistics of the population of the Republic of Korea, 1970–2006

	Crude birth rate (per 1000)	Crude death rate (per 1000)	Life expectancy at birth	
			Male	Female
1970	31.2	8.0	59.8	66.7
1975	24.8	7.7	60.2	67.9
1980	22.7	7.3	61.8	70.0
1985	16.2	6.0	64.5	72.8
1990	15.4	5.8	67.3	75.5
1995	16.0	5.4	69.6	77.4
2000	13.4	5.2	72.3	79.6
2003	10.2	5.1	73.9	80.8
2005	9.0	5.0	75.1	81.9
2006	9.2	5.0	75.7	82.4

Source: National Statistical Office, 2008b.

Table 1.4 Life expectancy by gender in the Republic of Korea and world average, 1985–2005

	World average		South Korea	
	Male	Female	Male	Female
1985	59.7	63.5	64.5	72.8
1990	61.3	65.2	67.3	75.5
1995	62.1	66.3	69.6	77.4
2000	63.0	67.4	72.3	79.6
2005	63.9	68.3	75.1	81.9

Source: Adapted from http://www.kosis.kr.

Note: In 2006, the average male life expectancy at birth among the 30 OECD member countries was 75.8 years (South Korea 75.3) and the average female life expectancy was 81.4 years (South Korea 82.4). Since 1970, South Korea has recorded the most rapid increase in life expectancy, with the exception of Turkey, among the 30 OECD member countries (http://www.index.go.kr).

produced in the late 1980s (see Table 1.6). We can see from this data that the health status of the general public cannot be satisfactorily upgraded only by structural improvements in health care, such as increased medical personnel, financing and facilities. Rather, improvements are required in other spheres, such as increasing access to services, providing better linkages between different aspects of care, concentrating on the appropriateness of care, improving

the responsiveness of health care services and satisfying the population's higher expectations.

The main causes of mortality are diseases of the circulatory system and neoplasms (Table 1.7). As of 2006, diseases of the circulatory system explain 23.1% of total deaths, while neoplasms explain 27.3%. Diseases of the respiratory system, diseases of the digestive system, external causes of mortality and 'symptoms, signs and abnormal clinical and laboratory findings' also have been major contributors. The causes of mortality over almost three decades have changed. The number of deaths from certain infectious and parasitic diseases has decreased, while deaths from external causes have increased significantly. The traffic accident rate, which is high, is one of the major external causes of death. This change is related to the increase in income that has accompanied economic development and industrialization.

Table 1.5 Infant mortality rates (per 1000 live births) in the Republic of Korea and selected countries, 1985–2005

	Republic of Korea	Japan	United States	France	Germany	Sweden	China
1985	23.0	6.5	10.3	9.2	10.8	6.8	37.8
1990	14.3	4.9	8.8	7.8	8.1	6.0	31.4
1995	14.1	4.4	7.8	6.5	6.1	5.2	29.9
2000	8.3	3.8	7.5	4.7	5.0	4.4	28.0
2005	4.7	3.2	6.8	4.4	4.5	3.3	25.7

Source: Adapted from http://www.kosis.kr.

Table 1.6 People's self-assessment of their health conditions, 1986–2006

Year	Percentage of respondents				
	Very good	Good	Normal	Bad	Very bad
1986	8.9	39.8	34.7	14.5	2.1
1989	11.2	43.6	27.4	15.6	2.2
1995	6.1	37.6	36.9	17.3	2.2
1999	6.1	36.6	37.8	16.8	2.7
2003	7.4	35.5	39.5	14.9	2.8
2006	8.5	36.1	39.9	13.0	2.5

Source: National Statistical Office (various years), *Report on the social statistics survey*.

Note: These data are based on the following question posed to people aged 15 years and over: "how do you evaluate your general health condition?"

Table 1.7 Main causes of death, 1980–2006

Cause	Persons (%)[a]							
	1980	1985	1990	1995	2000	2002	2004	2006
Certain infectious and parasitic diseases	5 707 (5.4)	8 161 (4.6)	5 471 (3.4)	5 265 (2.2)	6 200 (2.5)	5 746 (2.3)	5 192 (2.1)	5 449 (2.2)
Neoplasms	15 707 (14.9)	31 120 (17.6)	38 490 (23.8)	50 713 (21.3)	59 020 (23.8)	63 489 (25.7)	65 505 (26.6)	66 774 (27.3)
Endocrine, nutritional and metabolic diseases	1 366 (1.3)	2 914 (1.6)	4 780 (3.0)	8 466 (3.6)	11 806 (4.8)	12 883 (5.2)	12 424 (5.0)	12 265 (5.0)
Diseases of circulatory system	38 130 (36.2)	63 629 (36.0)	57 045 (35.3)	62 718 (26.3)	58 554 (23.6)	61 522 (24.9)	58 382 (23.7)	56 388 (23.1)
Diseases of respiratory system	7 094 (6.7)	9 267 (5.2)	7 606 (4.7)	11 014 (4.6)	16 105 (6.5)	16 622 (6.7)	14 261 (5.8)	14 310 (5.8)
Diseases of digestive system	11 150 (10.6)	18 016 (10.2)	15 481 (9.6)	17 734 (7.4)	14 901 (6.0)	14 130 (5.7)	12 124 (4.9)	10 733 (4.4)
Symptoms, signs and abnormal clinical and laboratory findings, NCE	16 065 (9.5)	36 106 (20.4)	25 309 (15.6)	34 482 (14.4)	31 669 (12.8)	23 615 (9.6)	29 990 (12.2)	31 587 (12.9)
External causes of mortality	4 600 (4.4)	33 (0.0)	196 (0.1)	34 132 (14.3)	28 847 (11.6)	28 834 (11.7)	30 567 (12.4)	29 615 (12.1)
Total causes of death	105 370	176 901	161 727	238 132	247 346	246 515	245 771	243 934

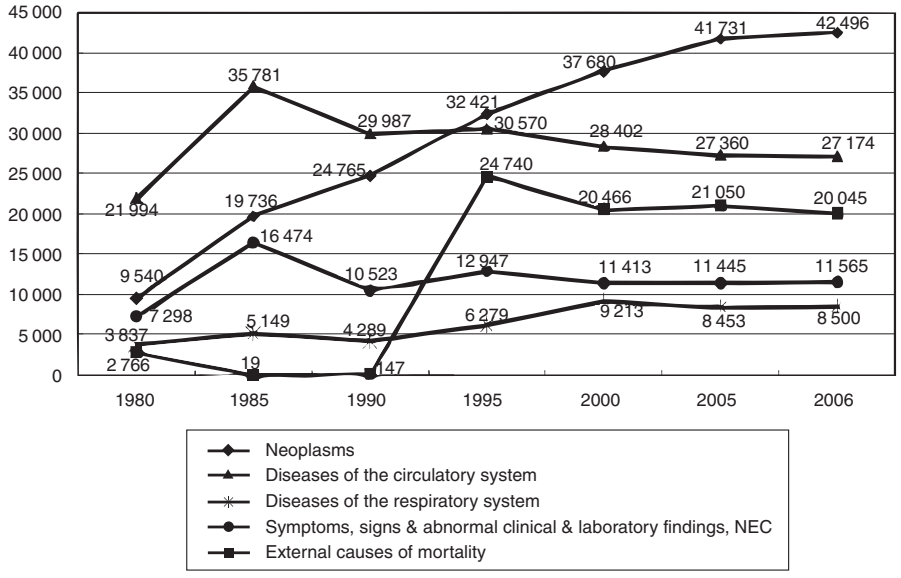
Source: Adapted from MIHWFA (various years), *Yearbook of health and welfare statistics*.

Notes: NCE: Not classified elsewhere; [a]Numbers in parentheses designate the ratio of each cause to total deaths.
Total numbers here are not equal to the sum of main causes of death, as minor causes of death are omitted from the table.

When the causes of death are compared by gender, diseases of the circulatory system and neoplasms have been the most important causes of death over time, irrespective of gender. While diseases of the digestive system and external causes of mortality are important causes of death for men (see Fig. 1.2), women are more vulnerable to diseases of the respiratory system and symptoms, signs and abnormal clinical and laboratory findings (see Fig. 1.3).

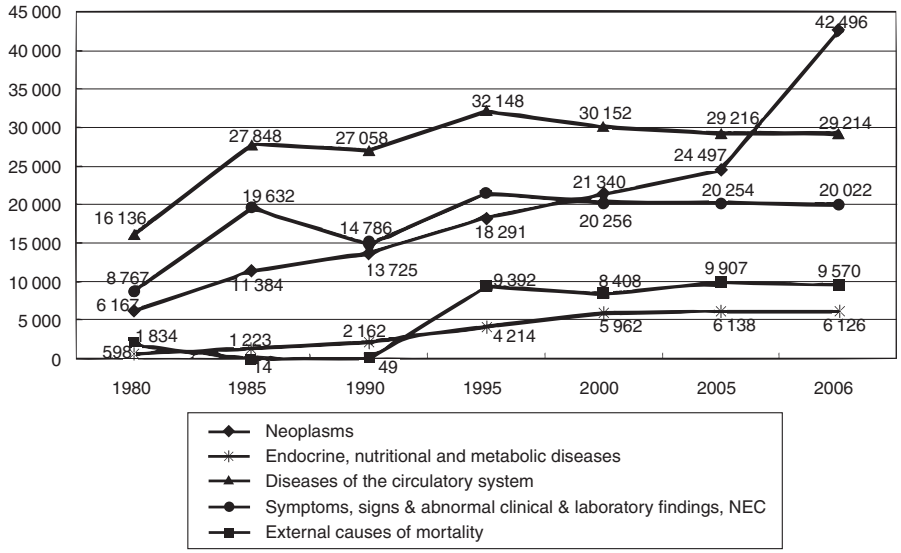
The incidence of the main communicable diseases has fluctuated over time. As Table 1.8 shows, the incidence of communicable diseases is declining in general, largely due to the development of health care technologies, enhanced knowledge about disease and improvements in living conditions. In particular, category I-type communicable diseases, such as cholera, typhoid fever and paratyphoid fever, are almost disappearing. But, despite its decrease, tuberculosis is one of the most frequently appearing diseases. The incident rates of scrub typhus, mumps and malaria are also quite high.

Fig. 1.2 Top five causes of death for men, 1980–2006



Source: National Statistical Office (various years), *Annual report on the causes of death statistics*.
Note: NEC: Not classified elsewhere.

Fig. 1.3 Top five causes of death for women, 1980–2006



Source: National Statistical Office (various years), *Annual report on the causes of death statistics*.
Note: NEC: Not classified elsewhere.

Table 1.8 Incidence of main communicable diseases, 1980–2006

	1980	1985	1990	1995	2000	2002	2004	2006
Typhoid fever	201 (0.5)	208 (0.5)	232 (0.5)	370 (0.8)	234 (0.5)	221 (0.5)	174 (0.4)	200 (0.4)
Paratyphoid fever	7 (0.0)	12 (0.0)	17 (0.0)	30 (0.1)	7 (0.0)	413 (0.9)	45 (0.1)	50 (0.1)
Shigellosis	57 (0.1)	41 (0.1)	13 (0.0)	23 (0.1)	2 462 (5.1)	767 (1.6)	487 (1.0)	389 (0.8)
Cholera	145 (0.4)	0 (0.0)	0 (0.0)	68 (0.2)	0 (0.0)	4 (0.0)	10 (0.0)	5 (0.0)
Vibrio vulnificus sepsis	–	–	–	–	21 (0.0)	60 (0.1)	57 (0.1)	88 (0.2)
Scrub typhus	–	–	–	274 (0.6)	1 758 (3.7)	1 919 (4.0)	4 698 (9.7)	6 480 (13.3)
Leptospirosis	–	–	–	13 (0.0)	106 (0.2)	122 (0.3)	141 (0.3)	119 (0.2)
Haemorrhagic fever with renal syndrome	20 (0.1)	64 (0.2)	106 (0.2)	89 (0.2)	203 (0.4)	336 (0.7)	427 (0.9)	422 (0.9)
AIDS	–	–	–	107 (0.2)	219 (0.5)	398 (0.8)	610 (1.3)	751 (1.5)
Measles	5 097 (13.4)	1 283 (3.1)	3 415 (8.0)	71 (0.2)	32 647 (68.0)	62 (0.1)	11 (0.0)	28 (0.1)
Mumps	866 (2.3)	1 237 (3.0)	2 092 (4.9)	430 (1.0)	2 955 (6.2)	764 (1.6)	1 744 (3.6)	2 089 (4.3)
Malaria	0 (0.0)	0 (0.0)	6 (0.0)	107 (0.2)	4 142 (8.6)	1 799 (3.7)	864 (1.8)	2 051 (4.2)
Tuberculosis	80 750 (212.0)	72 833 (178.4)	58 707 (136.9)	31 114 (68.2)	19 692 (41.4)	32 010 (66.5)	31 503 (65.0)	35 361 (72.3)
Scarlet fever	26 (0.1)	207 (0.5)	139 (0.3)	141 (0.3)	68 (0.1)	54 (0.1)	80 (0.2)	108 (0.2)

Source: Adapted from MIHWFA (various years), *Yearbook of health and welfare statistics*.
Note: Numbers in parentheses stand for the incidence rate per 1 000 000 persons.

2 Organizational structure

2.1 Overview of the health care system

South Korea has a unique National Health Insurance (NHI) system, with a single insurer, the National Health Insurance Corporation (NHIC), covering almost the entire population. In this respect, the health care system resembles that of countries with a centrally financed national health service. The NHIC has a very unified and simple management structure: its headquarters in Seoul carries out its functions through 6 regional headquarters located in large cities in major areas and 178 branch offices nationwide. Private medical providers mainly supply health care services, and the fee schedule is established through negotiations between the NHIC and the various associations of the medical providers. In addition, financing for the health insurance system relies on contributions paid by employers and employees in the corporate sector, and by the self-employed. A government subsidy provides further revenues, used for the self-employed. Other government-funded programmes are in place for the poor and the very small proportion of the population not covered by the NHI system.

The major actors involved in the health insurance sector include stakeholders such as the Ministry for Health, Welfare and Family Affairs (MIHWFA), the Ministry of Strategy and Finance (MOSF), the NHIC, the Health Insurance Review and Assessment Service (HIRA) and labour unions. Nongovernmental organizations (NGOs) began to be more deeply involved in policy decision-making after the integration of health insurance funds in 2000 (see below). These actors have distinctive roles and responsibilities in accordance with the National Health Insurance Act (1999).

The MIHWFA is one of the key decision-makers in health insurance policy. The origin of this central influence dates back to the initial implementation of

the health insurance system in the 1970s, when symbiotic relationships between the government and business supported the early stages of the NHI programme. Under the National Health Insurance Act (1999), MIHWFA has a supervisory role in health insurance policy, including important functions such as appointing top managers for the NHIC and HIRA, issuing general guidelines for implementing health insurance policy, and approving the NHIC's annual budget. In addition, as an executive governmental body, MIHWFA has a constitutionally derived right to introduce and revise health policy legislation.

Also under the National Health Insurance Act, the NHIC is a specialized quasi-independent social insurance organization. It acts as a single-payer and has responsibility for providing health care benefits to the population, as well as collecting contributions, reimbursing providers and delivering medical services through contracts with hospitals and clinics. In addition, the NHIC provides a range of useful information to beneficiaries regarding the availability of medical services, and, since 1 July 2008, has administered long-term care services for the elderly.

2.2 Historical background

At least two unique characteristics cannot be underestimated when looking at the history of the NHI system. First, the evolution of this system during the 1960s and 1970s appears to be very peculiar when compared to many European countries, which generally adopted statutory health care systems when new social citizenship rights flourished soon after the Second World War. At its early stages of development, social health insurance in South Korea was not based on social citizenship. According to his autobiography, President Park Chung Hee (1963–1979) initially thought that the implementation of a social insurance programme was premature, as he believed that economic development was the most urgent priority at the time (Park, 1979). Ultimately, however, his regime implemented the social health insurance scheme in 1977 to address the policy suggestions of political elites, as well as the peoples' needs. Faced with increasing societal demands and rapid economic development in the 1970s, some politicians such as Shin Hyun Hak, Minister of Health and Social Affairs, as well as senior aides, eventually persuaded President Park that establishing a social health insurance programme was inevitable to maintain political stability as well as economic development (Shin D-M, 2000; Kim D-S, 2007; Shin E, 2007).[3]

[3] Much of the population and the media now acknowledge that the implementation of the NHI scheme under the leadership of Park Chung Hee was one of his – and the country's – most important achievements.

Rapid economic expansion achieved under the five-year economic development plans made an important contribution to the introduction of compulsory health insurance for company employees in July 1977. The strong economic growth over the previous two decades bolstered the confidence of both government officials and employers, who would play an important role in health care policy, particularly as they would have hesitated to adopt a health care programme in the absence of a strong economy. The strong relationship between government and business was a decisive element during the early stages of implementing the new health insurance system. In particular, the government needed the help of business, as employers were one of the main pillars supporting health care finance.

Against this background, the country started to build a health care system aimed at universal coverage, adopting a step-by-step approach to extend coverage to all of the population. On 1 July 1977, the amended Medical Insurance Act established compulsory enrolment for employees in a corporate health insurance fund. Further clarifications to the Act (through decrees) set out the size of enterprises that should enter their employees into health insurance schemes. Gradually, as the size of the companies that should participate became smaller, the proportion of the population covered became larger. Thus, quite a unique chapter in global health system history was born – in a record 12 years, in July 1989, South Korea had achieved universal health insurance coverage, with the majority of population groups and their dependants falling under the NHI scheme.[4]

2.2.1 Coverage extension

The successful extension of health insurance coverage was unprecedented. Targeting all of the population, the government adopted a step-by-step approach to incrementally achieve this goal. In July 1977, employees working in large companies employing more than 500 workers were enrolled in funds. There were two reasons for this choice. One is that the government did not grant any subsidies to the health insurance scheme and thus it had to be financially self-sustaining. The other reason relates to feasibility: the government needed a pilot study to gauge the probable success of health insurance implementation, and thus chose the most feasible group to make it work. As many companies established their own medical insurance societies, health care at the time was characterized by multi-fund schemes. In the meantime, coverage extension

[4] In 1989, employees in companies that employed 1–5 workers were included in health insurance funds as 'self-employed' contributors. In 2001, this group's status shifted to that of company insurees, in line with all the other employees in the unified NHI scheme.

to civil servants[5] and private school teachers took place in January 1979. An independent corporation, the Korea Medical Insurance Corporation, was established to manage these two groups.[6]

In July 1979, coverage was extended to include employees working in companies with more than 300 workers. Gradually, social health insurance coverage was extended to smaller-sized enterprises. In January 1981, employees in companies with more than 100 workers were covered, followed by those in companies with more than 16 employees in January 1983. It is also worth noting that, during the 1980s, coverage was also extended from first-line dependants of company insurees (i.e. spouses, children, parents and siblings) to second-line dependants (i.e. parents-in-law and brothers and sisters-in-law, etc.).

In July 1988, the self-employed in rural areas, along with employees in companies with more than five workers were covered. Lastly, in July 2001, all enterprises employing more than one worker were required to participate in the NHI scheme. Thus, their workers became insured company employees (whereas previously, employees in this category of enterprises had been covered as self-employed people). As a result of the gradual coverage extension policy, after 1977 the number of people covered by company health insurance funds increased rapidly (Table 2.1).

In the early stages of expanding health insurance coverage, the decision to also cover self-employed people may have seemed risky. In theory, including this group in the health insurance scheme would not be easy, as it is very difficult to manage activities such as contribution calculation, collection and eligibility. Moreover, coverage expansion needs a government administration with adequate capacity and skills to manage the insurance system. To some

Table 2.1 Coverage of company employee health insurance funds, 1977–2006

	1977	1980	1985	1988	2000	2005	2006
Total population (thousands)	36 411	38 123	40 805	42 869	47 008	48 138	48 297
Number of insured (thousands)	3 140	9 161	16 424	20 777	22 404	24 233	28 445
Proportion of population covered (%)	8.6	24.0	40.2	48.5	47.7	50.3	58.9

Sources: HIRA, 2008; NHIC, 2008a.

[5] Teachers in public (state) schools are classified as civil servants.

[6] The Corporation existed until October 1998, when the first health insurance integration reform took place.

extent, management capacities and technology are critically important assets for the successful implementation of a health insurance scheme. As highlighted by Carrin (2002), launching a health insurance programme with universal coverage is not easy unless officials in the health care sector are capable of undertaking complex tasks.[7] In South Korea's case, the strategy to cover the self-employed may seem somewhat unexpected, but it was also a bold move that paid off. Of the two large self-employed groups that could be targeted, the government started with those living in rural areas, mainly consisting of farmers and fishermen. This decision was closely related to the authoritarian government of President Chun Doo Hwan, and, in 1988, the size of the insured population had reached about 29 million. One and a half years later, from July 1989, insurance coverage was extended again to the self-employed in urban areas. The announcement to include the urban self-employed led to a further 40 million people being covered by NHI, the largest group to enter the system during the coverage extension process (Table 2.2). With the addition of the urban self-employed, all major population groups, except those covered by the Medical Aid Programme (MAP) (see below) were included in the NHI scheme.

2.2.2 Major structural reforms

Despite the short period of time it took to develop, the NHI system soon exposed a few fundamental limitations. These problems were closely related to the 'multi-fund' character of the system, under which many small mutual societies managed their funds independently. Consequently, the size of risk-pooling was so small that a widening of the financial gap between rich and poor funds became inevitable. In general, relatively large-sized funds in urban areas enjoyed surpluses, while small-sized ones located in rural areas were in deep deficit. In general, these small-size societies were more likely to face financial instability due to their narrow risk-pooling structure. Table 2.3 shows that, in 1980, when only 20% of company employees were covered, there were already 602 insurance funds. Worse still, among these corporate funds, 229 (38%) of them covered less than 1000 insured each; and more than 75% of societies insured less than 3000 people. Inefficiencies, both in management and in health care expenditure, inevitably followed. According to organizational theory, small-sized funds are expected to have high transaction costs. Moreover, under the multi-fund system, insurers were not likely to maintain an advantageous position when negotiating with medical providers. Without monopsonic power,

[7] Carrin (2002) also mentions that many Asian countries such as China, Viet Nam and Mongolia have tried over many years to extend insurance coverage to the self-employed but, as yet, none has succeeded in achieving universal coverage.

Table 2.2 Health insurance coverage expansion to all population groups, 1977–1989

Year	Targeted groups	No. insured	Percentage insured to total population[a]
1977	Corporate workplaces employing more than 500 employees	3 200 269	8.79
1979	Civil servants and private school teachers and employees Corporate workplaces employing more than 300 employees	7 957 460	21.20
1981	Corporate workplaces employing more than 100 employees Pilot project for the self-employed in three (geographical) areas Occupational health insurance societies established, covering artists and trades people, etc.	11 497 415	29.69
1982	Second project for the self-employed in three areas Compulsory enrolment for corporate workplaces employing more than 16 employees and voluntary enrolment for those with more than 5 workers	13 803 779	35.10
1984	Enlargement of dependant coverage to also include second-line dependants	17 165 277	42.37
1988	Self-employed rural residents Compulsory enrolment for workplaces employing 5 or more employees	28 906 359	68.87
1989	Self-employed urban residents Universal coverage for all major population groups	39 922 389	90.39[b]

Sources: NFMI, 1998; NHIC, 2009a.

Notes: [a]Excluding enrollees in the MAP, who are administered by local governments; [b]As of December 2008, 96.2% of the population was under NHI coverage, and the remaining 3.8% under the MAP.

under the multi-fund system the bargaining power of individual insurers was not strong and thus medical costs were likely to increase rapidly.[8] And to make a bad situation worse, regressive income redistribution was no longer acceptable to the public, especially when academics and politicians began to oppose the multi-fund system in the 1980s.

[8] According to a study by Chun (2005), fee schedule rate increases after 2000 have been relatively lower than those of the multiple funds that existed before 2000.

Table 2.3 Number of insurance funds by size, 1980 (persons insured)

	Total	Less than 1 000	Less than 3 000	Less than 5 000	Less than 10 000	More than 10 000
Societies	602	229	221	65	52	35
Percentage	100	38	37	11	9	5

Source: MHSA, 1980.

One of the solutions to these problems was to integrate the multi-fund schemes into a single fund. In fact, about 400 small-sized funds had been exposed to adverse side-effects for almost 20 years. In these circumstances, and despite some strong opposition from politicians and some MIHWFA officials who were against moving to a single insurer system, the decision was taken to integrate the funds in 2000 (see Chapter 7).

Foremost among the advantages of this strategy was that the reform reinforced the purchasing power of the single insurer, the NHIC, and, generally, its new monopsonic power has been able to contribute to controlling health care expenditure. In negotiations over the fee schedule, the NHIC has considerable bargaining power vis-à-vis the representatives of provider associations. Secondly, integration of the funds made it possible to enlarge risk-pooling and to reinforce income redistribution at the national level, which was way beyond the previous capacity of smaller funds. Thirdly, the integration greatly contributed to increasing administrative efficiency, due mainly to the downsizing that occurred. As shown in Table 2.4, administrative efficiency has increased constantly since the reform in 2000. In terms of overall evaluation, the integration of funds achieved greater macro-efficiency of the NHI system.

Table 2.4 Administrative cost comparisons before and after insurance fund integration

	Before integration				After integration					
	1994	1997	1998	1999	2000	2001	2003	2004	2005	2006
Total expenditure (billion won)	3 070	7 679	8 716	9 561	10 674	14 106	15 972	17 362	20 029	22 908
Administrative costs (billion won)	395	672	702	681	780	629	634	694	741	771
Percentage	10.0	8.8	8.1	7.1	7.3	4.45	3.96	4.0	3.7	3.4

Source: NHIC, 2007a.

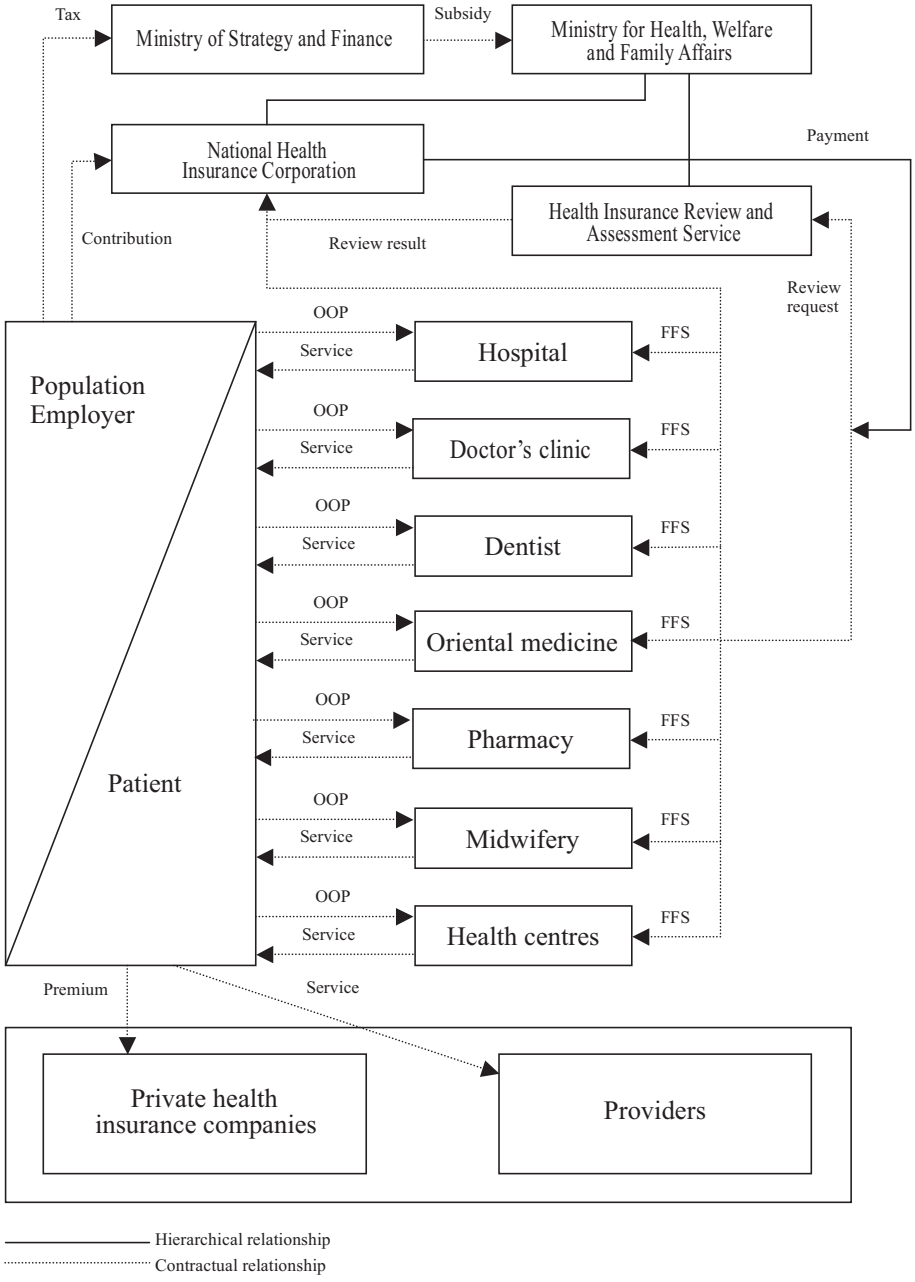
2.3 Organizational overview

By and large, since 2000, the administrative structure of the health care system has been a simple one (Fig. 2.1). With integration, the multiple health insurance funds were transformed into a single-payer system. The NHIC, established by the National Health Insurance Act in 1999, plays a major role as the single insurer. In general, the NHIC is responsible for supplying health care benefits through medical providers and for financing these services. Its headquarters, located in Seoul, manages the health insurance organization through six regional headquarters located in large major cities. Each regional headquarters administers about 20–30 branch offices within their own boundaries. Branch offices are front-line organizations, which collect contributions and provide various kinds of health information to beneficiaries. The NHIC negotiates the level of medical fees with provider associations to set the price of medical services every year. Final agreement on each fee schedule is achieved through a very complex and conflictual process, with each negotiator relying on evidence-based data and materials to resolve deadlocks.

The administrative structure of public health is somewhat different to that of the NHI system. Public health, which mainly focuses on preventive health and health promotion, is administered through public health centres. Central and local governments are responsible for financing the public health scheme based on general taxation. All local governments usually operate public health centres within their boundaries for local residents. These centres usually provide primary public health care services such as vaccinations, health education, health promotion and so on, but not general practitioner (GP) services, which are delivered by specialist family doctors from their own offices or clinics (see Chapter 6).

The long-term care system was launched fully from July 2008. The new long-term care insurance scheme began as a pilot project over three years in 2005, with two further pilot projects in 2006 and 2007. After these trial periods, the Long-term Care Insurance Act was passed in April 2007. The target population of this scheme is people over 65 who need long-term care services for more than 6 months. By way of exception, those under 65 are also entitled to receive benefits if they have a condition such as dementia, cerebrovascular disease or other age-related diseases defined in a decree of the Long-term Care Insurance Act. The benefit package includes both in-kind and cash benefits. In-kind benefits are provided for nursing home and institutional care, while cash benefits are given for family care provided in special areas such as islands or other remote places. The long-term care scheme is financed through contributions paid by all those insured within the NHI scheme. The contribution rate is 4.78% of a person's NHI contribution amount, and both

Fig. 2.1 Overview chart of the health care system



Notes: FFS: Fee for service; OOP: Out-of-pocket payments.

contributions are paid together by beneficiaries. However, the long-term care component is automatically transferred to a separate long-term care account to be used for long-term care services only.

The administration of long-term care services is managed by the NHIC using its existing organizational facilities and staff. These joint arrangements for NHI and long-term care administration were agreed after long and intense discussions between major stakeholders and are based on the managerial efficiency that is expected from a unified administration. The implementation of the long-term care scheme from July 2008 undoubtedly will play a pivotal role in the country's rapid social transformation. As estimated by an OECD study, South Korea will have the highest elderly population in the world in 2050, reaching a rate of 37.3% of the total population aged 65 years or older (Cho, 2006). Given this socio-demographic trend, the long-term care scheme is necessary to maintain the sustainability of the social security system in the future.

Apart from the NHI scheme, MAP is a programme for the poor. MAP beneficiaries are persons or households living on the poverty line, which is defined by the central government annually, along with other qualifying criteria. In 2006, the number of persons covered by MAP was over 1.8 million or about 3.6% of the total population (this figure had reached 3.8% of the population in 2008). Each local government selects those who are eligible through an annual means test. There are two types of beneficiary depending on the poverty level: Class 1 and Class 2. Those who fall under Class 1 are people who, in general, are unable to work at all. Class 2 beneficiaries are people who do not qualify for Class 1 and who are not able to work independently. In 2006, 57% were Class 1 beneficiaries and 43% were Class 2.

The programme is funded from general taxation. Central and local governments allocate the budget for the MAP. Although the NHIC does not directly operate the programme, it is deeply involved in MAP management through the use of NHIC organizational structures, and thus it takes part in managing eligibility and paying medical fees to providers. The MAP is something of a safety net measure, in that the government directly provides medical services for that part of the indigent population that cannot obtain health insurance by paying contributions under the compulsory social health insurance scheme.

HIRA reviews the cost of health care benefits and evaluates the reasonableness of health care services provided by medical institutions (Art. 55 of the National Health Insurance Act). In addition, HIRA's main responsibilities focus on the development of criteria for review and evaluation, and other matters related to the review of medical costs. Its main responsibilities are as follows:[9]

[9] Pursuant to Art. 56 of the National Health Insurance Act.

- review of the costs of medical care benefits;
- evaluation of the reasonableness of medical care benefits;
- development of the criteria for review and evaluation;
- investigative research and international cooperation related to HIRA's basic operations;
- operations delegated to it in connection with review of the costs of benefits or evaluation of the reasonableness of medical care that are provided under the provisions of other acts;
- operations determined by the Minister for Health, Welfare and Family Affairs to be necessary in connection with the health insurance programme; and
- other operations prescribed by presidential decree in connection with review of the costs of insurance benefits and evaluation of the reasonableness of insurance benefits.

Although these are common functions in the health services sector, they are becoming more important in the age of evidence-based health care. Setting review standards and promoting processes based on the evidence base will be important areas in the organization's remit in the future. HIRA's functions could then resemble a specialized organization, such as the National Institute for Health and Clinical Excellence in the United Kingdom, which undertakes health technology assessments (HTAs) and develops clinical guidelines.

MIHWFA is in charge of health insurance programmes. While MIHWFA may take direct measures to supervise the activities of the NHIC and HIRA (for example, if necessary, it can modify its governance regulations), it also has several means with which to manage the NHI system. The most important mechanism is the Health Insurance Policy Deliberation Committee (HIPDC), which was established under MIHWFA in accordance with the National Health Insurance Act. This committee deals with all the major issues concerning health insurance, such as setting the benefits package and costs of treatments as detailed in the fee schedule. The Committee consists of 25 members and MIHWFA appoints or recommends members in accordance with the procedure set out in the National Health Insurance Act. The Ministry also can use an indirect tool to influence the management of the insurer and review agencies; the Ministry has the right to approve the two organizations' budgets, make recommendations to the president on candidates to head the NHIC, and directly appoints the president of HIRA and the directors of both organizations. The Office of Health Insurance Policy within MIHWFA is responsible for the overall management of health insurance policy and undertakes this task via four departments: Health Policy Planning, Health Benefit Planning, Pharmaceutical Policy and Health Benefit Evaluation.

MOSF is involved in running the health care system through the allocation of government subsidies. As a proportion of total health care finance, government subsidies for health care are not negligible. In addition to the subsidy for health insurance expenditure, MOSF also transfers funds from general revenue for the NHIC management budget, which includes all administrative costs. MOSF can also influence health insurance policy through its involvement in the NHIC's highest level decision-making body: the board of directors. In fact, under the National Health Insurance Act, representatives from MOSF are entitled to be included in the board of directors as non-permanent directors. The board plays an important role in making decisions related to the insurer's functions and responsibilities: for instance, setting the annual budget and determining major NHIC activities are part of the board of directors' functions. MOSF's role is to comprehensively evaluate the NHIC's affairs to increase the efficiency and transparency of all public programmes. In these terms, the Ministry evaluates the NHIC's annual projects in accordance with the Government Public Agency Management Act (2005), which monitors all public agencies' performance. Based on the Act, the Ministry can control budget spending, personnel management and major projects, as well as assess the performance of NHIC operations.[10]

2.3.1 Business and trade unions

Undoubtedly, employer groups such as the Korean Employers Federation (KEF) and the Federation of Korean Industries (FKI) played a key role during the early stages of the NHI scheme in the late 1970s and the coverage expansion period in the 1980s. Firstly, they were important financial contributors to the health insurance system, contributing half of the funds' resources on behalf of their employees. Secondly, they partly contributed to the coverage expansion process by employing workers who previously were classified as self-employed and were not yet covered by the NHI scheme. Overall, the role of employers was critical in generating the momentum towards universal coverage (Anderson, 1989).

As a result, business representatives occupied important positions in the health care policy-making process, particularly in various areas of health insurance. Sound partnership relations developed between government and business. However, the long relationship between these two key players is not the same as it once was. At the time of the proposed reforms in the late 1990s and into 2000, employer groups were not very cooperative when faced with the prospect of moving towards NHI integration. As a matter of fact, health care

[10] Apart from these roles, MOSF indirectly supervises private health insurance through its affiliation with the Financial Supervisory Service.

policy around the late 1990s took place in a changed environment in which the previous alliance between government and business was replaced by a tripartite corporatism (i.e. labour force representatives began to participate as one of the three key players in decision-making bodies). The new government led by President-elect Kim Dae Jung tried to elicit social consensus among major stakeholders on the issue of health insurance integration, as the single-payer reform was part of his presidential election campaign (Shin D, 2000; Yang, 2001).

In this new environment, unsurprisingly, employer groups – particularly the KEF and the FKI – objected to a unified system of NHI (Kwon, 2003), as they were concerned about their potential loss of influence once a single-payer scheme was established. Indeed, as they anticipated, their influence in the NHIC's decision-making body was significantly weakened during the 1990s in the run up to fund integration. Meanwhile, one of the two big labour unions – the Korean Confederation of Trade Unions (KCTU) – played an important role in developing health insurance, organizing alliances and networking all the labour-related organizations for the mobilization of health insurance reform at the national level.

The KCTU became an important body for executing strategies and mobilizing large sections of the labour force into a collective position in support of health insurance integration. The union generally used two tactics: on the one hand, it employed a 'soft approach', relying on cooperation and compromise. Under this strategy, the union officially took part in various decision-making bodies to help expand support towards NHI integration. For instance, the unions participated in meetings of the Tripartite Commission[11] and persuaded other stakeholders to support the single-payer scheme. On the other hand, the KCTU mobilized and used organized labour unions as part of a 'hard approach'. To pressure decision-making bodies, the Korean Social Insurance Union, one of the country's strongest unions, was drawn in, along with the farmer's organization, to add weight to the KCTU's demands on health care reforms. They lobbied bodies such as the parliament, MIHWFA and even the 'Blue House' (the President's Office).[12]

Meanwhile, the Federation of Korean Trade Unions (FKTU), the largest union in South Korea, pursued the middle ground in relation to health care reform, especially on the issue of health insurance integration. As a member of the Tripartite Commission, the FKTU participated in the health policy-making process, but it seemed to be either not strongly opposed or in favour

[11] The Tripartite Commission comprises representatives from government, employer groups and labour unions.

[12] For more information on the strategies and activities of KCTU, see Health Care Alliance for Integration and Benefits Expansion (2001).

of integration. Overall, it maintained a balanced stance, wanting to protect the mutual interests of both the union and the public.

2.3.2 Political parties

In South Korea, with its presidential system that concentrates most political power within the Office of the President, political parties – whether they are ruling or opposition parties – tend to follow the president's decisions. In particular, this form of decision-making was common during the authoritarian governments of the 1960s and 1970s. However, this pattern became increasingly unsustainable once the democracy movement took root in the 1980s. As early as 1988, 'centre-left' parties actively started to take part in health insurance issues. The Peace and Democratic Party and the Democratic Party, then opposition parties, prepared legislation (the National Medical Insurance Act) that proposed a single-payer system. Moreover, to address the social issues that were emerging under the new democratic era, parties competed to win electoral support and began to take stock of the electorates' needs. One of the hottest issues of the time was that of health insurance fund integration, which allowed parties, particularly the opposition parties, to reflect public opinion and to become deeply involved in health care reform. In fact, despite initial opposition from the governing Democratic and Justice Party, the two opposition parties mentioned above as well as a third – the New Democratic Republican Party – which together held a majority in the National Assembly, introduced insurance fund integration legislation, which was passed unanimously on 9 March 1989 (Kim Y, 2001). With several distinct provisions, such as progressive contribution rates and a contract system between insurers and providers, this act transformed the multi-fund insurance system into a single-payer scheme. However, the Act was vetoed by President Roh Tae Woo (Chun, 2005). Despite this failure, the experience was a telling one, as it was the first time that political parties had direct political involvement in health insurance policy.

2.3.3 Provider organizations

Like those in other countries, provider associations in South Korea are involved in health insurance policies. The Korean Medical Association (KMA), which represents physicians in the primary care sector, and the Korean Hospital Association (KHA) are among the most important provider organizations. Other associations, such as the Korean Nurses Association and the Korean Oriental Medicine Association, represent other major provider groups. These provider organizations promote their professions' interests according to their associations' goals, and thus often collide with MIHWFA and the NHIC, particularly in

relation to negotiating fee schedules, setting payment methods, and defining the insurer's role. The associations' involvement in health care policy may be exemplified by their stances towards the introduction of health insurance in 1977 and the health integration reform period in the 1990s. First, at the time of the NHI scheme's inception, the system was deemed to be beneficial for providers; thus, in general, these groups did not strongly oppose the introduction of NHI. In fact, they hoped that universal coverage would lead to an increase in the volume of medical treatments, and they also expected that, under the third-payer system, there would be no overdue reimbursements by the insurer.[13]

In contrast, the provider groups' position regarding health insurance integration in the late 1990s was often inconsistent and ambiguous. They tended to express conflicting views: for example, they supported the reforms in several forums but expressed opposing opinions in other instances. In fact, when the opposition National Congress for New Politics Party won the presidential election in 1997, KMA and KHA leaders expressed their concerns over insurance fund integration.

2.3.4 Civil society

NGOs played an important role in determining policy directions as part of civil participation in health care. A handful of civic groups, such as the Health Rights Network and the People's Solidarity for Participatory Democracy (PSPD) contributed in a major way to establishing a single-payer system and later reinforced support for benefit expansion. Some argue that civic groups have provided a major impetus to the development of health care policies since 1998 (Kwon, 2003).

It is true that today's health care achievements, especially considering the effects of globalization and the economic crisis, would be unthinkable without the role played by civic groups, most of which were founded in the 1980s and 1990s. In the 1980s, when the South Korean people were beginning to understand the influence of the social rights movement, the pro-democracy movement erupted against the autocratic regime of Chun Doo Hwan. Once the democratic government of the first civilian president, Kim Young Sam, was elected in December 1992, the democratic movement rapidly shifted into advocating social rights (Shin D, 2000). Under these circumstances, a few NGOs were able to establish themselves. The emergence of many civic groups at the time and their dynamic activities were fostered by a growing awareness of social citizenship rights. Citizens had already began to recognize that social rights were

[13] Prior to the establishment of the NHI system many medical providers, particularly in rural areas, had suffered from bad debts due to overdue payments (Kwon, 2003).

not spontaneously given, but rather had to be achieved by asking governments to provide social protection for the population. As Table 2.5 shows, this idea was developed into a more fundamental social policy principle that the welfare provided by the government was not a 'grace' granted by an overwhelming authority, but a 'right' that citizens are naturally entitled to. Thus, the emergence of civil society institutions coincided with the advent of the concept of 'social citizenship rights' at a time of economic difficulty.

Among the most prominent civic groups were the PSPD, the Citizens' Coalition for Economic Justice, the Health Rights Network and the Korean United Women's Association (Table 2.6). All these organizations had action plans to define social rights as one of the basic human rights; they also urged government involvement to protect the lives of the elderly and the poor who are not able to live without help in market economies.

Table 2.5 South Koreans' attitudes towards state responsibility for individual welfare (%)

Responsibility for welfare	May 1997	October 1998
Individual responsible	51%	17%
State responsible	49%	83%

Sources: Shin and Rose, 1997; 1998.

Note: Figures were obtained in response to the following question: "please choose one statement that comes closest to your view, either 'individuals should be responsible for their own welfare', or 'the state should be responsible for everyone's economic security'".

Table 2.6 Establishment and policy orientations of major civic groups

Name	Policy orientation	Established
Citizens' Coalition for Economic Justice	• Monitoring corruption and securing a safety net for the poor by correcting market failures	July 1989
Green Consumers' Alliance	• Reinforcing consumers' participation in social issues and developing policies for the consumer	April 1996
Health Rights Network	• Equity in health and comprehensive health security for the entire population	September 1997
Korean United Women's Association	• Building equal societies where all persons' rights and welfare are secured	February 1987
PSPD	• Reinforcing participation and human rights in all government policies	September 1994

Source: Chun, 2005.

2.4 Decentralization and centralization

Historically, social policy programmes as well as health insurance in South Korea have tended to be highly centralized. Thus, all health care policy decisions traditionally have been in the hands of central government departments such as the MIHWFA. In fact, MIHWFA is directly involved in health insurance policy: supervising the management of the NHIC and HIRA, allocating government subsidies and deciding on major health insurance policies using tools such as committees set up according to the National Health Insurance Act.

While decentralized administration is not common, a few areas do follow this trend. First, public health is one of the major responsibilities of local governments. Local governments have 251 public health centres which provide health education, immunizations, and health prevention and promotion services. Local governments also allocate budgets for the management of public health offices within their areas. Second, local governments provide health services for the poor. They select the beneficiaries for MAP based on criteria guided by the central government and they provide funds for the programme, in addition to receiving subsidies from the central government. Third, the long-term care insurance scheme (which started on 1 July 2008) is partly managed by local governments. Their role in managing long-term care is critically important, particularly in terms of financing. According to the Long-term Care Insurance Act, local governments are obliged to pay a proportion of long-term care expenditures (Arts. 4 and 58). They are also responsible for certifying long-term care facilities.

It is likely that further decentralization of some areas may occur in the health care sector in the future, and this would be particularly important in the administration of NHI. In addition, decentralized administration would further bolster local governance and cooperative relationships between central and local authorities in managing health care and long-term care. The public health insurance system is also likely to be reinforced in the future, as is further internal competition to enhance efficiency. The conservative Grand National Party, which won the presidential election in 2007, has placed greater emphasis on competition and other market-oriented mechanisms in public health insurance. As a result, the Public Agency Progress Committee was established in August 2008 under MOSF to instil efficiency-focused management into public entities. To this end, the NHIC has also begun to focus its efforts on reinforcing its functions and enhancing competition and efficiency.

2.5 Patient empowerment

2.5.1 Patient information

Providing the right kind of information to patients is an important health service. As patients today live in a period of information technology, reliable and appropriate information that is accessible is an important resource when making decisions about purchasing health services. This phenomenon is especially salient with the advent of widespread Internet use in South Korea, and the subsequent increase in demand for medical information. To meet this demand, medical information (through various methods and providers) should be distributed.

The NHIC provides a very wide range of health information, through various methods, to those insured. Firstly, it provides comprehensive health information through a specialized web site called "Health IN". On "Health IN", people can find information on hospitals and pharmacies, such as their addresses, the number of physicians they have and the type of facilities and equipment they offer. Other health-related information is also available on this site. For instance, people who want to know about a health problem such as obesity can access useful guides and information on being overweight (http://www.nhic.or.kr). Secondly, the NHIC edits several leaflets and books on different health topics, such as obesity, high blood pressure and diabetes, and regularly distributes them to the public upon request. Information on ways to avoid drug dependence is also provided. Thirdly, the NHIC supplies information through its case management programme, which was adopted to provide health information to targeted patient groups, such as those who suffer from high blood pressure, diabetes and obesity. Case managers regularly visit the homes and hospitals of risk groups, checking their health status, providing relevant health information in person and encouraging regular medical visits. Fourthly, NHIC 'service counters' work in major hospitals to help prospective and current patients to obtain medical services. The information is available on the spot and includes the specialties of consultants, the cost of treatments, the hospitalization process, as well as general health information. Fifthly, those living close to a NHIC hospital can benefit from its health education activities. Other private hospitals also organize health education classes to provide up-to-date information to patients as well as to the general public. All these services are also available to ethnic minorities. For example, the NHIC provides English services for foreign residents, and services for the visually impaired include information in Braille and health information by telephone. Moreover, the direct information service provided through the case management programme can help the elderly who have difficulty reading information in NHIC publications.

2.5.2 Patient rights

As in other countries, patient charters in South Korea outline basic guidelines for patients' rights. But unlike most countries, these charters do not take the form of legislation or directives; rather, they exist on a voluntary basis. Therefore, insurers and hospitals working with patients produce their own patient charters, making the content different for each institution. For example, the NHIC's patient charter articulates the general principles of its services provision and lists the kinds of services provided and how quickly they can be delivered. In contrast, Seoul National University Hospital's charter is much less comprehensive. It briefly outlines the principles or philosophy underlying the hospital's service orientation, such as human rights, equality, choice and confidentiality (http://www.snuh.ac.kr). Compared to the patient charters common in European countries, most charters in South Korea do not contain clauses on waiting lists because waiting times are not long, even for elective surgery, as there is an abundant supply of hospital beds in Seoul, predominantly provided by the private sector, which owns about 90% of total hospital beds.

In addition to patient charters, South Korea legislates to secure patients' rights to access medical facilities when treatment is needed. The Medical Act states that "doctors shall not refuse treatment during a patient visit without legitimate cause" (Art. 15). The Emergency Medical Act more clearly delineates the right to access hospitals when emergency care is required, stating that "all citizens have the right to receive emergency medical care regardless of sex, age, race, religion, and social and economic status" (Art. 3). As an additional guarantee, Art. 6 of this Act states that "anyone who works in emergency care should not decline appropriate emergency care when requested … without a legitimate reason".

Confidentiality in health care is considered to be as important as patients' rights. Currently, global best practice treats an individual's medical record as a matter of the utmost privacy and such information should be managed very stringently, particularly in the era of increased information technology.

In South Korea, basic protection of patient information is secured through legislation on Personal Information Protection of Public Institutions, which elucidates overall guidelines on personal information management, such as collection, storage, exposure of personal data and so on. Under this legislation, health information is classified as critically important information, so all government departments and public institutions must carefully look after the data under their control. To further secure data protection, criminal proceedings can be undertaken against anyone infringing the law by disclosing information without following due procedures, leading to fines of up to 10 million won (about US$ 1000) and jail sentences of up to 3 years (Art. 23). In addition, Art. 86

of the NHIC Act prohibits employees of both the NHIC and HIRA from disclosing any confidential information. Reflecting on these two laws, the NHIC issued a directive in 2007 – the Regulation on Individual Information Protection – which comprehensively regulates the general management of health data.

In parallel, allowing patients to access (and control) their own medical information is also an important protective measure. While it is imperative to keep individual health data securely, it is also essential for patients to be able to request their data from public institutions in order to check its accuracy and to make corrections if necessary. However, there are instances where data disclosure is prohibited, even if the request is for their own health data. The NHIC can refuse such a request if it judges that the individual in question is likely to be disadvantaged by the release of his or her own health data. For example, the NHIC tends not to provide individual disease data to a person if the data is expected to be delivered to private health insurance companies.[14] Refusals of this kind are overseen by an NHIC committee that regulates data disclosure procedures. This committee, which has been operating since 2004, decides what kind of data can be disclosed and how widely.

2.5.3 Patient choice

The issue of patient choice is complex. Although – unlike normal goods and services in markets – it is acceptable that choices within the health care market should have some limitations, in theory some choice in this market is also possible. Acceptable levels of choice for individuals are likely to vary depending on a country's health care system. For instance, in various health care systems, patients are allowed to choose their medical institutions, doctors (specialists or GPs), insurers, treatment methods and so on. In general, single-payer systems tend to have less patient choice than multipayer systems. From a broad perspective, the degree of choice depends on how strictly governments regulate the health care system – for example, by implementing a gatekeeping system.

Patient choice in the South Korean health care system exists in several forms. Firstly, patients can choose their providers, both in terms of facilities and in terms of physicians, and there is no gatekeeping system. Among the three levels of medical institutions (clinics, hospitals and tertiary hospitals), patients can choose either clinics or hospitals at the first delivery stage without restriction. Access to tertiary hospitals requires a referral letter from the primary physician; otherwise, the full cost is incurred out of pocket by the patient.

[14] A person who requests his or her own disease data from the NHIC should submit a 'data request form', which includes a section on the purpose of data usage.

Secondly, patients have the right to choose between specialists and GPs within the medical facilities that are offering treatment. The fee schedules for these two kinds of doctors are different (with higher fees for specialists); so, in general, patients who want fast and good quality care tend to prefer specialists.

Thirdly, in principle, the choice of treatment method is also possible to some degree, with patients having the right to listen to the available options among various treatment methods. However, this kind of choice is very difficult to facilitate in practice given the information asymmetry in health care. Doctors often have superior knowledge compared to patients when choosing relevant treatments and, under these circumstances, patients are accustomed to adhering to doctors' opinions. In particular, patients suffering from severe conditions often have to delegate treatment choices to either doctors or family. Likewise, patients who need urgent surgery after accidents would not have the opportunity to exercise choice. On a related issue, euthanasia surfaced recently as a social issue, with the Supreme Court of Korea legitimating the practice in May 2009. According to the court's decision (Supreme Court 2009 Da 17417), euthanasia (or ceasing medical treatment) is allowed if patients previously expressed their opinion on the artificial expansion of life, or if family members and physicians are aware of patients' wishes based on their philosophy and beliefs.

Fourth, patients are allowed to choose the type of ward they use in hospital, such as a single occupancy ward or a multiple occupancy ward. Fees are different depending on the types of ward chosen and users have to pay the difference between a 'high class ward' (with less than five beds) and a 'normal class ward' (with more than six beds). The former has several types of bed, such as special beds or one-bed and two-bed wards. There is no additional charge for using normal class beds.

In general, there is no strong evidence on how much patient choice should be allowed or is desirable within a health care system, resulting in differing degrees of choice across countries. In South Korea, how does the current level of individual choice allowed in selecting providers affect equity and efficiency in the health care system? Patient choice in selecting providers can bring about inequity. For example, currently patients can choose specialists in tertiary hospitals without actual limitations. If patients can pay out of pocket without feeling the financial burden, specialist care has some advantages, such as being able to jump the queue for treatment and obtaining good quality care. As a result, those who are better off tend to visit specialists in university hospitals, while the worse-off use GPs in primary care institutions. A recent study provides evidence to support this: on average, the better-off visit tertiary hospitals much more frequently than the worse-off. The former visited specialists 5.1 times more than the latter in 2003–2005. This produces a

negative effect on equity of access to university hospitals by poorer segments of the population (Yoon, 2009).

2.5.4 Cross-border health care

The issue of patient mobility is becoming increasingly important in terms of strengthening competitiveness in health care. As cross-border health care becomes more common, many countries, especially in Asia, have begun to pay attention to health care as one of the potential sectors that can produce high value-added. Anticipating active patient mobility between countries within a few years, many south Asian countries – such as Singapore, Thailand and India – have allocated a large amount of resources to maintain their competitive advantage. Since 2003, South Korea also has taken part in this competitive race, with the government launching a strategy to draw in overseas patients. In terms of medical tourism, South Korea's state-of-the-art hospitals are pushing strongly to gain a competitive edge over neighbouring countries. As a result, the number of patients moving to and from abroad for treatment is increasing (Chun, Yoon and Moon, 2006b).

In parallel, the number of South Koreans going abroad for treatment is gradually increasing in line with the rapidly rising number of citizens visiting other countries. Among the 'outbound' patients going overseas for treatment, the richest patients often visit foreign hospitals to maintain their privacy and to enjoy a holiday. According to government sources, the amount paid for treatments undertaken abroad in 2006 came to about US$ 100 million (Bank of Korea, 2007).

Meanwhile, the number of foreigners coming to South Korea to receive treatment and the amounts spent on such treatments are increasing steeply. To attract foreign patients, the government has recently deregulated some restrictions on hospitals. It has approved for-profit hospitals (FPHs) in two cities – Incheon and Jeju – which are among the country's five 'Special Economic Zones' for foreign investors and companies. Several state-of-the-art hospitals will be built at these sites, and will be expected to attract many foreign patients. In addition, many hospitals in Seoul have already started to treat foreign patients in the areas of cosmetic surgery and some acute fields, in which South Korean physicians maintain quite a comparative advantage in terms of cost and quality of care over physicians in neighbouring countries. Approximately 27 000 foreign patients were treated in 2008. The number will rise substantially as travel agencies and hospitals have started to bring foreign patients to South Korean hospitals from May 2009. MIHWFA expected 100 000 foreign patients to be treated in 2009 (Kim S, 2009).

Currently, the NHI scheme does not cover cross-border care, although the possibility is being discussed by a handful of health care experts. According to the National Health Insurance Act, cross-border care is prohibited in all circumstances, so South Korean nationals seeking treatment abroad will not be reimbursed by the NHI scheme. However, foreign residents legally registered by the authorities in South Korea are entitled to receive the same treatment as citizens.

2.5.5 Complaints procedures

Complaints procedures are formally institutionalized within the National Health Insurance Act. In general, patients can pursue their complaints through two channels. As a first step, they must bring their complaint to the NHIC Complaints Committee (Art. 76). The Committee consists of 10 members including a chairman, and each member is a representative from various stakeholder groups such as employers, employees and the insured. The Committee has to make a decision within 60 days of a complaint being made. This procedure gives patients the opportunity to complain to the insurer, the original decision-maker, and gives the insurer a chance to reconsider its original decision. Should the outcome prove dissatisfactory, people can respond to the Committee's formal decision in two ways: one is to continue with an appeal to the Dispute Adjustment Committee under MIHWFA. Another means is to lodge an appeal directly with the courts. Importantly, there is a mechanism through which patients' perspectives can be justly reviewed throughout the complaints and appeals procedures. As a measure to review complaints, experts representing patients' perspectives should be appointed as committee members in both the NHIC's Complaints Committee and MIHWFA's Dispute Adjustment Committee.

In addition to these legal procedures, there are many complaints procedures that do not have a strict legal basis. The complaints site on the NHIC web site is one example. Anyone who wants to air his or her complaint with regard to any dissatisfaction with the service received (such as a late response or lack of kindness during a consultation) can complain to the NHIC. Upon registering such complaints, citizens are entitled to receive an answer within a specific period, between three and seven days.

2.5.6 Patient safety and compensation

The Medical Act sets out general guidelines on patient safety and other matters related to medical practices. Put simply, the Medical Act broadly assigns this obligation to doctors and to managers as follows: "doctors should exert all their efforts to improve quality of care, prevent hospital infections, and

develop medical technology" (Art. 4). Each hospital should operate an Infection Prevention Committee to enhance patient safety within medical institutions (Art. 47 of the Medical Act). The Act also articulates the importance of patient safety from diagnostic radioactive rays (Art. 37). Under this rule, hospitals should follow several safety measures, such as appointing officials to manage radioactive ray activity, regular education and safety inspections.

Although there are no specific regulations on establishing a medical error reporting system, currently some experts have started to emphasize the importance of such mechanisms to improve patient safety and quality of care. For example, a civic group, Medical Consumer, monitors and reports medical errors to the public. The Korea Consumer Agency also publicizes medical errors. Evaluation of medical institutions' performance is implemented regularly to enhance patient safety (see Chapter 4). Nor is there malpractice legislation in South Korea. Therefore, health care providers are not legally obliged to have liability insurance. As a result of no regulation, patients have to take legal action in order to claim damages due to malpractice. Some providers are able to offer compensation when they lose legal cases by buying private insurance policies. But patients have to prove, within the legal process, that malpractice and damage were caused by the provider. Therefore, patients themselves have to deal with problems in negotiating with providers, and, in the longer run, relying on litigation to resolve disputes does not provide a good safety net for ensuring patient safety and compensation.

Direct-to-consumer advertising of drugs and doctors' services is prohibited; only the advertising of medical devices is permitted by medical institutions to illustrate the devices and technology they possess to treat particular diseases.

2.5.7 Patient participation

In South Korea, patient participation in health insurance is by and large becoming active, both in terms of range and depth. Since the 1980s and the advent of greater civic movements, patient participation has become an important element in the health insurance system. In particular, patient groups were established to exert influence administratively and politically on purchasing decisions.

Political means of influence available to patient groups include the organization of demonstrations to increase their voice in the decision-making process. For example, the first patient group was organized in 2003, when a new innovative drug called 'Glivec' for the treatment of leukaemia was listed in the benefits package. However, even though its price was determined using the normal pricing procedure, the drug was too expensive to be prescribed to some patients, who had to make high OOP payments to purchase it. The

patient group organized several demonstrations demanding greater access to this drug and, ultimately, the government could not ignore these demands; it reviewed the drug's price and tried to find reasonable ways to resolve the problem. In the end, an agreement between the government and the pharmaceutical company was reached that guaranteed that an amount equivalent to 10% of total purchases would be provided free (Chun, 2004). Another means of securing patient participation is administrative. It resembles an institutional approach to expand patient groups' influence from within or through 'internal participation'. Patient group representatives take part in numerous committees, which are important decision-making bodies, and thus they can play an important role both in enlarging the benefits package and deciding on contribution rates.

Patient satisfaction is one of the barometers that reflect how well a health care system is working. A systematic tool is used to check the degree of patients' satisfaction, with the inclusion of their views in health care management. Under the Performance Evaluation Act for Public Organizations (2004), all public organizations are obliged to undertake evaluations of their management performance each year, including an assessment of customer satisfaction. The latter is seen as an important indicator, and is assessed by special review teams appointed by the Minister of Strategy and Finance. Therefore, both the NHIC and HIRA, as public agencies, have to consider patient involvement or satisfaction in their management protocols. Table 2.7 shows the customer satisfaction rates surveyed by MOSF and the NHIC from 2004 to 2006.

Table 2.7 Patient satisfaction rates, 2004–2006

Evaluation item (% satisfied)	2004	2005	2006
MOSF survey			
Overall satisfaction	62.1	65.6	63.3
NHIC survey			
Overall satisfaction	50.9	51.1	52.5
Satisfaction with benefits package	47.0	49.6	49.0
Satisfaction with insurer's services	54.3	51.5	56.1
Satisfaction with appropriateness of contribution rate	50.4	51.0	50.8

Source: http://www.nhic.or.kr.

2.5.8 Physical access

To facilitate access to health facilities by the physically disabled, a handful of measures were established in the 1990s. Firstly, the Convenient Use of Facilities for the Disabled, the Elderly, and Pregnant Women Act (1997) requested that

public facilities such as medical institutions provide appropriate means to help the disabled and other frail groups access hospitals easily. Under this law, subway stations, hospitals and other public places should be equipped with convenient means such as elevators, wheelchairs and a guide for the disabled and hearing impaired. Secondly, the Welfare Act for the Disabled (1981) also aims to secure physical accessibility by disabled people to medical services and public services in general. This Act stipulates that the government and local governments should provide sign language and guides for those with hearing and visual impairments (Art. 23).

3 Financing

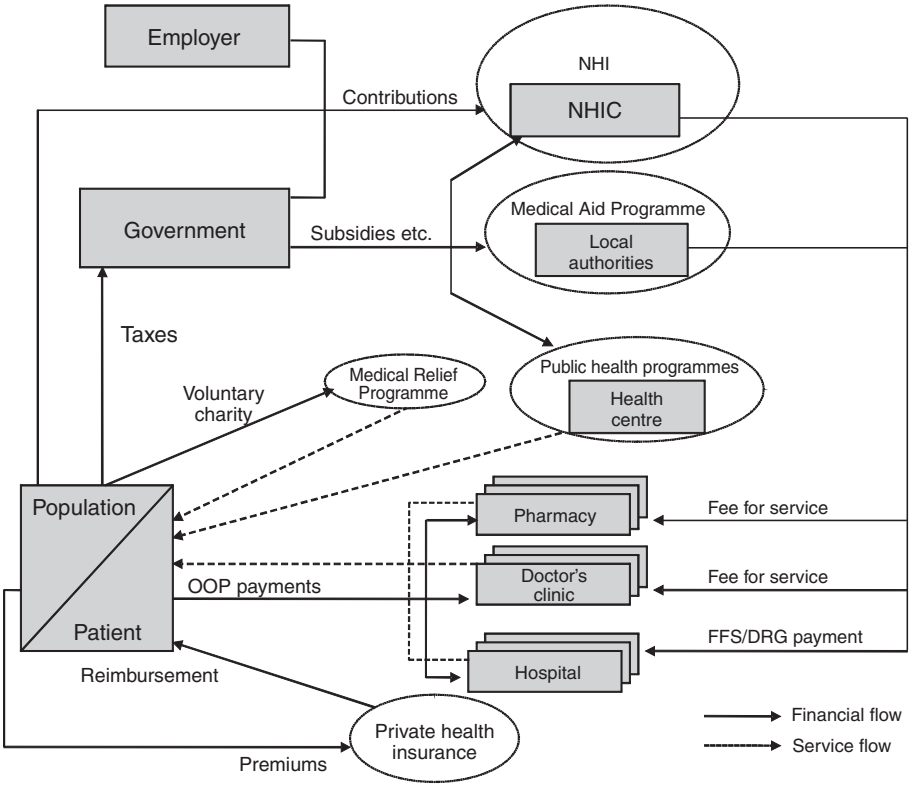
The South Korean health care system is a mix of public and private financing. Funds for health care are raised mainly from equally important sources: mandatory health insurance contributions and OOP payments by patients. As the government is responsible for health care services, it subsidizes a substantial portion of health care funding.[15]

NHI, which provides universal coverage, is predominantly funded through contributions by employees, employers and the self-employed (including contributions by the state as an employer of civil servants). About 36% of funding is private, mainly in the form of direct payments and cost sharing by patients, and in the form of premiums to private health insurance schemes (Kim J, 2008).

In addition, there is MAP, which guarantees health care services to the poor and is financed by the central and local governments. The Public Health Service provides the whole population with health care services for prevention and health promotion, and the Medical Relief Programme (MRP) provides foreign workers and homeless people with emergency medical services through public and private sources. Figure 3.1 illustrates the financial flows of the South Korean health care system.

[15] There is no rule or regulation that regulates the size of government subsidies in the National Health Insurance Act. The origin of government subsidies actually dates back to the 1980s, when government officials hinted that the government would subsidize about one half of health care expenditure for the self-employed, because, unlike employees, this group would end up bearing 100% of their NHI contributions themselves. Therefore, the size of government subsidies changed every year depending on budget allocations. In 2004, in order to clarify the size of the subsidy, the government enacted the Special Act for Financial Stabilization, which clarified that the size of the subsidy should be 35% of health care expenditure.

Fig. 3.1 Financial flow chart of the health care system of the Republic of Korea



Notes: DRG: Diagnosis-related group; NHI: National Health Insurance; NHIC: National Health Insurance Corporation.

3.1 Health expenditure

South Korea has a relatively low, but rapidly growing, level of health expenditure compared to other OECD countries (Ko, 2008).[16] Total health care expenditure has risen steadily from about 4.4% in 1990 to 6.8% of gross domestic product (GDP) in 2007. Table 3.1 shows that the amount spent on health care has risen in both absolute and relative terms, with total health expenditure growing rapidly. This growth was more pronounced in public health expenditure, which steadily increased its share of total health expenditure. Despite this increase, public sources of spending as a proportion of total health expenditure are still lower

[16] The data given here is taken from the recently published OECD Health Data report (OECD, 2009).

than in other OECD countries. According to the OECD report, South Korea is in the group with the lowest public health expenditure, which includes Turkey, Mexico, Poland and Slovakia (OECD, 2009).

While the share of GDP represented by health expenditure (4.4% in 1990) is below the level that would be expected for an OECD country with South Korea's standard of living, real health expenditure per capita has increased rapidly and above real GDP per capita for almost the entire period between 1990 and 2007. This growth in real per capita health expenditure can be explained almost wholly by volume increases up until the mid-1990s, as the government kept increases in the price of health services and medical fees below general price increases. Of total health expenditure, the outpatient share (33.6%) was large, while the inpatient share (27.9%) was lower than the OECD average; the drug share (24.7%) also was relatively high (OECD, 2009).

Table 3.1 shows the percentage of total health expenditure financed through public and private sources. Public expenditure, which comes mainly from contributions, includes direct care provision (e.g. MAP for the poor) from government and subsidies to the NHI. Private expenditure mainly includes OOP payments and voluntary (private) health insurance. OOP payments were about 35.7% of total health expenditure in 2007.

The growth in public health expenditure was mainly a result of expenditure increases in the NHI scheme. In addition to this, the government has tried to expand the benefit package under the NHI, leading inevitably to increases in NHI expenditure (see Chapter 7).

Table 3.1 Trends in health expenditure, 1990–2007

	1990	1995	2000	2004	2007
Total expenditure per capita (US$)	361	450	778	1 149	1 688
Total expenditure (% GDP)	4.4	4.2	4.8	5.6	6.8
Public expenditure (% total health expenditure)	36.5	36.3	44.9	50.8	54.9
Government health spending (% total health expenditure)	8.3	7.5	9.2	10.0	12.3
OOP spending (% total health expenditure)	58.2	54.5	45.9	40.4	35.6
Private insurance spending (% total health expenditure)	2.0	2.9	4.7	3.8	4.1

Source: OECD, 2009.

Notes: GDP: Gross domestic product; OOP: Out-of-pocket.

Two major reforms were implemented in July 2000: the integration of multiple insurers into a single-payer system and the separation of the functions of prescribing and dispensing between doctors and pharmacists. The government introduced a mandatory prescription system for pharmacies and prescription fees for doctors (see also Chapter 7). The processes and outcomes of these two reforms raise interesting issues that go beyond the specific objectives of the reforms. The reforms were considered by the medical professionals as threatening their economic interest and led to strikes by doctors. Coincidently or not, the financial deficit of the NHI scheme came on the heels of a decision to postpone increases in the NHI contribution rate. Therefore, the government increased the fees for medical services, which in turn contributed to increases in NHI expenditure (Jeong and Lee, 2003). There is still a lack of mechanisms to maintain health expenditure growth along a sustainable path.

Table 3.2 outlines health expenditure on different service programmes as a percentage of total health expenditure. The largest shares have been consistently taken up by outpatient care and inpatient care. Relatively little is spent on preventive and public health.

Table 3.2 Health expenditure by service programme, 1990–2007

Expenditure on service	1990	1995	2000	2004	2007
Inpatient care (% total health expenditure)	28.9	23.5	27.2	26.4	27.9
Public expenditure on inpatient care (% total health expenditure)	13.5	13.8	15.5	15.7	18.3
Public expenditure on inpatient care (% total expenditure on inpatient care)	46.6	58.9	56.8	59.4	65.8
Total expenditure on outpatient care (% total health expenditure)	31.6	33.3	33.6	34.7	33.6
Public expenditure on outpatient care (% total expenditure on outpatient care)	35.3	31.2	44.3	48.7	48.9
Total expenditure on pharmaceuticals and other (% total health expenditure)	24.2	26.1	26.3	26.3	24.7
Public expenditure on pharmaceuticals and other (% total health expenditure)	3.8	5.0	8.3	12.6	13.5
Public expenditure on prevention and public health (% total health expenditure)	0.8	0.7	0.7	0.7	1.9

Source: OECD, 2009.

3.2 Population coverage and basis for entitlement

3.2.1 Population coverage

The whole population is covered for the risks of illness, either through the NHI scheme, financed by mandatory contributions, or through MAP, a social assistance scheme for the very poor, financed through general taxation. More than 96% of all residents in the country are covered by NHI, which guarantees universal and comprehensive health care. The rest of the population, who do not earn an income above the poverty line and cannot afford to pay NHI contributions, are covered by MAP. Besides NHI and MAP, there are other health care programmes, the Public Health Service, which provides the whole population with health care services for prevention and health promotion, and MRP, which provides foreign workers and the homeless with emergency medical care services through public and private sources. Table 3.3 outlines the coverage scope of different programmes and mechanisms within the health care system.

Population coverage under the NHI scheme is divided into two groups: (a) employees; and (b) the self-employed. The employee group includes:

Table 3.3 Health system coverage programmes in the Republic of Korea

	Public			Mixed	Private
	NHI	**MAP**	**PHS**	**MRP**	**VHI**
Coverage/ entitlement	96.3% of population	3.7% of population	Whole population	Foreign workers and the homeless	Voluntary subscription
Benefits	Health care	Health care	Health promotion/ prevention	Emergency care	In cash
Organization	NHIC	NHIC/local authorities	Health centres/ health posts	Local authorities	Insurance companies
Service provider	Private/public providers	Public/private providers	Local health centres	Public/private providers	Private/public providers
Finance	Contributions/ subsidies	Public sources/ general taxation	Public sources	Public/private sources	Premiums

Notes: MAP: Medical Aid Programme; MRP: Medical Relief Programme; NHI: National Health Insurance; NHIC: National Health Insurance Corporation; PHS: Public Health Service; VHI: Voluntary health insurance.

(a) industrial employees in workplaces with more than one regular worker; (b) civil servants and soldiers; (c) private school teachers; and (d) family members of these insured workers. The self-employed group includes the self-employed and members of their families in urban and rural areas (Table 3.4).

Table 3.4 Classification of National Health Insurance entitlement

Employee	Self-employed
(a) Industrial employees in workplaces with more than one regular worker	The self-employed in both urban and rural areas, and their family members
(b) Civil servants and soldiers	
(c) Private school teachers	
(d) Family members of these insured workers	

The self-employed become insured by paying health insurance contributions if they have an income over the national minimum (about US$ 1326 a month for a family of four in 2008). No part of the population has a choice of insurer, as, in 2000, all the previously separate insurance funds were integrated into one organization, the NHIC, and everyone pays into a single fund. As membership of the NHI scheme is compulsory, there is no 'opting in' or 'opting out'. Voluntary health insurance (VHI) also plays a role in the health care system (see Section 3.3.2 below) and its size is significant: 63.7% of the population has at least one or more private health insurance policy (Cho et al., 2005; Korea Development Institute, 2007).

The NHI benefit package is nationally uniform, while the contribution calculation methods are different for employed workers and the self-employed (see Chapter 4). Unemployed people and pensioners are also covered by paying contributions. Contributions for these groups are calculated on the same basis as the self-employed (i.e. taking into account property, pensions, etc.). In general, patients receive medical benefits in-kind, and they also have to pay some portion of their medical care (cost sharing), which is defined by the National Health Insurance Act.

Since 2001, foreigners, in principle, can also be covered by NHI. They qualify by registering in the country as a foreigner and submitting a written application form at one of the NIHC's branch offices. Korean nationals residing abroad may be covered by NHI provided that they meet the qualification criteria of having resided in the country for over three months.[17] Such nationals can apply

[17] The criteria extend to those who have planned to stay in the country for over three months to study or work, even though their actual stay has not reached three months.

for NHI coverage through one of the NIHC's branches, providing the required documentation showing identity, residence and income. Illegal immigrants are excluded from health care coverage. Moreover, access to health care is denied to anyone who has not paid contributions for six months. Therefore, NHI obligations sometimes limit the accessibility of medical care for the worse-off, if they are overdue on payments. This has become a political issue.

A government-sponsored public assistance scheme, MAP, was established in 1977 to run in parallel to NHI. The programme provides eligible low income individuals with free medical services and the same benefits included within the NHI scheme. MAP is part of the Livelihood Protection Programme, the South Korean welfare system, and hence is separate from NHI. All individuals whose income does not reach the minimum standard of living (and certain other specific population groups) are eligible for MAP cover. MAP beneficiaries are divided into two categories. Class 1 includes households where no person is able to work due to disability, old age (i.e. over 65) or pregnancy, and to persons in nursing and welfare facilities. Class 2 includes livelihood protection (welfare) beneficiaries who are employable but self-supporting. While there are no differences in the benefits provided under the NHI scheme and MAP, co-payments on inpatient services are only waived for MAP Class 1 beneficiaries.

Public health services are provided by health centres and health posts (see also Chapter 6). There is a public network of health care facilities, including health centres, health subcentres and primary health care posts. The government established primary level facilities after 1981, with the purpose of filling gaps in private provision in underserved rural and fishing areas. There is currently one health centre for each administrative district and a health post in locations with more than 500 residents. The main activities of health centres include illness prevention and health promotion, vaccination, management of communicable diseases, mental and child health care, and other basic services. Primary care facilities are staffed by salaried doctors. Most of them are physicians under compulsory military service who are posted in districts that have few or no doctors, such as rural areas.

3.2.2 Definition of benefits

Benefits covered under the NHI scheme include acute treatment and outpatient care in hospitals, pregnancy and childbirth, the curative costs of chronic treatments, physician and specialist services, eye examinations, some dentistry treatments, the medical costs of home care nursing, and most prescription pharmaceuticals. Service coverage has been expanded over the years – for example, certain high technology services have been included (e.g. computed

tomography (CT) scanners) and benefit days were increased from 180 in 1994 to 365 in 2000 (see Chapter 7).

Health insurance has an explicitly defined uniform package of care ('positive list'). The criteria of the care package are reviewed by the HIPDC, established under MIHWFA. Decisions about what health care services to include are made on the basis of explicit criteria. A 'negative list' is also applied, and some benefits are explicitly excluded if they are not required in the treatment of diseases. Volumes of health care services are not well specified, while the rate of co-payments is fixed for each benefit. The insured and their families are provided with benefits for the purposes of prevention and treatment of illnesses and injury resulting from daily life, childbirth, health promotion and rehabilitation. Both benefits in cash and benefits in kind are guaranteed, but there are no cash benefits such as compensation for loss of income in the case of having to take sick leave from work (Table 3.5).

In more detail, NHI covers diagnosis, treatment (inpatient care, outpatient care, medicine, dental services), pharmaceuticals (e.g. compliance with the WHO essential drug list and beyond, such as antiretroviral treatment and opiate analgesics), dental care (e.g. dental check-ups and extractions), prevention, health promotion, rehabilitation, pre-hospital emergency care, medical aids/devices for the disabled, organ transplantations, some complementary medicine procedures and patient information. The most relevant exclusions concern patient transportation, glasses and contact lenses, care not considered essential to daily living (e.g. plastic surgery) and high-cost services. Occupational health care and accident-related care are covered by separate industrial injury insurance. Conditions or services that are not covered include: alternative therapies and complementary medicine, minor stress with no accompanying diseases, fatigue, skin conditions (freckles, balding, moles, acne) and plastic

Table 3.5 National Health Insurance benefits

Health insurance benefit	Recipient
Benefits in kind	
Health care benefits	The insured, dependants
Health check-up	The insured, dependants
Benefits in cash	
Co-payment ceiling	The insured, dependants
Medical aids/devices expenses for the disabled	The insured and dependants if the disabled person is registered in accordance with the Welfare Act for the Disabled
Prenatal care subsidy	Pregnant insured and dependants

surgery. Patients pay the cost of these services themselves, or some may be covered by private (voluntary) health insurance. Some oriental medicine treatments are not reimbursed by the NHI system, but well-defined therapies such as acupuncture, cupping and moxibustion are reimbursed.

Cash benefits are available to those who use medical aids/devices for the disabled, pregnant women and those who have paid excessive co-payments. However, there are no cash benefits for people with mental illnesses or people living with HIV/AIDS.

The benefits package has been extended, and about 20 items, such as positron emission tomography (PET) and organ transplantation, were added in 2006. The NHI scheme applied cost reductions to outpatient treatments for 62 rare diseases in January 2004, and introduced a reimbursement system with a ceiling for cost sharing in July 2004. The NHI also began to pay for magnetic resonance imaging (MRI) in January 2005, and cut the rate of OOP payments to 10% for serious cases with high expenditures in September 2005. The system also expanded benefit coverage to include organ transplantation (liver, heart, lungs and pancreas) in January 2006 and PET in June 2006. Moreover, in the most recent benefit expansion drive, the OOP payment rate for serious diseases will be cut to 5% from December 2009 (see Chapter 7).

Benefit coverage also has been extended to socially vulnerable groups. The rate of co-insurance for mental health outpatient treatment decreased to 20% in March 2005, medical devices for the disabled have been covered since April 2005, as have remedies for chronic hepatitis B (since December 2005). Prisoners in custody are not entitled to NHI benefits and are covered by separate health care provisions made by the Ministry of Justice. Professional soldiers are entitled to benefits under the NHI system, but other soldiers in the various military services are not entitled to NHI as they are covered by special health care provisions under the Ministry of Defense.

Coverage also has been extended to include benefits relating to childbirth. Cost sharing for vaginal deliveries and for premature infants was abolished in January 2005. Co-payments for the outpatient treatment of children under six were abolished in January 2006, but were reintroduced in 2007 at 70% of the adult co-payment.

In 2006, NHI benefits accounted for 61.3% of total health service costs. Therefore, OOP payments reached 38.7%. Under the previous progressive government, there were plans to enhance NHI benefits to reach 70% of all health service costs before 2008. To finance these extensions, NHI contribution rates would have needed to rise, as well as the state subsidy. The successive conservative government (elected in 2008), somewhat unexpectedly, has not changed the benefit expansion plan. There are no variations in entitlements/

benefits as the NHIC is the only one single insurer. This public insurance body does not offer additional benefits over and above the established package of care and it does not offer complementary or supplementary insurance (see also Section 3.3.2 below).

The HIPDC decides what care should be included in the benefit package. The HIPDC deals with health care benefits standards, health care benefits costs and other matters closely related to health insurance. The committee consists of 25 members, 8 representing the insurer, beneficiaries and employers, 8 representing the medical and pharmaceutical sectors, 8 representing public interests, and a chairman. The members, whose tenure is two years, are appointed or assigned by MIHWFA.

The HIRA examines the security and effectiveness of health technologies and decides whether new health technologies should be included in the benefit package. The results of HTAs are applied to decisions on the possible inclusion of benefits, effective utilization of resources by health organizations, and quality criteria for doctors' practice. Regulations on the deployment of new technologies do not strictly cover the private sector. The 'resource base relative value scale' is the measure used to steer the appropriate use of technologies (Kam, 2008).

3.3 Revenue collection/sources of funds

Like most other countries, South Korea has a mix of compulsory and voluntary financing for health care. However, NHI contributions and general taxation together are a dominant source over other sources. Besides these two sources of revenue, there are private health insurance and OOP payments. In 2007, public financing made up approximately 54.9% of total health expenditure, while private financing was about 45.1%. Of the latter, 35.6% was made up of OOP payments, 4.1% came from private health insurance and the remaining part was financed by voluntary and charitable funds.

3.3.1 Compulsory sources of financing

Taxation

Tax revenue is used to partly finance NHI and to fully finance MAP and the Public Health Service. In accordance with the Special Act for Financial Stabilization, the government should subsidize the NHI system by means of both the general budget and through a surcharge on tobacco sales.[18] In

[18] The Act ceased to apply from January 2007, as it was special legislation designed to be in effect for only a certain period (2002–2006).

order to stimulate participation by the self-employed and promote coverage extension to this group, the government had promised to subsidize half of the payment of benefits for this category of insured. However, the total government subsidy to the NHIC, paid as a lump sum, is now about 20% of its contribution revenue. MIHWFA is required to transfer an amount equivalent to 14% of total contribution revenue from the general budget every year, while a further 6% of total contribution revenue should be transferred from the Health Promotion Fund, which is funded through tobacco taxes and is used exclusively for providing additional funds to the NHI scheme. The general budget subsidy consists of not only direct taxes but also indirect taxes. Therefore, it is not clear whether this subsidy is progressive or not (Lee J, 2005). The tax levied on tobacco sales is indirect and has a regressive effect. The National Tax Service is responsible for collecting both general taxes and the earmarked tax for health promotion (the tobacco tax). However, there has been criticism that it does not adequately assess the exact income of the self-employed (e.g. doctors, lawyers, small business owners, etc.) and thus does not recoup the correct amount of tax revenue (Choi B, 2008).

The central government collects income tax, various property taxes, corporation tax, value-added tax, liquor tax and special excise taxes. Regional governments collect the regional development tax, education tax, registration tax and licence taxes (such as automobile licence taxes), while local authorities collect vehicle, land, property and enterprise tax. Local authorities can raise taxes beyond the level defined by the central government. There are tax ceilings for small enterprises and low income families, so that their tax burden is diminished.

The excise duty or surcharge on tobacco is an earmarked tax for health promotion ('surcharge for health promotion'). In 2006, it was 354 won (about US$ 0.354) for each pack of tobacco, with the total revenue raised from this tax reaching 149.4 billion won, which was transferred to the NHIC as a state subsidy. This surcharge has been criticized because tobacco consumers consider themselves to be discriminated against. There have been proposals to impose a similar hypothecated excise duty on alcohol but this has yet to be legislated.

OOP payments and private health insurance premiums are tax deductible. OOP payments can be deducted when they amount to more than 3% of disposable income. Tax relief for private health insurance premiums is limited to 700 000 won per year (2008).

NHI contributions

NHI contributions are levied on the basis of ability to pay: for employees, the rate applies to gross salary and is shared equally between the employer and

employee. Contributions by self-employed individuals are assessed on the basis of income, assets, living standards and rate of participation in economic activities. The income-related share of the contribution is calculated from taxable income or, for individuals whose taxable income is unavailable or lower than 5 million won, from their income, age, sex and property. The other components of the contribution vary with the asset base and car ownership of the insured. Dependants of the insured are also covered by the NHI scheme (Choi B, 2008).

In order to broaden coverage rapidly while maintaining its main principles and aims, a policy of maintaining low contributions and limited benefits was applied to the NHI from the time it was first introduced in 1977 for companies with more than 500 employees. This policy, together with rapid economic growth and firm government stewardship, facilitated the collection of contributions from employees and employers. Contributions are collected by the NHIC through its six regional headquarters in Seoul, Busan, Daegu, Gwangju, Daejeon and Gyeong-In, and through 178 branch offices.

Currently the contribution rate is 5.08% of gross income of the employed (from 1 January 2008). There has been no difference in the contribution rates among different categories of employed workers since July 2003. The contributions of the self-employed cannot be fixed, as their incomes are not known exactly; therefore, they are calculated not only on the basis of income but also on other criteria and characteristics (i.e. properties, motor vehicles and gender).

Employed workers pay 50% of the contribution and their employers pay the other 50%. Civil servants pay 50% of the contribution and the government, as their employer, pays the other 50%. Private school employees pay 50% of the contribution, the owners of these schools pay 30% and the government subsidizes 20% of the contribution. The calculations for employees' monthly contributions are shown in Table 3.6.

The contributions of employees are based on gross salary. Here, salary means money paid to an employee for work done, excluding retirement pay, prizes, fees earned from publications and non-taxable earned income as defined by income tax law. There are upper and lower thresholds on contributions in proportion to salary. Therefore:

monthly contribution = average monthly wage × contribution rate (0.0508)

average monthly wage = gross annual salary ÷ length of work period within a year.

NHI contributions are tax-deductible. Contributions are not progressive but proportional, and sometimes even regressive, as income above an upper threshold (6 579 000 won in 2008) is not taken into account in the calculation

Table 3.6 National Health Insurance contributions

Classification	Total (%)	Employee (%)	Employer (%)	Government (%)
Company employees	0.0508 (100)	0.0254 (50)	0.0254 (50)	–
Civil servants	0.0508 (100)	0.0254 (50)	–	0.0254 (50)
Private school teachers	0.0508 (100)	0.0254 (50)	0.0174 (30)	0.0116 (20)
Soldiers	0.0508 (100)	0.0254 (50)	–	0.0254 (50)

Source: NHIC, 2009a.

while income below the lower threshold (280 000 won) is considered to be equal to 280 000 won (Table 3.7).

The contributions of the self-employed are calculated on the basis of not only income but also the insured persons' household assets. A points systemis used whereby 'contribution points' are determined by taking into account the income, property, living standard and participation rate in economic activities of each self-employed person in a household (Art. 62 of the National Health Insurance Act). A monetary value per point (currently set at 139.9 won) is then used to calculate the contribution per household according to the following formula:

monthly contribution = contribution points × monetary value per contribution point.

Some social groups do not contribute to the NHI scheme. These include individuals who should be covered by MAP, individuals remaining abroad continuously for more than one month, individuals who work abroad and have no family to support domestically, individuals who are on active military service and individuals who are in prison or reside within a facility under the jurisdiction of the Ministry of Justice. The latter may use NHI services, but their responsible institutions must then transfer the equivalent health care cost to the NHIC. Transfers in these cases are not taken as NHI contributions but as compensation for medical expenditure.

Table 3.7 National Health Insurance contribution rate calculations

Range of average monthly wage (won)	Contribution rates	Calculation
Less than 280 000	5.08%	280 000 × 0.0508
Between 280 000 and 6 579 000	5.08%	average monthly wage × 0.0508
Exceeding 6 579 000	5.08%	6 579 000 × 0.0508

Source: NHIC, 2009a.

It is important to note, however, that contribution rates have not been raised sufficiently to finance additional NHI benefits and increased utilization of services. Decisions on the contribution rate are determined by MIHWFA after deliberations by the HIPDC. Table 3.8 shows the average monthly contributions of the self-employed and employees (2000–2007).

So far, social insurance revenues have been collected separately. Therefore, health insurance revenues are not mixed with other sectors. Recently, discussions began on the possibility of collecting all social insurance revenues together through a "unified collecting body" (Shin Y et al., 2007). In May 2009, the National Assembly revised the National Health Insurance Act to allow the NHIC to collect all social insurance contributions, including pensions, unemployment insurance and industrial accident contributions. The NHIC, as the unified collection body, will collect contributions from January 2011.

Additional contributions

There are no additional contributions for NHI. The long-term care programme was introduced in July 2008. The contributions for this insurance are collected in addition to NHI contributions, and currently are set at 4.78% of a person's NHI contribution (5.08%).

Table 3.8 Average monthly contributions, 2000–2007 (won)

Classification	2000	2001	2002	2003	2004	2005	2006	2007
Self-employed								
Household	31 678	36 253	39 071	43 390	45 818	46 871	49 688	55 054
Per capita	10 965	12 982	14 650	16 807	18 256	19 237	21 050	24 065
Employees								
Household	24 237	28 830	35 209	44 581	49 675	52 956	57 092	62 430
Per capita	7 688	9 542	12 220	15 727	17 752	19 000	20 713	23 449

Source: NHIC, 2009a.

3.3.2 Voluntary health insurance

Although the Medical Insurance Act was passed in 1963, it was not in effect until 1977. Private/VHI filled this gap by providing health insurance coverage to its policy holders. After the compulsory health insurance programme was introduced in 1977, VHI operated in parallel, and its role changed as the NHI system gradually extended its coverage of the population to achieve universal

coverage in 1989. There are still different forms of private health insurance (e.g. indemnity and life insurance). However, substitutive VHI does not exist in South Korea. Private health insurance expenditure is expanding rapidly: it reached US$ 89 million in 1990, US$ 463 million in 1995, US$ 992 million in 2000 and US$ 1477 million in 2004 (OECD, 2007) (See Table 3.9).

VHI premiums are calculated in relation to the risk profiles of applicants, taking into account age, gender and health status. Private insurers can reject applicants with pre-existing conditions, as there is no regulation on underwriting. Also, some insurers require applicants to take a medical examination. There is no control over the price of premiums. As mentioned above, pre-existing conditions are not covered and, in general, dependants need to purchase separate policies, as they are not automatically covered by the main insuree's policy. Insurers are free to set their package of benefits. Benefits are provided in cash (via reimbursement). Although there is no strict regulation of VHI providers, sufficient funds, for example, to guarantee the payment of benefits for a determinate period of time should be held in reserve. There is no cross-subsidy from VHI to the NHI system. Not-for-profit (mutual) insurers and for-profit (commercial) insurers are subject to the same regulatory framework under the supervision of MOSF. Lower socioeconomic groups are less likely to be covered by VHI as there are no subsidies from the government except for the fact that premiums are tax deductible.

Since 1995, much discussion has taken place regarding whether to promote VHI or private health insurance further. In 2006, there was a proposal to transfer the health data of those insured under the NHI to private insurers so that they could calculate premiums more precisely based on individual risk rates (Kim C, 2006). Not surprisingly, civil activists and experts opposed this proposal on the basis that it would divulge individual health information. In addition, there has been criticism of VHI policies that reimburse OOP payments incurred when using NHI services on the grounds that this provides an incentive for people to use more NHI benefits, and increases expenditures (OECD, 2003).

Table 3.9 Private health insurance expenditure, 1990–2004

Year	1990	1995	2000	2004
Total expenditure (US$ millions)	89	463	992	1 477
Per capita (US$)	2	10	21	31
Growth rate (%)	–	420.0	114.5	48.8

Source: OECD, 2007.

3.3.3 Out-of-pocket payments

People receiving health care services pay a certain portion of the costs in accordance with Art. 41 of the National Health Insurance Act. In addition, patients must pay 100% of the cost of medical services that are not included in the NHI benefit package. The total amount of direct payments for services excluded by the NHI benefit package is not known. However, the high share of uncapped OOP payments raises concerns about the equity implications of both financing and accessing health care services across income groups.

When NHI was first introduced in 1977, cost sharing was also set up for all kinds of benefits. There have been small changes in the level of OOP payments in recent years, both in terms of cost sharing for services provided under the NHI scheme and as direct payments for services not covered by NHI (Table 3.10).

Table 3.10 Cost sharing and direct payments, 2004–2006

	Covered by NHI (%)	Cost sharing with NHI (%)	Direct out-of-pocket payment (%)	Total (%)
2004	61.3	23.1	15.6	100
2005	61.8	22.5	15.7	100
2006	64.3	22.4	13.3	100

Source: NHIC, 2008a.

Note: NHI: National Health Insurance.

Cost sharing

The health care system in South Korea relies a great deal on consumer cost sharing to ensure that there is parsimonious consumption of health care services and to contain public expenditure on health. Cost-sharing policies have explicit objectives: raising revenue for the health sector, reducing inappropriate demand, containing costs and encouraging consumer responsibility. Despite relatively high cost sharing, health care expenditure increased very rapidly due to patients' moral hazard,[19] heightened expectations, increased use of medical technologies and induced demands from providers. As a result, the total amount of benefit expenditure almost doubled from 13 165 billion won in 2001 to 24 577 billion won in 2007 (NHIC, 2008a).

[19] Moral hazard refers to the possibility that patients/the insured may exploit benefits unduly to the detriment or disadvantage of other insurees or the insurance system without having to bear the financial consequences of their behaviour (Mossialos, Allin and Figueras, 2007).

Under the present legislation, the government decides on the level of cost sharing. Co-payments have been maintained at a high level, which has allowed NHI contributions to be kept at a lower level. The HIPDC is responsible for making decisions about the level of cost sharing and what is included in the benefit package.

Cost sharing is a contentious issue in South Korea, and frequent changes have occurred regarding which services are subject to cost sharing and at what levels (Kim H, 2004). For example, prior to 2006, meals during hospitalization were paid directly by patients, and the hospitalization of young children under six was subject to cost sharing (at a level of 50%). Subsequently, the government extended the benefit catalogue and lengthened the periods covered for some services.[20] Following this extension, from July 2006, meals in hospitals were included in the benefit catalogue, with patients having to pay only 20% of the cost. In addition, hospital care for young children was fully covered by the NHI, with no cost sharing. This change was designed to enhance security against illness. However, in December 2007, the cost-sharing structure for these two items was changed again: the proportion of cost sharing for hospital meals was increased to 50% and the hospitalization of young children incurred a 10% cost-sharing burden.

Before 2008, cost sharing had been a mix of co-payments (a fixed amount or flat rate charged for a service) and co-insurance (a fixed proportion of the cost of a service). However, there has been a general decline in the use of co-payments, and currently co-insurance tends to prevail (Kim J, 2008). Cost sharing for inpatient treatment is set at 20% of the total treatment amount.

Cost sharing for outpatient treatment varies according to the medical care institution and its location. It also depends on whether a patient is exempted from the 'mandatory prescription system', which requires a patient to obtain a prescription for medicine from a doctor and then have it dispensed in a licensed pharmacy. Those exempted (e.g. people with mental health conditions and those over 65) may obtain their medicines directly within the clinic or hospital where they are treated.[21]

Table 3.11 outlines the various cost-sharing structures for outpatient care. In summary:

- In tertiary hospitals, patients have to pay doctors' fees and 60% of the total treatment amount exclusive of doctors' fees. If they are exempt from mandatory prescription, they have to pay doctors' fees, 60% of the total

[20] Currently, the government is planning to reduce cost sharing for severe illnesses and to increase it for less serious ones (see Chapter 7).

[21] See Chapter 7 for a more detailed account of the reform that enforced the compulsory separation of prescribing and dispensing functions between physicians and pharmacists.

treatment amount exclusive of drug expenses and doctors' fees, and 30% of drug expenses. This rule is applied nationwide.

- In general hospitals in urban areas, patients have to pay 50% of the total treatment amount. If they are exempt from mandatory prescription, they have to pay 50% of the total treatment amount exclusive of drug expenses and 30% of drug expenses.
- In general hospitals in rural areas, patients have to pay 45% of the total treatment amount. If they are exempt from mandatory prescription, they have to pay 45% of the total treatment amount exclusive of drug expenses and 30% of drug expenses.
- In dental hospitals and oriental medicine hospitals in urban areas, patients have to pay 40% of the total treatment amount. If they are exempt from mandatory prescription, they have to pay 40% of the total treatment amount excluding drug expenses and 30% of drug expenses. In such hospitals in rural areas, patients have to pay 35% of the total treatment amount. If they are free from mandatory prescription, they have to pay 35% of the total treatment amount excluding drug expenses and 30% of drug expenses.
- In clinics (dental, oriental medicine and hospital health centres) and health centres (health subcentre, primary health care posts), patients have to pay 30% of the total treatment amount. This rule is applied nationwide.

The cost-sharing ceiling, which is broadly similar to an OOP maximum, was introduced in July 2004 as a health insurance safety net. Until 2006, once a patient's OOP expenditure exceeded 3 million won within 6 months, the rest of his or her treatment was free. In 2007, the cost-sharing limit was set at 2 million won within a six month period, after which further payments were exempted. From January 2009 the cost-sharing ceiling was fixed at 2, 3 or 4 million won, depending on beneficiaries' size of contributions. The measure aims to alleviate the financial burden on households against catastrophic or high-cost diseases and to help prevent them from falling into bankruptcy. This cost-sharing ceiling applies to inpatient and outpatient care, as well as to pharmaceutical services. As a result, in 2007 about 110 000 patients with serious illnesses were exempted from further co-payments at an amount of 125 000 million won.

In total, the cost sharing and direct OOP ratio in 2006 was about 35.7% of total health care costs. Therefore, NHI coverage is approximately 64.3% (Kim J et al., 2009). There are some VHI policies that reimburse cost sharing under the NHI system. The proportion of the population purchasing this type of VHI is not known. There are distributional implications to this form of VHI, as the cost-sharing rate is very high and imposes heavy financial burdens on patients with low incomes. Vulnerable groups cannot afford to buy this type of VHI and they cannot take advantage of risk-pooling through VHI. Thus, these groups

Table 3.11 Out-of-pocket payments for outpatient services according to type of medical institution and location

Institution	Location	Patient status	Cost sharing (co-insurance)
Tertiary hospital	Nationwide	Normal patients	DF[b] + (TA[c] – DF) × 0.6
		Prescription-exempt patients[a]	DF + (TA – DF – DE[d]) × 0.6 + DE × 0.3
General hospital	Urban	Normal patients	TA × 0.5
		Prescription-exempt patients	(TA – DE) × 0.5 + DE × 0.3
	Rural	Normal patients	TA × 0.45
		Prescription-exempt patients	(TA – DE) × 0.45 + DE × 0.3
Hospital, dental hospital, oriental medicine hospital	Urban	Normal patients	TA × 0.4
		Prescription-exempt patients	(TA – DE) × 0.4 + DE × 0.3
	Rural	Normal patients	TA × 0.35
		Prescription-exempt patients	(TA – DE) × 0.35 + DE × 0.3
Clinic, dental clinic, oriental medicine clinic, hospital health centre	Nationwide	All patients	TA × 0.3
Health centre, health subcentre, primary health care post	Nationwide	All patients	TA × 0.3

Source: Decree of National Health Insurance Act.

Notes: [a]Patients who are exempted from obtaining a mandatory prescription for medicine from a physician and having it dispensed in a pharmacy; [b]DF: Doctors' fees; [c]TA: Treatment amount; [d]DE: Drug expenses.

have to find the funds for cost sharing or think very carefully about accessing health care services. Protection mechanisms apply to people with chronic illnesses and to people who need specific medical devices. In these cases, cost sharing is low.

Informal payments

Informal payments may exist in health care services, but their size compared to official payments is not known and very difficult to ascertain. It may be very little, as coverage by the official health system is comprehensive. Also, informal

payments to either jump the queue or to obtain good quality care, which is common in several countries, does not exist at all in South Korea.

3.3.4 Parallel health system

There are no parallel health systems in South Korea, as civil servants and also public and private school teachers are insured through the NHI scheme and participate in the same medical system as the general population. In the case of military personnel, the Ministry of National Defense provides soldiers with medical care provided in medical institutions contracted to the NHIC; the Ministry then transfers payment for the cost of the health care provided to the NHIC. This same procedure applies to prisoners in custody: the Ministry of Justice transfers payment to the NHIC for the health care services used by inmates.

3.3.5 External sources of funding

The South Korean government receives no financial assistance for the health sector from other governments or international agencies.

3.3.6 Other sources of financing

As mentioned in Section 3.3.4, the Ministry of Justice reimburses the NHI system for health services utilized by prisoners in custody. Likewise, the Ministry of National Defense pays the NHIC for the costs of health services used by military personnel. For refugees and the homeless, MRP is financed by local authorities, voluntary organizations and charitable institutions. Institutions providing mental health and social services also supply their clients with medical care services.

Voluntary and charitable financing
Voluntary and charitable funds are used by MRP, which provides refugees, foreign workers or the homeless with emergency medical care via private or public sources. This programme includes people who are not covered either by the NHI scheme or by MAP, especially in emergencies. The exact percentage of such funds in relation to total health care funding is not known.

Mental health financing
People with mental illness are insured by NHI if they can afford to pay contributions. They can be also covered by MAP if their income is insufficient

to pay NHI contributions. Where NHI services are used, mental health service users must pay the same co-payments or co-insurance levels as other users of the health care system.

Besides these programmes, there are community-based mental health services that do not impose any charges. However, NGOs, donor organizations and religious organizations do not contribute significantly to the funding of mental health care services. They establish and run facilities for mental health care by means of subsidies from the central and regional governments.

Long-term care financing

Before July 2008, long-term care (home care and community care) was excluded from the health care system and was provided as a social welfare programme. Such services were financed by the central and regional governments, local authorities and welfare institutions. The state subsidized the welfare institutions that provided such services. Since national insurance for long-term care was introduced in July 2008 (see Chapter 7), voluntary and charitable funds no longer play an important role in long-term care (Jang, 2008). Under the new system, there is no regional variation in approach to funding long-term care. Users of long-term care services have to pay 15% of home care services and 20% of residential care services through cost sharing. Beneficiaries of MAP are exempt from cost sharing, and people on low incomes pay only 50%.

3.4 Pooling of funds

3.4.1 Pooling of funds and allocation

The NHIC's major functions include managing beneficiary eligibility, implementing and collecting contributions, providing preventive services to improve the health of beneficiaries, arranging health insurance benefits, reimbursing the health care services it covers, operating health care facilities for beneficiaries and carrying out research activities on health insurance affairs. The market structure is a single payer system and the NHIC is the single purchaser of services included in the benefit package from providers. There is no allocation among pools/purchasers as the NHI system is integrated into one organization.

Moreover, the revenue collection and pooling functions are integrated; the NHIC not only collects funds but also pools them. The NHIC collects contributions (payroll taxes) itself. Currently, it is separated from other agencies that collect contributions for pensions and unemployment insurance but, as

mentioned above, from January 2011 the NHIC will collect all social insurance contributions as the collection agencies integrate into the NHIC.

Resources are not collected or pooled at the local level, but managed by the NHIC at the central level. Since there is only one health insurance fund, patients have no choice of insurance funds and there is no risk-adjustment scheme in place.

3.4.2 Mechanisms for allocating funds among pooling/ purchasing agencies

There are no other government agencies to pool funds for health care and no geographically distributed pools in South Korea. The government manages all health care funds. There is no global budget for overall spending. The health care budget is decided at the national level by the HIPDC, whose chairman is the Deputy Minister of the MIHWFA. Budgets are not allocated to geographical regions and (re)allocated between funds. There is no risk adjustment and budgets are not set for different sectors within the health care system. Furthermore, there are no fixed budgets for different sectors. Instead, the NHIC discloses the expenditure on each sector of the health care system to the public at the end of each year.

There are no devolved purchasers, as the NHIC enjoys a monopsonic position in purchasing medical services on behalf of the population covered by the NHI scheme.

3.5 Purchasing and purchaser–provider relations

Medical services are supplied mainly by private providers. About 90% of doctors were working in the private sector in 1997. Private hospitals and clinics own the large majority of beds, and about 90% of all medical institutions are private. While for-profit enterprises are by law prohibited from practising in the medical sector, in practice, hospitals are known to be profit-oriented and their practices do not differ from for-profit organizations. Most private hospitals rely exclusively on NHI reimbursement and OOP payments, and they do not receive government subsidies or other financial support for their operations. The number of public hospitals has decreased over time through privatization. However, in 2000, the NHIC opened a general hospital with 744 beds in Ilsan near Seoul.

Under the National Health Insurance Act, all health care services, such as clinics, hospitals and pharmacies, whether public or private, are mandatory

NHI providers and thus there is no opting out of the NHI scheme. In addition, health service providers do not have the right to refuse care to patients if they follow the normal pathways to obtain necessary treatment.

The so-called 'compulsory provider rule' dates back to the foundation of the NHI scheme. At its inception, policy-makers had to consider enforcing compulsory provider contracts, given that a large majority of medical services and facilities were in private hands. Public providers made up only about 10% of total hospital beds, which was low compared to, for example, most European countries, where the opposite situation is often found. In these circumstances, it was thought that allowing providers a choice of whether or not to contract with the NHI scheme would definitely limit access to medical institutions, especially in cases where private providers could refuse to enter into contracts. It was not surprising that providers opposed compulsory contracting and finally appealed to the Constitutional Court. However, the appeal was rejected, with the Court's ruling supporting the Ministry of Health and Welfare's (MOHW's) position that a regulatory measure enforcing compulsory provision is not unconstitutional, as it aims to improve accessibility to medical facilities and to prevent collusion between providers (Constitutional Adjudication No. 2000–505, 31 December 2002).

The debate over the compulsory provider rule has continued over the past decade. The private sector, led by private hospitals and VHI companies, which have maintained strong opposition to the rule, has lobbied hard to have the system changed. However, even though this issue will persist on the health policy agenda, it is not likely that any change will be legislated in the near future.

There are two types of contract between providers of health care services and the NHIC as a purchaser. The first type is individual contracts to treat NHI insurees. Only providers who contract with the NHIC may treat the insured and be paid by the NHIC. The other type is group contracts for the value of health care service fees. Providers are paid on a fee-for-service (FFS) basis. The NHIC and provider representatives negotiate a unit price per point of the relative value points[22] of each medical procedure and the contracts for it. Contract terms are for one year and are renewed annually. Contracts are negotiated three months before their expiry date.

The same contract rules apply to both public and private providers. There is no competition among providers for contracts from the purchaser (NHIC) as

[22] A relative value point (unit) refers to a numerical value assigned in the resource-based relative value scale to each procedure code used to bill for services provided by a health care provider. The relative value unit assigned to a particular code expresses the relative effort and expense expended by a provider in providing one service as compared with another service.

almost every provider is eventually required to contract to provide treatment to NHI insurees and, by law, they may not reject the NHIC's proposal.

The NHIC has different contracts for the value of service fees with each association of providers. Nevertheless, the NHIC, as the insurer, cannot control the expansion of health costs through these contracts because it cannot control the volume of services. Supplier-induced demand is controlled and checked by HIRA, which evaluates the reasonableness of health care benefits. Therefore, HIRA's function could contribute to the financial stability of the NHI system. As yet, there has not been a case where competition authorities have intervened. There is no provision for block contracts with other countries for cross-border health care provision.

3.6 Payment mechanisms

The payment system combines retrospective and prospective methods: in general, providers of health care services are paid on the basis of FFS, and the monetary values of service fees are set for the next year.

3.6.1 Paying for health services

Public health services are provided by the central and regional governments and local authorities. The facilities of public health services are financed by the state, and health care personnel, in general, are civil servants and receive salaries. Therefore, no special payment system for providers is required.

The costs of primary and ambulatory health care are reimbursed through FFS for all services and referral levels. The NHIC pays providers for the share of medical costs not borne directly by the patient, on the basis of a fee schedule. The fee schedule includes fees for all medical services and materials, including drugs. The fees incorporate not only the cost for the treatment and the materials but also remuneration of providers for the service they provide. Additional reimbursements exist for each given service if provided at higher level facilities: these are 20% for hospitals, 25% for general hospitals and 30% for tertiary hospitals.

The fee schedule is negotiated annually directly between providers and the NHIC. However, this negotiation is only a recent development (Kim J and No, 2007). Before 2001, fees were set unilaterally by the MIHWFA, after consultation with MOSF.

Costs for some categories of inpatient care are paid on the basis of a price per case, or diagnosis-related group (DRG) – a payment system that was introduced as a pilot project in 2002 (Kam, 2008). The DRG system for seven diagnostic groups was introduced to pay hospitals only for inpatient care services. Currently, about 2000 medical institutions participate in the DRG payment system on a voluntary basis.

The fee schedule includes a positive drug list. For the cost of drugs and medical equipment, the MIHWFA sets the upper limit for their reimbursement. Previously, the cost of pharmaceutical care was paid by the NHIC on the basis of the prices of medicines reported by pharmaceutical producers. In 1999, a new reimbursement system was introduced whereby the NHIC reimburses the actual prices of medicines paid by health care providers to the pharmaceutical producer.[23] This change aimed to promote price competition between drug producers and to reduce any profiteering. At the same time, the government cut the prices of all pharmaceutical products by 30.7%. In 2002, a new incentive was introduced. The drugs list sets the prices at which the medicines dispensed by pharmacists are reimbursed, which may be different from the wholesale price decided by the manufacturer (see Chapter 6).

The costs for rehabilitation, long-term care, palliative care, mental health care and dental care are paid on the basis of FFSs in the case of ambulatory services. Health care services for prisoners and military personnel are provided by the state, which finances such services by means of public financial sources. Therefore, these patients are not required to pay for the services used and there is no payment system. No specific services are outsourced.

Currently, there are no changes in the methods used to pay providers. However, it has long been discussed in South Korea whether to introduce global budgets as a payment system. Some experts believe that reaching an agreement on payment methods will not be an easy task and it is not expected to happen in the near future.

The payment system does not have incentives to deliver emergency services and difficult operations. There are no arrangements in place to reimburse providers to treat foreigners or citizens who seek health care abroad.

3.6.2 Paying health care personnel

Health care personnel are paid in two ways: one group is paid on the basis of FFS and the other is paid on a salary basis. Health care personnel working in primary, ambulatory and community care are paid on the basis of FFS, which

[23] This method takes into account any discounts the pharmaceutical producer may have given to the provider.

also applies to doctors, community pharmacists, dentists, complementary and alternative medicine (CAM) practitioners and physiotherapists. Some health care personnel may also generate income through extra billing for services not covered by the NHI. The other group of health care personnel in hospitals and public institutions are paid a salary, which also applies to doctors, nurses, pharmacists, dentists, managerial staff, social workers or care workers.

Doctors working in hospitals are salaried employees whose pay is above the mean income of all other employees, but is still likely to be lower than the average income of clinic-based doctors in independent practices. The revenues of independent doctors and those working in hospitals have different sources. First, providers earn the fees reimbursed by NHI for the provision of insured services. Providers complain that they do not receive adequate compensation from the NHIC, both because of historically low levels of NHI fees and because the rate of increase of fees fell behind general price increases until the mid-1990s. Second, providers receive direct OOP payments from patients. Fees for uninsured services are mostly unregulated and market prices can vary greatly by facility. In general, public hospitals and health centres provide uninsured services at lower market prices than private institutions, which is why public hospitals treat a higher share of poor and MAP patients. Third, there are reports of certain facilities levying special treatment charges, although no estimates are available about their frequency or amount. The average income of health care professionals is higher than that of other equivalent professionals.

4 Regulation and planning

4.1 Regulation

Well-judged regulation in the provision of health care services is a critical element for the efficient delivery of quality health care, but it may not always be fully achieved. In areas where regulatory measures are not strong enough, valuable resources may be inappropriately utilized. As mentioned in Chapter 2, the central government plays the pivotal role in South Korea's health care policy and provision, with auxiliary roles for local government. MIHWFA has overall supervisory responsibility for the health insurance system. In broad terms, the Ministry provides overall leadership or stewardship and uses various regulatory mechanisms as specified by the National Health Insurance Act. The role of MIHWFA and other ministries is outlined in more detail in Chapter 2 (see Section 2.3). Therefore, this section looks at other bodies involved in regulatory functions within the health care system.

Table 4.1 summarizes the various regulatory functions undertaken by different government departments and agencies and sets them within a framework that describes whether these functions are centralized or decentralized. A more detailed discussion of the major regulatory functions will follow in the sections below.

MOSF exercises some regulatory capacities in the health sector through the provision of subsidies to the health care budget and through its role in overseeing private health insurance policy. These two areas are not inconsiderable, and therefore MOSF's regulatory scope should not be underestimated. In addition, the MOSF can recommend a director for board membership of the single insurer, the NHIC, to monitor finances and other accounting matters.

Table 4.1 Decentralization of functions and examples of health care regulation

Function	Type of decentralization[a]	Regulatory institution	Examples of health care regulations
Standard setting	No decentralization; function centralized	MIHWFA	Sets benefit tariffs Sets benefit provision standards
	Delegation	NHIC	Decisions on contribution rates Fee schedule contracts with providers
		HIRA	Health technology assessment Claims reviews
		Financial Supervisory Service	Regulates life and non-life insurance
Monitoring	Delegation	NHIC, HIRA	Quality of care Utilization reviews Safety of drug interactions
		Red Cross	Safety of blood supply
Enforcement	Privatization	Korean Hospital Association, Korean Medical Association	Self-regulation of providers Job training
	Deconcentration	Korean Food and Drug Administration	Approval of drug/ medical equipment market authorization
	Delegation	NHIC, HIRA	Investigation of fraud and abuse
	Devolution	Local governments	Public ownership of medical facilities in rural areas

Notes: HIRA: Health Insurance Review and Assessment Service; MIHWFA: Ministry for Health, Welfare and Family Affairs; NHIC: National Health Insurance Corporation.

[a]Decentralization can take various forms, such as:

- deconcentration: passing some administrative authority from central government offices to the local offices of central government;
- devolution: passing responsibility and some independence to regional or local government, with or without financial responsibility;
- delegation: passing responsibilities to local offices or organizations outside the structure of central government (e.g. quasi-public bodies) but with central government retaining indirect control; and
- privatization: transferring ownership and government functions from public to private bodies.

See the Appendices in *Health System in Transition Template*, http://www.euro.who.int/Document/E88699.pdf.

The National Assembly also plays an important, albeit indirect role in health care, despite the fact that South Korea's strong presidential system sometimes seems to limit the powers of parliament. In fact, the National Assembly can exert its influence through the passage and revision of legislation that includes regulatory powers. In particular, the Assembly's Health, Welfare and Family Affairs Committee has a strong presence in health care policy, equal to that of other bodies more directly involved in regulation.

Local governments are responsible for administering MAP and public health. As mentioned in Chapter 2, MAP is the health care programme for the worse off and those not covered by the NHI scheme. Beneficiaries of this programme make up approximately 3–4% of the total population, and must meet criteria set annually to qualify. The Public Health programme, covering health promotion and prevention activities, is provided directly by local governments.

There are national health plans for the improvement of the health status of some target groups and for the provision of health services. A health services plan was issued in 2005 with the aim of reinforcing the expansion of the health benefit package to cover severe and chronic diseases. Under this plan, patients suffering from severe diseases, including cancers and leukaemia, pay half the level of co-payments levied on non-severe diseases. Therefore, these patients can pay 10% of their total medical costs in the case of inpatient treatment, compared to 20% for other patients. Moreover, an infant and child health improvement plan was developed in November 2007. It targets young children under five years old and covers immunizations, health check-ups, dental check-ups and eyesight tests. Under this programme, all children receive preventive services free of charge. Similar health plans are sometimes issued by MIHWFA – for example, when the NHIC posts a financial surplus. In June 2009, MIHWFA announced a health care plan targeting groups that may need previously unlisted items in the NHI benefit package, like dentures and ultrasonography, which will be covered from 2012 and 2013, respectively (MIHWFA, 2009a). The Health Plan for 2002–2010[24] is one of the national health plans aimed at the improvement of the entire population's health. Its strategic objectives consist of four programmes: (a) Healthy Life; (b) Prevention-first Health and Disease Management; (c) Health Management for Population Groups; and (d) Healthy Environment programme. The Plan emphasizes the partnerships between public bodies and private individuals to bring about productive outcomes.

[24] This National Health Plan is based on Art. 4 of the National Health Promotion Act.

4.1.1 Regulation and governance of third-party payers

Organization

In South Korea, a single health insurance organization, the NHIC, is responsible for purchasing health services for the population. The single third-party payer system was the result of health insurance reform in 2000, when more than 370 funds were transformed into a single-fund (see Chapter 2). The NHIC is a quasi-public organization that undertakes its function in the public domain, and therefore its governance and management arrangements are regulated by the National Health Insurance Act. From a legal perspective, the NHIC is closer to a public body, not a private not-for-profit or a private for-profit organization.

In parallel, the VHI market is very competitive. All VHI companies are for-profit commercial enterprises. To some extent, the private health insurance sector competes against the NHI scheme to maintain its share of the health insurance market. In particular, services that are not currently covered by the public insurance scheme provide areas of strong competition between the public and private health insurance sectors. This is because the NHI scheme continuously strives to expand the benefit package by chipping away at service exclusion areas, while private health insurance companies try to maintain the proportion of services not covered by the national benefit package (see Chapter 3). As this is a policy concern, the government and academics are trying to achieve consensus on how to split the pie between the two health insurance sectors. Arriving at a mutually acceptable solution will not be easy, but, so far, some civic groups and health economists support the idea that VHI should target only those services excluded by NHI. Amid the strong competition, the size of private health insurance is relatively robust, with total premiums equaling approximately 40% of the total contributions paid into the NHI fund. The number of VHI policy holders is sizeable, with about 63.7% of the population having at least two or more private health insurance policies (Korea Development Institute, 2007).

Purchaser funding

The purchasing organization, the NHIC, receives most of its budget from direct contributions from the insured. The contribution for self-employed people is calculated on the basis of household income, property and automobiles, plus the age and economic activity (if any) of each household member (see Chapter 3). In addition, the government provides a subsidy to the NHIC to fund the health care expenditure of the self-employed. The size of this subsidy is not fixed, but varies from year to year depending on budget priorities, and, on average, is quite large, normally around 20–30% of total health care expenditure. In contrast, the contribution for employees is based only on their salaries and no other assets. Currently, the rate is 5.08% of gross income, with employers and employees

each paying 50% of the contribution. Given that NHI is a single-payer scheme, there is no need to have a formal risk-pooling mechanism between purchasers. The contribution structure operates on the 'ability to pay' principle, with the richer paying higher contributions and the poorer paying less. However, as mentioned in Chapter 3, the contribution system is not progressive, but rather proportional. The NHI scheme's operational costs and capital acquisitions are funded from general taxation revenues and not contributions.

The government's regulatory role in relation to the main purchaser, the NHIC, is somewhat indirect, as negotiations on the fee schedule take place annually between the provider associations and the NHIC. Given this context of direct purchaser–insurer relations, in theory, the government does not have much opportunity to regulate these activities. Instead, the government uses indirect leverage to influence purchasing (fee schedule) negotiations. For example, if MIHWFA releases general guidelines for purchasing negotiations and decides to expand the benefit package, negotiators from both sides should consider these factors during their purchasing deliberations. However, the government's role becomes a direct one when purchasing negotiations between provider groups and the NHIC fail to reach agreement on the fee schedule by 15 November each year. In this case, the purchasing negotiations are transferred to MIHWFA's HIPDC, which consists of 25 members representing various stakeholders, such as providers, labour unions, business representatives, patient and civic group and government officials (Art. 4 of the National Health Insurance Act). MIHWFA determines the unit price (cost) per value point through a resolution of the HIPDC.

Private health insurers have no such formal obligation to the national government, and are accountable to their management boards and shareholders for monitoring costs and the volume of services they purchase on behalf of their insurees. In practice, private insurers do not directly purchase health care services from providers; they reimburse policy holders for services received either through fixed amounts or by covering a proportion of co-payments, depending on the type of policy. In any case, by law, private health insurance companies are not able to contract with providers to directly supply patients with in-kind benefits.

There are no regulatory arrangements in place to tackle cross-border health care purchasing. Although foreign residents legally living in South Korea are entitled to health care benefits, legislation specifically prohibits the reimbursement of treatment obtained in other countries. Therefore, patients travelling abroad to receive treatment have to pay for it themselves or have the cost of care reimbursed by private health insurance.

4.1.2 Regulation and governance of providers

Organization

Health care services are provided by hospitals and primary care institutions (see Chapter 6). Ownership of providers is predominantly private not-for-profit, and less than 10% of beds are provided by public facilities such as national university hospitals and local government hospitals. As privately owned hospitals are more prevalent, and despite their formal not-for-profit status, there is a tendency for providers to manage their organizations to maximize revenues. Competition between providers to attract patients to their facilities is very strong. For example, tertiary hospitals, which traditionally tend to focus on the treatment of inpatients, are expanding their facilities to include outpatient departments. Likewise, clinics that usually treat outpatients compete with large university hospitals and, consequently, these hospitals purchase expensive state-of-the-art technologies to gain a competitive advantage. It has been noted that the predominance of private providers in South Korea ultimately leads to the inefficient use of health care resources. For example, the amount of MRI and CT equipment in the country is one of the highest in the world (OECD, 2009) (see also Chapter 5).

More worryingly, in the1990s, a few hospitals managed by local governments began to contract out their services to the private sector. The new owners changed the management style of these facilities in line with profit-seeking models, thus reducing staff numbers and adopting market-oriented management to maximize profits and reduce expenditure. These strategies significantly changed the hospitals and their activities (Kam, 2004). For example, hospitals tended to shift their focus to more profitable departments (e.g. from heart surgery to cosmetic surgery). In contrast, attempts to transform private not-for-profit hospitals into government-owned public ones failed due to resistance from the private owners and a lack of adequate funds to purchase these facilities.[25]

The government can steer policies that impact on providers somewhat indirectly through its membership of the HIPDC, particularly with regard to decisions on the benefit package and the fee schedule, which decisively determine the size of revenues that such providers can derive from the insurer, the NHIC (Art. 4 of the National Health Insurance Act). A major regulatory function is the government's role in undertaking on-the-spot investigations and audits when fraudulent payment claims are suspected. Fines may be imposed or illegally obtained payments may be withdrawn if inspections uncover abuses.

[25] Since the 1990s, the government has tried to curtail the impact of private hospitals by building new public ones.

Under the Medical Act, health care facilities need to be registered by local governments. Criteria on the number of doctors, medical departments and inpatient rooms vary depending on the type of facility (MOHW, 2007b). Steep penalties exist for infringements; for example, doctors who treat patients without registering their practice can be punished with up to five years' imprisonment or fined up to US$ 20 000 (20 million won) (Art. 87).

Medical equipment is also required to be licensed and registered in line with the Guideline on Installation and Operation Standards issued by MIHWFA (see Chapter 5). In addition, the Medical Act outlines safety regulations, including safeguards against radiation, fire, and environmental and occupational hazards.

Quality

Voluntary external quality assessment of medical facilities in general is not yet actively pursued and is at the initial stages of development. It is expected that patient groups' interest in quality issues, as well as campaigns by newspapers and civil groups, will promote the expansion of these voluntary assessment activities in the future.

In contrast, the compulsory evaluation of hospitals with more than 300 beds is undertaken every three years in order to ensure and monitor their quality of care. Other hospitals with less than 300 beds also can be targeted for evaluation if they request it. In general, evaluations include structural, process and outcome indicators, with the results being reported to the public. Therefore, newspapers as well as patients can access 'league tables' outlining each hospital's quality of care results (Art. 58 of the Medical Act; and Art. 28 of the Medical Act Decree).

The Blood Supply Management Act (1970) contains general guidelines on the safety of the blood supply. Despite the Act, there have been some problems; for instance, the accidental spread of HIV/AIDS due to a lack of proper procedures has occasionally been reported, although the number of cases detected has been very low. As a result, academics have proposed more stringent management methods, including the establishment of a blood supply management committee, which would secure the participation of civil groups.

To improve the quality of training of health care professionals in accordance with the Medical Act, continuing professional development (CPD) is required of all professionals – physicians, dentists, oriental medicine doctors, midwives and nurses. Each health professional must undertake eight hours of relevant training each year, which is provided by their respective professional associations. There are no incentives to undertake more onerous professional

development programmes; therefore the mandatory eight hours of training is the minimum requirement for all health personnel. The training requirements are the same for all medical staff whether they practise in private not-for-profit or public institutions.

4.1.3 Regulation and governance of the purchasing process

For the fee schedule contracts, NHIC negotiators prepare a strategy some time in advance, collecting and analysing data on medical production costs, the volume of services, and so on. Negotiators from both sides sometimes work together to reduce knowledge gaps and to settle disagreements during the actual negotiations. As the country's major purchasing organization, the NHIC is accountable to MIHWFA and to the public. Therefore, the NHIC takes several measures to contain total health care expenditure, including the prevention of fraud and abuse, and monitoring the volume and quality of services.

According to Art. 42 of the National Health Insurance Act, the process of concluding a purchasing contract should start with negotiations between the NHIC (as third-party payer) and provider associations (representing providers), and states that the "costs of health care benefits shall be determined by contract between the president of the NHIC and persons representing medical providers. The term of the contract shall be one year." The purchasing agreement contracts are concluded between the NHIC and each provider group separately – representing different types of health care provision, such as hospitals, physicians, dentists, oriental medicine practitioners, nurses, midwives and pharmaceutical associations. The aim of each contract is to negotiate the unit price[26] per 'relative value point'. The relative value point[27] is calculated by reflecting the volume of work, such as the time and effort used in treating patients, the volume of resources such as personnel, facilities and equipment, and the degree of risks involved in treating illness. The unit price per point agreed between the purchaser organization (the NHIC) and provider organizations then apply equally to both public and private providers.

4.1.4 Regulating quality of care

Along with the regular evaluation of provider institutions, there are some further measures to ensure the quality of care. The HIRA reviews claims data to look at the appropriateness of treatments through submitted claims. NHIC and HIRA also conduct surveys in various fields of care to improve quality. For example,

[26] Here, the 'unit price' means the monetary value of each service provided by physicians.

[27] See Chapter 3 for a more detailed definition of the relative value point.

in the past, data was publicly released on the number of Caesarean sections performed and on the antibiotics usage rates of different institutions. To reduce the rate of Caesarean sections and to improve the quality of care, the fee schedule was then adjusted to favour vaginal deliveries. Checks on facilities and their technology stocks (equipment) are also conducted by the two organizations. HIRA and NHIC regularly test the appropriateness of equipment and other technology used in the diagnosis and treatment of diseases. Through this kind of monitoring, obsolete equipment is taken out of service.

Incentives for customer-oriented providers are available. Providers who treat patients in the evenings and at weekends are entitled to claim higher fees than the fees charged during regular working hours. Other measures to improve the quality of care have been implemented or are under discussion. For instance, an infection prevention programme is now operating to enhance patient safety within medical institutions (see Chapter 2); the evaluation of medical institutions' performance plays a large part in quality regulation; and the development of electronic health records (EHRs) contributes to an improvement in the quality of care by reducing medical errors and by exchanging exact data between medical practices. Finally, clinical guidelines on diseases and medical devices are currently under discussion by several expert bodies.

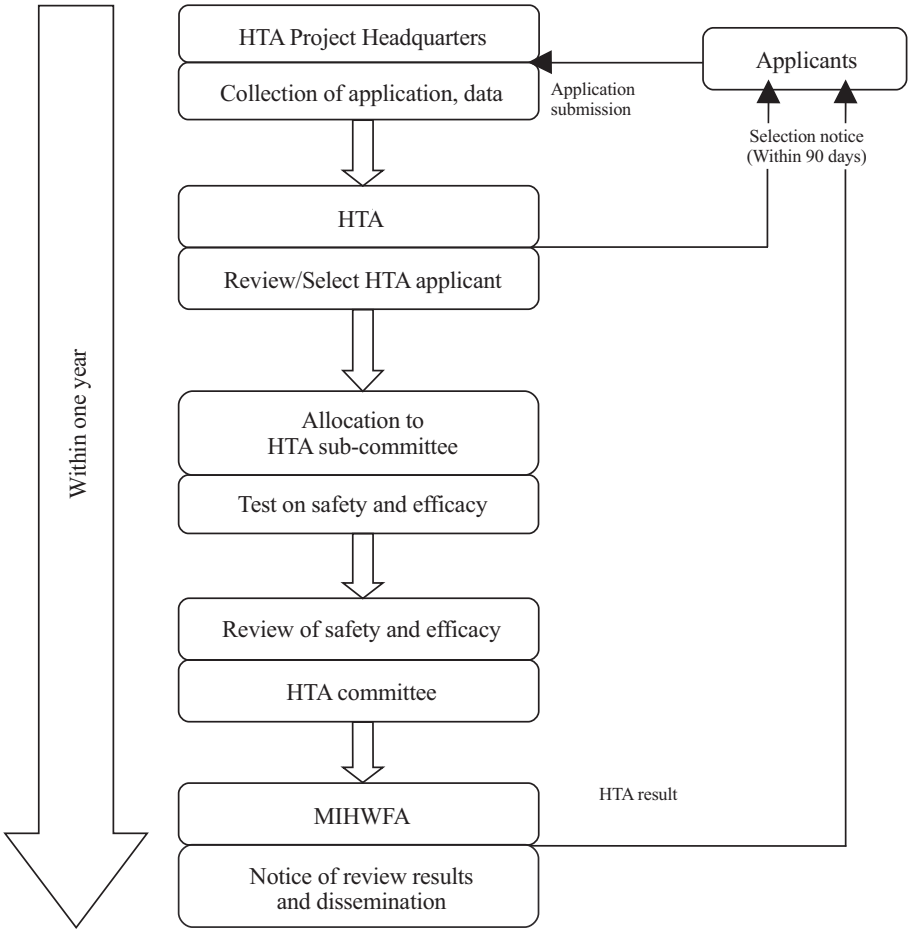
4.2 Planning and information system

4.2.1 Health technology assessment

Art. 54 of the Medical Act places the HTA Committee under MIHWFA. The committee consists of 20 members, including the chairperson. However, the actual HTA work is delegated to HIRA, which undertakes economic evaluations of medical devices, procedures, pharmaceuticals and the appropriateness of health care services provided. In theory, HTA is critically important, as new technologies should pass an HTA assessment before they can be added to the benefit package.

A fledgling HTA organization was set up in 2003 under the auspices of MIHWFA. However, it took several years of discussions before the government established the HTA Project Headquarters (HTAPH) within the Ministry in December 2007. Under the HTAPH, there are about 30 experts working as permanent staff and many specialists (from HIRA) contributing as non-permanent committee members. Stakeholders, including pharmaceutical companies and physicians, take part in five special HTA committees. The HTA assessment procedure is summarized in Fig. 4.1 below.

Fig. 4.1 HTA procedure



Source: http://www.hira.or.kr.

Notes: HTA: Health technology assessment; MIHWFA: Ministry for Health, Welfare and Family Affairs.

The HTA methodology relies mainly on the systematic meta-analysis of existing information. Economic evaluations, such as cost–effectiveness and cost–benefit analyses, are usually undertaken as part of the evaluations. These economic evaluations can provide the standard to decide whether the new device, drug or medical intervention is appropriate for inclusion in the benefit package.[28] Throughout the economic evaluation process, guidelines on safety,

[28] Branded drugs imported from other countries and which have proven cost–effectiveness documentation can be listed in the benefits package without a HTA.

efficacy and cost–effectiveness are also important components. Findings are disseminated through 'notices' issued by MIHWFA. These carry much weight and authority and are rather close to regulations in their effect.

The number of evaluations undertaken in the last five years is relatively low, but this is due to the short period of time that HTA has been employed in the health care sector. The majority of evaluations have focused on pharmaceuticals and medical devices, and the HTA findings are linked to the policy-making process in that they influence the pricing of drugs and medical devices, the formulary listing and what is included in the benefit package.

As Thomson, Foubister and Mossialos (2009) have noted, HTA has become one part of the 'permanent state of the health care system'. HTA in health care continues to emerge as an important area. The government has established a new independent research centre to focus on HTA: the National Evidence-based Healthcare Collaborating Agency, opened in May 2009, will conduct HTA for pharmaceuticals and other new health care technologies, including all medical devices and procedures (http://www.neca.or.kr). The results and materials produced by this research centre will be used as reference points to inform policy decisions.[29]

4.2.2 Information systems

From a theoretical perspective, collecting information for the purposes of management and delivery of health care services (such as patient satisfaction and quality surveys) is not difficult under the NHI scheme. Therefore, it would not be necessary to establish an independent organization to collect data and information on the insured. The NHIC collects, analyses and reports data on activity, services and quality. Both the NHIC and HIRA have the capacity to collect data in an ad hoc manner, as these institutions have to deal with a wide variety of health data and information in the process of reviewing and paying the health care service claims submitted by providers. Claims data based on FFS payments, and collected from all public and private providers, are used, for example, to conduct medical utilization and quality of care reviews. There is no systematic programme of data collection, but rather the data is acquired based on the day-to-day activities of the two agencies.

Some specific data are collected separately by special organizations. For instance, data on communicable diseases are collected by the Korean Centres for Disease Control and Prevention (KCDC), which are responsible for the monitoring and surveillance of the outbreak of communicable diseases and

[29] See http://www.asiaeconomy.co.kr (accessed October 2008).

other health risk factors. The National Cancer Centre collects all cancer-related data and information. These centres collect data themselves and, in some cases, the NHIC can also provide them with information on specific diseases (in an unidentifiable information and aggregated format only) upon request.

The Personal Data Protection Act strictly regulates the use and dissemination of personal data. As health data is key personal information, access to and sharing of this data is strictly managed, even among the professionals working in the NHI sector. This is particularly important, as a wide range of data is held by the NHIC, including a person's income, property (used to calculate their health insurance contribution), as well as all of his or her individual health data. In addition to the NHIC's own regulatory measures for keeping information safe, many civil groups closely monitor the management and security of health data stored by NHIC and HIRA.

4.2.3 Research and development

Up until now, investment in research and development in the health care sector has not been a priority. As a result, only a handful of research programmes have focused on health care with adequate resources, such as full staffing and funding. Four research centres exist at present: the Health Insurance Research Institute at the NHIC, the Health Insurance Review and Assessment Policy Institute at HIRA, the Korean Institute for Health and Social Affairs (KIHASA) and the Korean Health Industry Development Institute (KHIDI). Among these institutes, KIHASA focuses on comprehensive social policy research, including health care. KHIDI mainly focuses on health industry development, which covers such areas as the development of medical tourism and medical equipment. The main research priorities of all these research institutes are financing, the benefit package, review and assessment, and the long-term care insurance programme, with outputs circulated to government officials and academics.

On the other hand, private sector research, including that undertaken by universities, is somewhat active and large-scale compared to the public sector. In particular, scholars in universities have been involved in health insurance research since the establishment of the NHI system. The 'big debate' on health insurance integration in the1980s and 1990s created a great deal of momentum for attracting many scholars to this field of study. Debating the pros and cons of integration allowed academics to focus on social welfare, economics, medicine and even political science and apply these frameworks to the study of health insurance. Moreover, several universities set up research institutes focusing on health insurance topics, producing reports and articles, as well as organizing seminars and conferences. These activities helped to enrich health care research and development in the fields of health insurance and health system analysis.

5 Physical and human resources

5.1 Physical resources

5.1.1 Infrastructure

Planning and distribution of infrastructure

During the late 1970s, health care facilities were in very short supply due to the increased demands caused by the introduction of compulsory social health insurance in 1977. In response, the government supported the private sector through foreign loans and development credits to build new private health care facilities or to expand existing ones. In parallel, public health care facilities were expanded in rural areas where private sector investment rarely occurred. Public facilities also dominated specialized hospitals such as psychiatric hospitals, hospitals for tuberculosis and public health centres for primary health care services.

The impact of private sector-oriented policies was mixed. Even though the number of acute hospital beds expanded considerably, the result was to create an oversupply of these types of bed, while beds and facilities for long-term care suffered from shortages. The unequal distribution of health care facilities between urban and rural areas also emerged as a problem because facilities in urban areas were likely to earn more profit (Lee S, 2005). The growth of private sector health care facilities was boosted further by several factors. In particular, the national policy that regulated the establishment of health care facilities and the number of acute beds during the 1980s was abolished in June 1990. Other measures included: the abolition of the system setting a ceiling on the number of beds by region, the repeal of prior approval from the Minister for Health, Welfare and Family Affairs to create new beds, and the easing of requirements for the establishment of new university hospitals.

In 2005, the government expressed its intention to control the number of acute beds in order to contain rapidly rising health care expenditure. However, neither a strict legal system nor strong political measures have yet been completely put in place to achieve this goal. Although the Medical Act (1951) allows providers who expand and install new and expensive health technology equipment to register their intentions with provincial governors before proceeding, in practice the establishment or expansion of health care facilities is relatively easy for private sector operators if certain requirements are met. For example, owners of facilities can expand the number of hospital beds if they keep the numbers of physicians and rooms required by the Act (Art. 38 of the Medical Act). In effect, there is no real system in place to regulate the number of hospital beds in the country and, consequently, there is currently no means of keeping the rapidly increasing number of beds under control. Moreover, it is especially easy to establish a primary health care clinic, as physicians only need to submit the required documentation to the relevant local government (Art. 33 of the Medical Act).

As a result of achieving universal coverage in 1989 and deregulating the rules for establishing new health care facilities in 1990, the number of health care institutions, as well as the number of beds, has dramatically increased over the past two decades. These increases have been dominated by the private sector. The total number of all types of health care institution in the country increased from 29 773 in 1995 to 52 914 in 2007. In 2007, there were 1536 hospitals,[30] including general hospitals, oriental medicine hospitals and dental hospitals (Table 5.1).

The total number of hospital beds has trebled, from 134 176 in 1990 to 450 119 in 2007 (Table 5.2). In the case of dental hospitals, the number of beds increased from 66 in 1990 to 249 in 2007. The number of beds in oriental medicine hospitals and clinics was 8245 and 455 respectively in 2007, a 5-fold increase for the former and 31.5 times for the latter since 1990 – although these account for only a small percentage of total health care institutions (MOHW, 2006a). More recently, the establishment of new long-term care hospitals has grown sharply due to population ageing and increasing health care utilization by the older population. The number of long-term care hospitals increased to 593 in 2007 from 68 in 2003, while the number of beds increased to 66 727 from 8355 during the same period (MIHWFA, 2008; Oh, 2006). The number of acute care beds has doubled since 1990, amounting to 6.8 beds per 1000 population in 2006, well above the OECD average of 3.9 (OECD, 2009). While the number of health care institutions and beds has risen sharply in the last 20 years due to higher incomes and expanded statutory health insurance coverage, long-term

[30] That is, hospitals with over 30 beds and a specified number of departments.

Table 5.1 Number of health care facilities in the Republic of Korea, 1995–2007

	1995	2000	2001	2002	2003	2004	2005	2006	2007
Total	29 773	38 665	40 276	44 029	45 772	47 378	49 566	51 286	52 914
Medical									
General hospitals[a]	266	285	268	284	283	282	290	295	302
Hospitals[b]	398	581	599	691	730	763	794	850	945
Clinics	14 343	19 472	20 819	23 299	23 502	24 491	25 412	26 078	26 265
Dental									
Hospitals	12	56	60	80	99	107	123	134	151
Clinics	8 292	10 471	10 556	11 120	11 890	11 968	12 520	12 808	13 280
Oriental medicine									
Hospitals	69	136	131	135	151	154	146	142	138
Clinics	5 928	7 276	7 499	8 097	8 734	9 196	9 765	10 294	10 895
Dispensaries	246	185	169	169	150	158	187	172	182
Midwifery clinics	177	120	100	76	71	67	46	39	52
Specialized hospitals									
For tuberculosis	4	3	2	2	4	3	3	3	3
For leprosy	1	1	3	1	2	2	1	1	0
Psychiatric	37	79	70	75	88	95	102	107	107
Long-term care	–	–	–	–	68	92	177	363	593

Source: MIHWFA, 2008.

Notes: [a]General hospitals: with more than 100 beds for inpatients and more than 7 medical departments; [b]Hospitals: with more than 30 beds for inpatients.

Table 5.2 Number of inpatient care beds by type of facility, 1990–2007

	1990	1995	2000	2001	2003	2005	2006	2007
Total	134 176	196 232	287 040	288 952	340 988	379 751	410 581	450 119
General hospitals[a]	66 625	96 865	113 518	108 224	111 801	120 728	124 090	125 840
Hospitals[b]	19 425	33 425	62 874	63 813	78 853	90 467	98 228	112 392
Clinics	33 011	44 610	67 288	76 976	96 338	93 972	95 224	96 292
Dental hospitals	66	81	86	58	168	225	247	249
Dental clinics	–	29	27	33	196	22	7	17
Oriental medicine hospitals	1 276	3 498	8 117	7 774	8 742	8 538	8 379	8 245
Oriental medicines clinics	14	168	319	519	730	672	344	455
Dispensaries	872	577	564	317	281	848	819	660
Midwifery clinics	436	216	166	137	73	153	105	155
Tuberculosis care	2 073	2 243	1 142	826	1 373	1 373	1 373	1 373
Leprosy care	2 600	1 800	2 600	2 817	1 029	1 000	1 000	1 000
Psychiatric care	7 778	12 720	30 339	27 458	33 226	36 252	37 429	36 714
Long-term care	–	–	–	–	8 355	25 501	43 336	66 727

Sources: MOHW, 2007a; MIHWFA, 2008; OECD, 2008.

Notes: All the health care institutions, excluding long-term care hospitals and specialized hospitals, are acute care facilities; [a]General hospitals: with more than 100 beds for inpatients and more than 7 medical departments; [b]Hospitals: with more than 30 beds for inpatients.

care facilities (excluding hospitals for the elderly) have been in short supply due to the bulk of health care resources going to acute care services. With the implementation of the long-term care insurance scheme in July 2008, expansion of long-term care facilities is expected to follow. The number of midwifery clinic beds declined significantly to 155 in 2007 from 436 in 1990 due to women going to hospital maternity wards to deliver their babies.

Over the past 10 years, while the number of inpatient services has greatly increased in proportion to the increase in the number of beds, in 2006 the average length of stay for acute care in hospitals was 10.6 days, well above the OECD average of 6.3 days (OECD, 2009). This high average length of stay in hospitals is due to the lack of beds for long-term care, as acute care beds tend to be used for chronically ill patients. In addition, the increase in the number of beds in hospitals might have given incentives to hospitals to keep patients longer. By type of health care institution, in 1995 the average length of stay was 13.2 days for general hospitals, 12.1 days for other hospitals, 22.5 days for oriental medicine hospitals and 9.7 days for dental hospitals. These figures have declined steadily to 9.1 days, 10.8 days, 16.6 days and 4.5 days, respectively, in 2006 (MOHW, 2007c). In 2003, the occupancy rate of acute care hospitals was 71.6%.

The number of total acute care beds – 6.8 per 1000 population in 2006 – is higher than the OECD average (3.9) and ranks second highest among OECD countries (Japan ranks the highest). In contrast to most OECD countries (excluding Turkey), where the number of acute care beds has continuously declined over the past 15 years, in South Korea this number has steadily increased (Table 5.3).

In 2006, South Korea ranked relatively high among OECD countries in terms of annual medical visits per person (11.8 cases). Compared with the annual average in the 15 OECD countries (6.8 cases), South Koreans utilize considerably more health care services (OECD, 2008).

5.1.2 Capital stock and investments

Current capital stock

Health care institutions are classified into nine types based on the number of beds and clinical departments: (a) general hospitals; (b) hospitals; (c) dental hospitals; (d) oriental medicine hospitals; (e) long-term care hospitals; (f) clinics; (g) dental clinics; (h) oriental medicine clinics; and (i) midwifery clinics. Among the various types of hospital, 'general hospitals' have more than 100 beds and more than 7 medical departments. They are the highest level of hospitals, and include the 43 tertiary hospitals in the country. 'Hospitals' as

Table 5.3 Number of acute hospital beds per 1000 population in the Republic of Korea and other OECD countries, 1990–2006

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Australia	n/a	4.4	4.2	4.3	4.2	4.2	4.1	4.0	3.9	3.8	3.8	3.7	3.6	3.6	n/a	n/a	n/a
Austria	7.8	7.6	7.5	7.3	7.3	7.2	7.1	7.0	6.9	6.7	6.6	6.6	6.6	6.6	6.5	6.1	6.1
Belgium	n/a	n/a	5.4	5.4	5.3	5.3	5.2	5.2	n/a	5.1	5.0	5.0	4.9	4.8	4.8	4.4	4.3
Canada	4.0	4.0	3.8	3.7	n/a	4.2	3.9	3.8	3.7	3.3	3.2	3.2	3.2	3.0	n/a	n/a	n/a
Czech Republic	8.5	8.5	8.3	7.9	7.8	7.2	6.9	6.8	6.7	6.6	6.6	6.5	6.5	6.5	6.4	5.7	5.4
Denmark	4.1	4.0	3.8	3.8	3.7	3.9	3.8	3.7	3.6	3.5	3.5	3.4	3.4	3.3	n/a	n/a	n/a
Finland	4.3	4.8	4.6	4.6	4.5	4.0	3.4	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0	2.9	3.1
France	5.2	5.1	5.0	4.9	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.8	3.7	3.7
Germany	n/a	8.3	8.0	7.7	7.6	7.5	7.3	7.1	7.0	6.9	6.8	6.7	6.6	6.6	6.4	6.4	6.2
Greece	n/a	n/a	n/a	n/a	3.9	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8	n/a	n/a	n/a	n/a
Hungary	7.1	7.1	6.9	n/a	7.7	7.0	6.9	6.3	6.4	6.3	6.3	6.0	5.9	5.9	5.9	5.5	5.5
Iceland	4.3	4.1	4.1	4.0	3.9	3.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ireland	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.1	3.1	3.0	3.0	3.0	3.0	3.0	2.9	2.8	n/a
Italy	6.2	5.8	5.9	5.8	5.7	5.6	5.6	5.2	4.9	4.4	4.2	4.1	3.9	3.7	n/a	3.3	3.3
Japan	n/a	n/a	n/a	12.3	12.2	12.0	11.8	11.5	11.1	10.3	9.6	9.3	8.9	8.5	8.4	8.2	8.2
Luxembourg	6.7	6.6	6.5	6.6	6.4	6.2	6.1	6.0	6.0	5.9	5.9	5.8	5.7	5.7	5.7	5.2	4.6
Mexico	n/a	n/a	n/a	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Netherlands	3.8	3.7	3.7	3.6	3.4	3.4	3.3	3.3	3.3	3.2	3.1	3.0	2.8	2.8	n/a	3.1	3.0
New Zealand	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Norway	3.8	3.6	3.5	3.4	3.3	3.3	3.3	3.3	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.0	3.0
Poland	6.3	6.3	6.2	5.8	5.8	5.8	5.7	5.6	5.5	5.3	5.2	5.1	4.7	5.1	n/a	4.7	4.7
Portugal	3.4	3.4	3.5	3.4	3.4	3.4	3.4	3.2	3.3	3.3	3.3	3.2	3.1	3.1	3.0	3.0	n/a
Republic of Korea	**2.7**	**2.9**	**3.0**	**3.2**	**3.5**	**3.8**	**4.0**	**4.2**	**4.4**	**4.9**	**5.2**	**5.2**	**5.7**	**5.9**	**n/a**	**6.5**	**6.8**
Slovakia	n/a	n/a	n/a	n/a	n/a	n/a	7.0	6.9	6.7	6.7	6.5	6.3	6.2	5.9	n/a	5.0	4.9
Spain	3.6	3.6	3.6	3.5	3.5	3.5	3.1	3.1	3.1	3.0	3.0	2.9	2.9	2.8	n/a	n/a	n/a
Sweden	4.1	3.9	3.7	3.4	3.2	3.0	2.8	2.7	2.6	2.5	2.4	2.3	2.3	2.2	2.2	2.2	2.2
Switzerland	6.5	6.4	6.3	6.1	5.8	5.5	5.5	4.9	4.4	4.4	4.1	4.0	3.9	3.9	3.8	3.6	3.5
Turkey	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.3	2.4	2.0	2.5
United Kingdom	n/a	n/a	n/a	n/a	n/a	4.1	4.0	3.9	3.9	3.8	3.8	3.8	3.7	3.7	3.6	3.1	2.2
United States	3.7	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.1	3.0	2.9	2.9	2.9	2.8	2.8	2.7	2.7

Source: OECD, 2009.

Note: n/a: Not available.

a category fall between general hospitals and clinics, treating inpatients and outpatients, and have more than 30 beds.

There were a total of 593 long-term care hospitals in 2007, a 54% increase from the previous year. For specialized hospitals, including psychiatric hospitals (107) and hospitals for tuberculosis (3) the total number was 110. For other types of facility, in 2007, there were 13 431 dental hospitals and clinics, and 11 033 oriental medicine hospitals and clinics (Table 5.1).

Although the number of health care facilities and beds has grown dramatically, an imbalance exists between urban and rural areas, with a shortage in the supply of beds in rural areas. Approximately 87.13% of total health care institutions and 84.13% of all beds are concentrated in urban areas (MOHW, 2006b). Previously, the government had aimed to rationalize the distribution of health care facilities (primary, secondary and tertiary) and resources (medical equipment and health care personnel) according to regional characteristics and the complexity of their needs. Therefore, regions were divided into three categories (i.e. small, medium and large medical areas) according to their relative medical demands, and health care institutions were classified into three levels in order to restrict health care utilization by region and by level of medical services. This policy, however, was forced out by the deregulation trends of the 1990s.

Approximately 91.9% of all hospitals and 84.9% of all beds were owned and operated by the private sector in 2006. If the beds operated by (100%) private clinics are added, only 10% of all beds are public. Both doctors and not-for-profit medical institutions can establish private hospitals, but it is more common for doctors to establish small-sized hospitals, while all large hospitals are organized through not-for-profit corporate medical structures. Laws relevant to the operation of health care institutions are applied equally to both the private and public sectors. There are 43 tertiary hospitals, the highest level of health care institutions, of which only 1 is public (belonging to the MIHWFA), 8 are national university hospitals belonging to the Ministry of Education, Science and Technology (MEST), and the rest (34) are private university hospitals owned by university foundations.

The KHIDI carries out an analysis and evaluation of the management of health care institutions once a year.[31] This research targets hospitals throughout the nation (general hospitals, psychiatric hospitals, hospitals for infections, oriental medicine hospitals and dental hospitals) and considers the kinds of medical services provided, types of establishment, location and the number of beds. Information gathering is carried out in collaboration with MIHWFA. The institute examines an institution's balance sheet, income statement, number of

[31] The Healthcare Resources and Service Information Centre at KIHASA also produces detailed data on the capital stock and the condition of health care institutions' facilities.

treatments, number of health care personnel by category, general information and so on. The results of this hospital management analysis are put to practical use by the government in developing and improving health care. This evaluation of hospitals aims to improve the quality of health care, but it is not yet part of a formalized quality assurance programme.

Investment funding

Capital investment and the operation of public hospitals, which are owned and directly operated by the government, are financed by the state. However, in the cases of national university hospitals and hospitals owned by local governments, the state only supports initial capital investment and does not finance their operation and depreciation. For private hospitals, there is neither government support for capital investment nor public–private partnerships. Long-term care facilities represent an exception to this rule, with the private sector able to secure government financial support for capital investment. The stated aims of the government include the development of a sustainable health care system, the expansion of public health care to maintain national health expenditure at a reasonable level and the protection of the public's right to be healthy (MOHW, 2006c).

To this end, it has set out a road map to reform the supply structure of beds by 2020. In addition, the government also encourages large hospitals to concentrate on acute inpatient services and small- and medium-sized hospitals to focus on long-term care and specialized medical services. Another measure is the annual evaluation (since 2003) of emergency medical centres countrywide, with the results forming the basis of competitively allocated financial support (by MIHWFA) to improve emergency centres' infrastructure.

Capital investment controls

Legislation prevents profit-making corporations from establishing health care institutions in South Korea, and it is not possible to finance investments from capital markets. This legal regulation is intended to bolster the very weak public health care system so as to provide citizens with health care services more securely and more cheaply. The government also supports not-for-profit hospitals with tax concessions, such as reductions in property and corporation taxes. Recently, however, some have argued that profit-making corporations should be allowed to establish health care institutions to attract investment from capital markets, because health care will be a national growth industry and will strengthen the nation's competitiveness. Private health insurance companies and government departments dealing with economic development strongly support the idea of allowing FPHs. However, civil organizations and

labour unions, who insist that the public character of health care should be strengthened, have raised robust objections to this policy suggestion. There has been extensive debate over this issue since 2004 (Lee S et al., 2005) (see also Chapters 6 and 7).

Under current legislation, the governor of each region licenses the establishment of general and specialist hospitals. There are few ways to prevent the establishment of new health care facilities or the expansion of existing ones if formal requirements are met. Moreover, the supply of health care facilities has been deregulated through the abolition of laws that previously managed supply (see Section 5.1.1 above) (Oh, 2006). Therefore, the government has not taken strong regulatory measures to control the supply of health care facilities or to distribute health care facilities equally among regions.

5.1.3 Medical equipment, devices and aids

In the early 1980s, the introduction of high technology medical equipment was limited by the government to encourage its efficient utilization and to minimize the waste of health care resources. In 1992, the government issued a directive, the Expensive and High Technology Installation and Approval Review Regulation, under which institutions should apply for approval before installing high-level expensive technology and special equipment (MHSA Directive 66, 27 January 1992). There are other special accreditation standards and criteria for the installation and running of high-expenditure technology equipment, which are set by the Minister for Health and Welfare (MOHW Directive 386, 14 January 2003). These requirements are the same for both public and private hospitals. The installation of heavy medical equipment requires registration by MIHWFA or by the governor of a region. Big-ticket technologies are in oversupply and are not distributed equally among regions. Therefore, to improve the balance of expensive medical equipment among regions, since March 2007 the government has allowed hospitals in remote areas (such as islands) to install and run the equipment without satisfying the relevant criteria.

There are three kinds of high-cost equipment that should be registered: MRI, CT scanners and mammography units. In December 2005, the total number of MRI scanners was 596, of which 51.8% (309) were owned by general hospitals and 18.5% were owned by clinics. Regarding CT units, clinics owned as much as 37.4%, the highest share, followed by hospitals (35.6%) and general hospitals (26.7%). Clinics also possessed the highest number of mammography units, equal to 56.1%, followed by hospitals (25.3%) and general hospitals (18.0%).

The number of big-ticket technologies has increased continuously over the past 15 years. For example, the number of CT scanners per million population increased rapidly from 15.5 in 1995 to 33.7 in 2006, while the number of MRI units rose from 3.9 to 13.6 during the same period (OECD, 2009). The installation of expensive equipment is financed through hospitals' own budgets. Table 5.4 outlines the scope of medical technologies operated by health care facilities from 1995 to 2006.

Table 5.4 Medical technologies per million population, 1995, 2000–2006

	1995	2000	2001	2002	2003	2004	2005	2006
Magnetic resonance imaging	3.9	5.4	6.8	7.9	9.0	11.0	12.1	13.6
Computed tomography	15.5	28.4	27.3	31.0	31.9	31.5	32.2	33.7
Radiotherapy	4.1	5.3	4.8	4.5	4.6	4.6	4.5	4.7
Lithotripter	3.5	4.4	4.8	6.0	6.8	7.8	9.1	10.7
Mammography	–	13.3	13.5	19.4	24.8	27.1	28.7	34.1
Positron emission tomography	–	–	–	–	–	–	0.6	–

Source: OECD, 2009.

5.1.4 Information technology

South Korea has one of the highest rates of computer and Internet access in the world. High speed access is also widely available: 79.4% of households had access to a home computer in 2003, while 74.8% of households had access to the Internet. In addition, the country has ranked first in terms of digital opportunity, with the highest annual Digital Opportunity Index[32] score issued since 2005 (Ministry of Information and Communication, 2007). Such information technology is actively applied to health care: 66.9% of all clinics have introduced electronic health record (MOHW, 2007c). Large hospitals also are equipped with electronic medical record systems and have very advanced IT systems. Moreover, in 2005, 93.3% of all health care institutions made a reimbursement claim for treatment costs through the electronic data interchange (EDI) system (90% in 2004), and the number of institutions adopting EDI is projected to rise steadily.

[32] The Digital Opportunity Index is an e-index based on 11 internationally agreed ICT indicators. The indicators, which rank 180 economies, are grouped around 3 clusters, reflecting opportunity to access ICT (e.g. mobile network coverage and prices), infrastructure (such as the proportion of households with an Internet connection) and use, especially of broadband services.

The NHIC has established an extensive database system that includes data on the eligibility of the insured, collection of monthly contributions and payment of health care costs. In effect, all the information that is relevant to the NHI scheme for the entire population is concentrated within the NHIC. Due to this centralized system, people who need information on their contribution levels, health risk or even information on various diseases can easily obtain them via the NHIC or HIRA home pages. On the other hand, the introduction of an electronic NHI card has been under discussion since the late 1990s. At present, there is no technical impediment to the introduction of an electronic NHI card, as all hospitals and clinics, as well as the NHIC and HIRA, are fully computerized. However, civil and human rights organizations strongly oppose this move, expressing concern over the possibility of personal information being disclosed to unauthorized third parties. Therefore, social consensus on the protection of personal information will be needed before the introduction of any electronic NHI card system.

In terms of future developments, the government is planning to invest US$ 1.1 billion (financed by both the public (US$ 457 million) and private (US$ 620 million) sectors) to establish a national electronic health record system that is easily accessible anywhere and at any time and that can provide customized information to health care personnel, in spite of opposition from civil groups. Moreover, there are plans to establish a nationwide clinical guidelines database and to develop an evidence-based clinical decision-making system for medical doctors. The aim of this measure is to help reduce the incidence of medical errors by individual doctors. Finally, the government also aims to transform 3410 public health centres and their branches into information-centred organizations; the construction of the information and portal systems, as well as a data warehouse system, is in progress, and the new information system will be rolled out gradually in public health centres around the country.

5.2 Human resources

5.2.1 Trends in health care personnel

Since the introduction of statutory medical insurance in 1977, health care utilization has continued to increase due to the dramatic rise in demand caused by the incremental expansion of population coverage, a rapid increase in chronic diseases and an ageing population. In tandem with the rise in health care utilization, the number of all categories of health care personnel has grown continuously (Table 5.5). The number of physicians almost doubled from 42 554 in 1990 to 85 369 in 2005, and the number of oriental medicine

physicians increased two and a half times over the same period. A similar increase (more than double) occurred in the number of dentists and nurses. On the other hand, a relatively low increase (about 48%) was reported in the number of pharmacists, which is attributable to government regulation designed to slow down the growth in this group over the last 15 years.[33] Nevertheless, the ratio of physicians to pharmacists (1.6/0.6) is still lower than that of most OECD countries (3.04/0.73) (OECD, 2007). With regard to the number of maternity nurses, there has been only a slight increase (13%) over recent years. Since 2003, the number has decreased partly due to South Korea's falling birth rate – 1.19 children in 2008 (WHO, 2009) – which is the lowest in the world. Therefore, nurses in maternity care have had to transfer to other health care sectors following maternity ward closures or reduced activity in delivery rooms.

The regional distribution of the medical workforce is weighted towards Seoul and the six largest cities, mainly due to the deepening income gap between large urban areas and rural areas and the high concentration of health care institutions and populations in these large cities. In particular, the distribution of doctors is concentrated in the largest cities, including Seoul: 51.4% of all GPs and 73.3% of specialists are located in Seoul and the six largest cities (2005 data) despite the fact that these cities have only about 47% of the country's total population.

Table 5.5 shows that the number of physicians per 1000 population has steadily increased since 1990. Compared with the OECD average of 3.04, however, the number of physicians per 1000 population is the lowest at 1.7, followed by Turkey (1.6) (Table 5.6). Despite the rise in the number of physicians over the last 30 years, physicians are still in short supply, as the government tightly controls entry to medical schools. However, physicians working in hospitals accounted for approximately 39.3% of all licensed physicians (as a comparator, this figure is more than 60% in Sweden) (MOHW, 2006c). As shown in Table 5.7, the number of licensed nurses per 1000 population has risen steadily since 1990. In terms of the number of practising nurses, however, the number was relatively low (4.0 per 1000 population) in 2006, compared to the OECD average.

Table 5.8 shows the number of dentists per 1000 population among OECD countries. Compared to the OECD average (0.58), the number in South Korea was also lower, with 0.4 dentists per 1000 population, with only Mexico (0.1) and Turkey (0.2) posting lower levels.

[33] During the 1960s and 1970s, the government focused extensively on training pharmacists, leading to large numbers.

Table 5.5 Health care personnel, 1990–2006

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Licensed practitioners									
Physicians									
Total	42 554	57 188	72 503	75 295	78 609	81 328	81 998	85 369	88 776
Per 1000 population	0.99	1.27	1.54	1.59	1.65	1.70	1.71	1.77	1.83
Oriental medicine									
Total	5 792	8 714	12 108	12 794	13 662	14 553	14 421	15 271	16 016
Per 1000 population	0.14	0.19	0.26	0.27	0.29	0.30	0.30	0.32	0.33
Dentists									
Total	9 619	13 681	18 039	18 887	19 672	20 446	20 742	21 581	22 366
Per 1000 population	0.22	0.30	0.38	0.40	0.41	0.43	0.43	0.45	0.46
Pharmacists									
Total	37 118	43 269	50 623	51 872	53 168	54 381	53 492	54 829	n/a
Per 1000 population	0.87	0.96	1.08	1.10	1.12	1.14	1.11	1.14	n/a
Nurses									
Total	89 032	120 415	160 295	170 845	181 800	192 480	202 012	213 644	224 142
Per 1000 population	2.08	2.67	3.41	3.61	3.82	4.02	4.20	4.41	4.62
Anaesthesia APN									
Total	n/a	n/a	517	528	543	557	567	574	n/a
Per 1000 population	n/a	n/a	0.01	0.01	0.01	0.01	0.01	0.01	n/a
Public health APN									
Total	n/a	n/a	1 702	1 792	1 896	2 048	2 034	2 034	n/a
Per 1000 population	n/a	n/a	0.04	0.04	0.04	0.04	0.04	0.04	n/a

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Licensed practitioners (cont.)									
Home health care APN									
Total	n/a	n/a	2460	3134	3944	4674	5349	5713	n/a
Per 1000 population	n/a	n/a	0.05	0.07	0.08	0.10	0.11	0.12	n/a
Psychiatric health APN									
Total	n/a	n/a	n/a	n/a	188	188	186	186	n/a
Per 1000 population	n/a	n/a	n/a	n/a	0.004	0.004	0.004	0.004	n/a
Nurse aids									
Total	n/a	n/a	72064	75064	79731	82925	91722	90465	n/a
Per 1000 population	n/a	n/a	1.53	1.59	1.67	1.73	1.91	1.88	n/a
Midwives									
Total	7643	8352	8728	8801	8920	8996	8628	8657	8685
Per 1000 population	0.18	0.19	0.19	0.19	0.19	0.19	0.18	0.18	0.18
Licensed medical technicians									
Clinical pathology									
Total	16220	21792	29710	31046	32468	34074	35220	36609	n/a
Per 1000 population	0.38	0.48	0.63	0.66	0.68	0.71	0.73	0.76	n/a
Radiology									
Total	8194	11277	16432	17494	18417	19594	20700	22237	n/a
Per 1000 population	0.19	0.25	0.35	0.37	0.39	0.41	0.43	0.46	n/a
Physiotherapists									
Total	6281	9924	15896	17570	19240	21153	23005	25498	n/a
Per 1000 population	0.15	0.22	0.34	0.37	0.40	0.44	0.48	0.53	n/a

Table 5.5 Health care personnel, 1990–2006 *(cont.)*

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Licensed medical technicians (cont.)									
Occupational therapists									
Total	140	289	415	479	596	831	1 143	1 643	n/a
Per 1000 population	0.003	0.006	0.008	0.01	0.01	0.02	0.02	0.03	n/a
Dental technicians									
Total	7 696	11 509	14 912	15 984	16 958	18 026	18 946	20 202	n/a
Per 1000 population	0.18	0.26	0.32	0.34	0.36	0.38	0.39	0.42	n/a
Dental hygienists									
Total	6 310	11 170	17 102	19 320	21 371	23 389	25 626	28 153	n/a
Per 1000 population	0.15	0.25	0.36	0.41	0.45	0.49	0.53	0.58	n/a
Medical records officers									
Total	2 123	4 681	7 644	8 150	8 819	9 317	10 140	10 818	n/a
Per 1000 population	0.05	0.10	0.16	0.17	0.19	0.19	0.21	0.22	n/a
Licensed dietitians									
Total	n/a	60 179	82 069	84 969	89 008	92 927	97 295	100 808	n/a
Per 1000 population	n/a	1.33	1.75	1.79	1.87	1.94	2.02	2.09	n/a
Employment									
Hospital[a]									
Total	n/a	n/a	119 726	131 686	140 073	145 117	148 324	154 535	n/a
Per 1000 population	n/a	n/a	2.55	2.78	2.94	3.03	3.08	3.21	n/a
Clinic[b]									
Total	n/a	n/a	125 778	134 084	148 310	155 624	176 679	180 741	n/a
Per 1000 population	n/a	n/a	2.68	2.83	3.11	3.25	3.67	3.75	n/a

Source: MOHW, 2007c.

Notes: APN: Advanced practice nurse; [a]Salaried personnel in hospitals; [b]Salaried personnel in clinics and midwifery clinics; n/a: Not available.

Table 5.6 Number of practising physicians per 1000 population in the Republic of Korea and other OECD countries, 1990–2006

Country	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Australia	2.2	2.5	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.6	n/a	n/a	n/a
Austria	2.2	2.7	2.8	2.9	3.0	3.0	3.1	3.2	3.3	3.4	3.5	3.5	3.6
Belgium	3.3	3.5	3.6	3.7	3.7	3.8	3.9	3.9	3.9	4.0	4.0	4.0	4.0
Canada	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1
Czech Republic	2.7	3.0	3.0	3.1	3.0	3.1	3.4	3.4	3.5	3.5	3.5	3.6	3.6
Denmark	2.5	2.6	2.6	2.7	2.8	2.8	2.8	2.8	2.9	3.0	n/a	n/a	n/a
Finland	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.7
France	3.1	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4
Germany	n/a	3.1	3.1	3.1	3.2	3.2	3.3	3.3	3.3	3.4	3.4	3.4	3.5
Greece	3.4	3.9	3.9	4.0	4.1	4.2	4.3	4.4	4.6	4.7	4.9	n/a	n/a
Hungary	2.8	3.0	3.0	3.0	3.1	3.1	n/a	n/a	3.2	3.2	3.3	3.0	3.0
Iceland	2.8	3.0	3.1	3.3	3.3	3.4	3.4	3.5	3.6	3.6	3.6	3.7	3.7
Ireland	n/a	2.1	2.1	2.1	2.2	2.3	2.2	2.4	2.4	2.6	2.8	2.8	2.9
Italy	n/a	3.9	4.1	4.0	4.1	4.2	4.1	4.3	4.4	4.1	4.2	3.8	3.7
Japan	1.7	n/a	1.8	n/a	1.9	n/a	1.9	n/a	2.0	n/a	2.0	n/a	2.1
Luxembourg	2.0	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.6	2.7	2.8	2.5	2.9
Mexico	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.8	1.9
Netherlands	2.5	n/a	n/a	n/a	2.9	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8
New Zealand	1.9	2.0	2.0	2.2	2.2	2.2	2.2	2.2	2.1	2.2	n/a	n/a	2.3

Table 5.6 Number of practising physicians per 1000 population in the Republic of Korea and other OECD countries, 1990–2006 *(cont.)*

Country	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Norway	n/a	2.8	2.8	2.5	2.7	2.8	2.9	3.0	3.4	3.4	3.5	3.7	3.7
Poland	2.1	2.3	2.4	2.4	2.3	2.3	2.2	2.3	2.3	2.5	n/a	2.1	2.2
Portugal	2.8	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.3	3.3	3.4	3.4	n/a
Republic of Korea	**0.8**	**1.1**	**1.2**	**1.2**	**1.3**	**1.3**	**1.3**	**1.4**	**1.5**	**1.6**	**1.6**	**1.6**	**1.7**
Slovakia	n/a	n/a	n/a	n/a	n/a	n/a	3.1	3.1	3.1	3.1	3.1	n/a	n/a
Spain	n/a	2.5	2.8	2.9	2.8	2.9	3.2	3.1	2.9	3.2	3.4	3.8	3.6
Sweden	2.9	2.9	2.9	2.9	3.0	3.0	3.1	3.2	3.3	3.3	n/a	n/a	n/a
Switzerland	3.0	3.2	3.2	3.3	3.3	3.4	3.5	3.5	3.6	3.7	3.8	3.8	3.8
Turkey	0.9	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.4	n/a	n/a	1.6
United Kingdom	1.6	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.1	2.2	2.3	2.4	2.5
United States	n/a	2.2	2.2	2.3	2.3	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.4

Source: OECD, 2009.

Note: n/a: Not available.

Table 5.7 Number of practising nurses per 1000 population in the Republic of Korea and other OECD countries, 1990–2006

Country	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Australia	11.6	10.8	10.8	10.4	10.2	10.1	10.0	9.9	9.9	9.9	10.1	9.7	n/a
Austria	n/a	n/a	n/a	n/a	6.9	6.9	7.1	7.1	7.1	7.2	7.1	7.2	7.3
Belgium	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	14.8	n/a
Canada	11.1	10.9	10.6	10.4	10.2	10.1	10.1	10.0	9.4	8.5	8.5	8.7	8.8
Czech Republic	7.2	7.4	7.4	7.4	7.3	7.4	7.6	7.8	8.0	8.0	8.1	8.1	8.1
Denmark	10.8	12.5	12.7	13.0	13.3	13.5	13.8	14.1	14.3	14.6	14.8	15.0	15.3
Finland	4.4	4.8	5.2	5.4	5.5	5.7	6.1	6.6	6.9	7.3	7.8	8.0	8.3
France	5.4	5.9	5.9	6.0	6.2	6.3	6.5	6.7	6.9	7.0	7.2	7.4	7.6
Germany	n/a	n/a	n/a	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.6	9.7	9.8
Greece	3.4	3.6	3.6	3.7	3.1	3.1	3.1	2.9	3.3	3.3	3.3	3.3	n/a
Hungary	5.2	5.4	5.4	5.3	5.5	5.4	5.3	5.5	5.7	5.8	5.8	5.9	6.1
Iceland	12.5	13.1	13.1	13.1	13.5	13.4	13.3	13.1	13.3	13.7	13.7	14.0	n/a
Ireland	11.3	13.1	13.1	13.1	13.5	13.4	13.3	13.1	13.3	13.6	13.7	14.0	13.7
Italy	5.2	5.2	5.2	5.3	5.3	5.2	5.2	5.4	5.4	5.4	6.7	7.0	7.1
Japan	5.8	n/a	7.0	n/a	7.3	n/a	7.6	n/a	7.8	n/a	9.0	n/a	9.3
Luxembourg	n/a	9.4	9.8	10.0	9.9	10.0	10.1	10.4	10.9	12.6	12.9	15.9	16.0
Mexico	1.8	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3
Netherlands	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9.4	8.9	8.6
New Zealand	9.3	9.7	9.7	9.0	9.6	9.6	9.6	9.6	9.4	9.1	9.5	10.2	10.0

Table 5.7 Number of practising nurses per 1000 population in the Republic of Korea and other OECD countries, 1990–2006 *(cont.)*

Country	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Norway	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	31.0	31.6
Poland	5.5	5.5	5.6	5.6	5.5	5.1	5.0	4.9	4.9	4.9	4.9	5.1	5.1
Portugal	2.8	3.4	3.5	3.7	3.7	3.7	3.7	3.8	4.0	4.2	4.4	4.6	n/a
Republic of Korea	**n/a**	**n/a**	**n/a**	**2.7**	**2.8**	**2.9**	**3.0**	**3.2**	**3.4**	**3.5**	**3.8**	**3.8**	**4.0**
Slovakia	n/a	6.5	6.0	5.9	7.4	7.2	7.4	7.3	6.9	6.5	6.3	n/a	n/a
Spain	n/a	5.8	6.3	6.3	6.2	6.5	6.5	6.8	7.4	7.5	7.4	7.4	7.3
Sweden	9.2	9.7	9.6	9.6	9.7	9.8	9.9	10.1	10.3	10.4	10.6	10.7	n/a
Switzerland	n/a	n/a	n/a	n/a	n/a	n/a	12.9	13.2	13.7	14.3	14.1	14.1	n/a
Turkey	1.3	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	n/a	2.1
United Kingdom	7.9	8.1	8.2	8.2	8.6	9.0	11.3	11.5	11.7	12.1	12.3	12.3	11.9
United States	n/a	n/a	n/a	n/a	n/a	10.4	10.2	10.2	10.2	10.1	10.3	10.4	10.5

Source: OECD, 2009.

Note: n/a: Not available.

Table 5.8 Number of practising dentists per 1000 population in the Republic of Korea and other OECD countries, 1990–2006

Country	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Australia	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Austria	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Belgium	0.7	0.8	n/a	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Canada	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Czech Republic	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
Denmark	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	n/a	n/a
Finland	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	n/a	0.8
France	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Germany	n/a	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Greece	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	n/a	n/a
Hungary	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Iceland	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9
Ireland	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
Italy	n/a	0.4	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6
Japan	0.6	n/a	0.7	n/a	0.7	n/a	0.7	n/a	0.7	n/a	0.7	n/a	0.7
Luxembourg	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8
Mexico	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Netherlands	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
New Zealand	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	n/a	n/a	0.4

Table 5.8 Number of practising dentists per 1000 population in the Republic of Korea and other OECD countries, 1990–2006 *(cont.)*

Country	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Norway	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9
Poland	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
Portugal	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6	n/a
Republic of Korea	**0.2**	**0.2**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.4**	**0.4**	**0.4**
Slovakia	n/a	n/a	n/a	n/a	n/a	n/a	0.5	0.5	0.5	0.5	0.5	n/a	n/a
Spain	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Sweden	1.0	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	n/a	n/a
Switzerland	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Turkey	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	n/a	0.2
United Kingdom	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
United States	0.6	0.6	0.6	0.6	0.6	0.6	0.6	n/a	n/a	n/a	n/a	n/a	n/a

Source: OECD, 2009.

Note: n/a: Not available.

5.2.2 Planning of health care personnel

While the number of physicians in South Korea remains low compared to the OECD average, it is projected that the current supply will adequately meet the increasing demand for physicians' services, as medical students have started to graduate from the additional medical schools that were established in the 1990s. In fact, some argue that physicians might be in oversupply after 2020 (Oh, 2006).

In terms of other health professionals, South Korea had 40 dentists per 100 000 population in 2006 compared with the OECD average of 52 dentists per 100 000. This figure is projected to increase to 51 in 2010, 58 in 2015 and 66 in 2020. Moreover, the excessive supply of pharmacists is set to continue up to 2020. And, finally, at present, the number of nurses per doctor is lower than the OECD average, and the number of nurses employed is estimated to be low. However, an imbalance in the demand and supply of nurses is not expected to occur as there has been a recent increase in nursing school enrolments (Oh, 2006).

MEST regulates the number of health care personnel and medical schools by controlling the entrance quotas for medical schools as well as the number of medical departments according to planning frameworks for the medical workforce set by MIHWFA. In the case of medical specialist training, the KHA is mandated by MIHWFA to set the number of interns and residents by allocating specialist traineeships by training year and also by designating training hospitals. The KHA has a review committee to formulate its own standards for specialists' training and eligibility requirements. The selection of specialist trainees is based on an open competitive examination conducted by the presidents of training hospitals.

The KMAhas strongly demanded that the number of physicians be reduced, as market competition in primary care, in particular, is becoming fierce. For this reason, there are plans to reduce the number of physicians by strengthening the national examination for a physician's licence. The government is also exploring ways to cut the number of students admitted to medical schools by 10%. To adjust the supply of advanced practice nurses (APNs), the Minister for Health, Welfare and Family Affairs regulates the number of professional education institutions and the number of students admitted to these institutions.

In South Korea, professional mobility is not an issue yet. However, as of July 2009, the government has designated five cities (Busan-Jinhae, Incheon, Kwangyang, Samangum and Dagu) and one special self-governing city (Jeju) as 'special economic zones' and has allowed foreign FPH to open in some of these areas (Lee S et al., 2005). In addition, foreign licensed physicians are allowed to give medical treatment to South Korean citizens as well as foreigners

only in these free economic zones. On the other hand, there are very few South Korean physicians who wish to obtain a foreign medical licence in order to practise in other countries.

5.2.3 Training of health care personnel

Medical education in Korea is based on either a six-year undergraduate degree or a four-year postgraduate degree.[34] Since 2006, those who do not major in medicine at undergraduate level have been able to enter a university medical faculty to undertake medical training through a four-year postgraduate course. A six-year undergraduate course takes place at a college of medicine, and is divided into two stages. The first preparatory stage takes two years, and the second regular stage consists of a four-year course. After finishing their degree courses, students have to pass the national medical examination to obtain their medical licence. At present, there are 41 medical education institutions – 14 undergraduate university colleges of medicine, 14 postgraduate university schools of medicine and 13 institutions that offer both six-year undergraduate and four-year postgraduate degrees. Out of these 41 medical universities, 10 are public and the rest are private. Regardless of the public or private nature of these higher education institutions, medical students have to pay for all of their tuition fees: the fees for public universities are approximately 50% of those for private education. The geographical distribution of medical faculties is relatively even. Physicians can then choose whether to go straight into general practice or to obtain a specialization.

A certification system for medical specializations, influenced by the United States health care system, has been in place since 1952. Currently there are 23 basic specialty areas. Medical specialists must pass a qualifying examination to enter their programme of choice; they obtain their medical specialist certification after completing a one-year internship and 3–4 years of residency courses, ranging from three years for family medicine and preventive medicine to four years for other specialized fields including internal medicine. Although by law, those with a medical licence can begin practising medicine, almost all physicians take an internship and residency programme to obtain better training. In fact, more than 90% of physicians choose to continue their studies in order to qualify as medical specialists, which is why most primary care physicians are specialists and not GPs. All practising physicians must take more than eight credits of training courses every year as part of their CPD programme (see Chapter 4; Art. 20 of MIHWFA Decree

[34] Medical education traditionally was based on a six-year undergraduate degree, but several universities have switched to a four-year postgraduate medical programme.

on the Medical Act). MIHWFA is formally responsible for such training, but actual responsibility and management is delegated to the KMA. Meanwhile, education for oriental medicine physicians is somewhat different. In 2008, there were 11 oriental medicine colleges. Students undertake a six-year undergraduate degree – made up of a two-year preparatory stage and a four-year oriental medicine course. Following the completion of these two stages, students must pass a national oriental medicine examination in order to receive their licence to practise.

There are now two educational routes for nursing education: a four-year university course and a three-year college course.[35] Out of a total of 115 nursing education institutions, 52 or 45.2% are universities, and the rest are colleges. Most nursing education places are private with only 9% being public, while their geographical distribution is relatively even.

Legislation for the certification of APNs occurred in 2003, and the first cohort of APNs who passed the qualification examination entered the workforce in 2006. To be qualified as an APN, a registered nurse has to complete a postgraduate (Masters) APN degree taught at professional nursing educational institutions designated by the Minister for Health, Welfare and Family Affairs. Currently, these institutions are sited within the relevant faculties of 20 universities. The duration of the degree is at least two years, with 33 credits required to obtain the qualification. All registered nurses are required to receive eight hours of training every year as part of their CPD programme, and the president of the Nurses Association must submit the results of this training to the Minister for Health, Welfare and Family Affairs annually.

Training for paramedical personnel is based on a three-year college course or a four-year university degree. Even after obtaining a licence, all paramedical personnel must also complete eight hours of (CPD) training every year. To be pharmacists, students must study at a college of pharmacy for four years and pass the national pharmacists' examination.

5.2.4 Registration/licensing

MIHWFA has a supervisory function with regard to all health care personnel. The Ministry is also the licensing authority for physicians, dentists, nurses, pharmacists and other health care professionals on the basis of relevant laws. Once health care professionals have been given the right to practise, they do not have to undergo formal recertification procedures. However, in cases of proven malpractice as defined by medical and pharmacy law, licences can be withdrawn.

[35] There is no difference between degrees taken at universities and colleges.

5.2.5 Doctors' career paths

All registered physicians who have passed the national medical licence examination after completing their medical degree are entitled to enter a specialist training course. More than 90% of physicians choose to obtain more training by taking an internship and residency course, which are required to become a specialist. Less than 10% of physicians are GPs, who have three career paths: opening their own practice, practising as employee physicians or working in public health institutions such as public health centres. Specialists with a PhD degree can be qualified as professors in medical universities. Another career path for physicians is to work as a civil servant in the area of public health and welfare.

In public hospitals, which account for about 10% of all health care institutions, their particular bureaucratic characteristics tend to influence physician's promotion prospects. However, a physician's promotion prospects in private hospitals more or less depend on the hospital's owner or CEO and each physician's performance. Physicians practising in hospitals tend to change their place of employment very frequently, whereas those who work in medical schools are unlikely to move to other employment. In addition, there are no limits on changing employment venues: it is common for specialists with their own practice to move hospitals and vice versa.

5.2.6 Other health staff career paths

The career paths for oriental medicine physicians and dentists are similar to those of physicians. Oriental medicine physicians and dentists can open their own practices or work in both private hospitals and public health care institutions. After completing the relevant medical education, pharmacists can either open their own pharmacies or work as employees in large pharmacies or in private or public health care institutions. Nurses can also choose to work within private or public hospitals.

Oriental medicine physicians, nurses, dentists or other health care professionals can also obtain teaching posts in universities if they obtain a doctorate. They can also work as civil servants in central or local government organizations or as researchers in pharmaceutical companies or research institutes.

5.2.7 Pharmacists

In 2006, there were 20 630 pharmacies registered in South Korea, and 31 237 pharmacists working in health care institutions (NHIC, 2006).

Table 5.9 shows the number of pharmacists per 1000 population, which in 2005 was the fifth lowest (0.6) among OECD countries (0.73).

To open a pharmacy, free market principles apply. The government does not regulate the number of pharmacies at either the local or national level. However, only registered pharmacists are allowed to own and run a maximum

Table 5.9 Number of practising pharmacists per 1000 population in the Republic of Korea and other OECD countries, 2004–2006

Country	2004	2005	2006
Australia	0.9	0.7	n/a
Austria	0.6	0.6	n/a
Belgium	1.2	1.2	1.2
Canada	0.8	0.8	0.8
Czech Republic	0.6	0.6	0.6
Denmark	0.2	0.2	n/a
France	1.1	1.2	1.2
Germany	0.6	0.6	0.6
Hungary	0.5	0.5	0.5
Iceland	1.1	1.1	1.1
Ireland	0.9	n/a	1.0
Italy	0.9	0.9	0.8
Japan	1.3	n/a	1.4
Luxembourg	0.7	0.7	0.7
Netherlands	0.2	0.2	0.2
New Zealand	0.8	0.7	0.7
Norway	0.4	0.4	0.4
Poland	0.6	0.6	0.6
Portugal	0.9	1.0	n/a
Republic of Korea	**0.6**	**0.6**	**0.6**
Slovakia	0.5	n/a	n/a
Spain	0.9	0.9	0.9
Sweden	0.7	0.7	n/a
Turkey	0.3	n/a	0.3
United Kingdom	0.7	0.6	0.7
United States	0.8	0.8	n/a

Sources: OECD, 2007; 2008.

Note: n/a: Not available.

of one pharmacy, which must be registered with the relevant local government. The premises must contain a space for a dispensing room and meet other technical criteria.

6 Provision of services

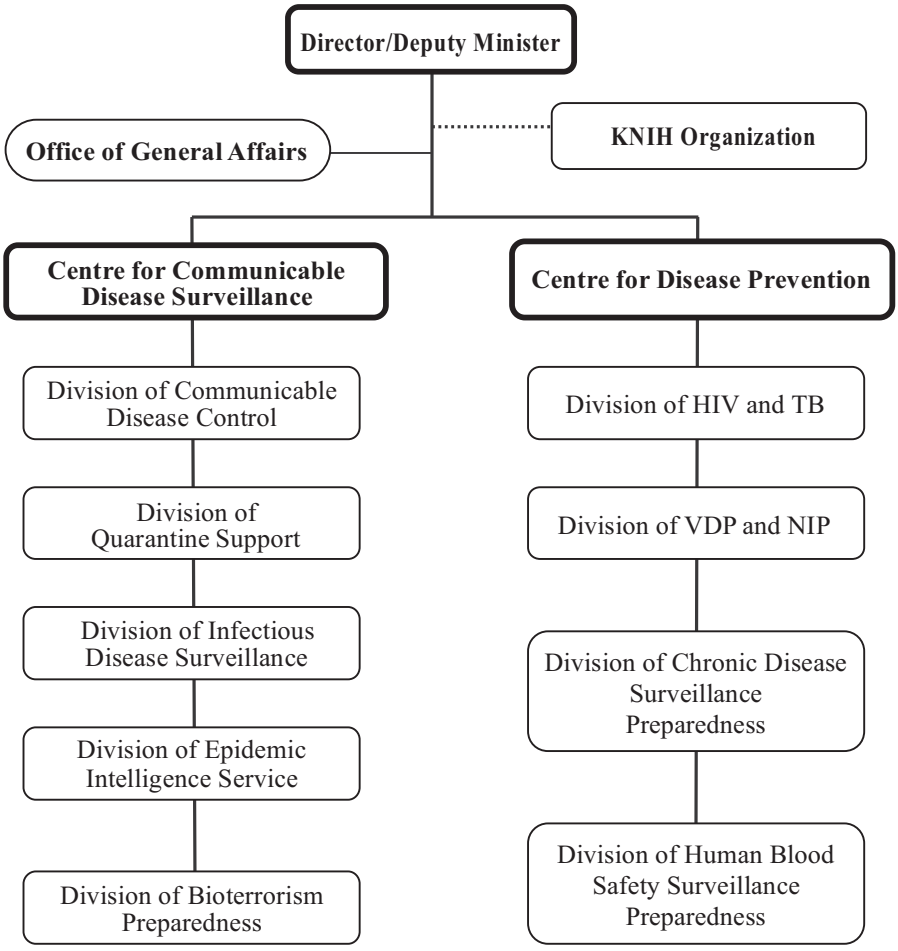
6.1 Public health

As Mossialos, Allin and Figueras (2007) put it, "public health is the science and art of promoting health, preventing disease, and prolonging life through the organized efforts of society". They go on to define it as a "social and political concept aimed at improving health, prolonging life and improving the quality of life among whole populations through health promotion, disease prevention and other forms of health intervention". Similarly, public health in South Korea is defined as health services provided by the central and local governments for the improvement of people's health. But, unlike most other countries, public health in South Korea is mainly provided by public hospitals and by public health centres (*Bogunso* in Korean), which make up about 10% of total providers. At the end of 2007, there were about 92 hospitals, 251 public health centres, 1314 subpublic health centres and 1908 primary health care posts that carry out public health functions across the nation (MIHWFA, 2008).[36] Despite the relatively small number of facilities, they have contributed to the development of public health initiatives such as communicable disease management, mother–child care, health promotion, health education and so on.

Environmental and communicable diseases are the special responsibility of two centres for disease control and prevention, established in January 2004 (Fig. 6.1). As new diseases break out (for example, due to climate change) and often do so unexpectedly, MIHWFA has set up a special organization aimed at protecting the public from various diseases and to maintain an effective

[36] In general, public health centres have many branches, such as 'subpublic health centres' and 'primary health care posts' located within the local administrative district. Although hierarchically different, all health care facilities under public health centres provide the same primary health care services to local residents.

Fig. 6.1 Korean Centres for Disease Control and Prevention (KCDC) organizational chart



Source: http://www.cdc.go.kr.

Notes: KNIH: Korean National Institute of Health; HIV: Human immunodeficiency virus; NIP: National immunization programme; TB: Tuberculosis; VDP: Venereal disease prevention.

control system at the central government level. As Fig. 6.1 shows, there are two Centres – the Centre for Communicable Disease Surveillance and Response, and the Centre for Disease Prevention – under the same directorship of an umbrella body known as the KCDC. In addition, there is the Korean National Institute of Health, whose main aim is to conduct research into the causes of various diseases, and to effectively prevent and control communicable and noncommunicable diseases. The management of communicable diseases is

centrally controlled by the KCDC and implementation is carried out by local institutions such as public health centres and local governments. The KCDC has a monitoring system for the notification and surveillance of disease outbreaks around the clock. In the case of an outbreak, the KCDC systematically reports it to the public using its state-of-the-art technology system.

Health promotion and education are provided by two bodies. On the one hand, public health centres administer health promotion and education programmes for residents living within the local government boundary. In fact, most health centres operate health clubs for their resident populations. In addition, all health centres provide health education programmes, such as courses on smoking cessation, obesity and healthy diets, as well as breastfeeding campaigns. Programmes provided by health centres are very convenient for local people to access because 251 public health centres are located in each basic administrative district. On the other hand, the NHIC is also involved in providing health promotion and education. From the national insurer's perspective, health promotion programmes are important as 'prevention is better than treatment'. Therefore, the NHIC has opened up health promotion centres in several locations and operates programmes to promote healthy living by the insured.

The delivery of health prevention services is to some extent similar to that of the health promotion programme, with the difference being that preventive services are mainly provided as part of the NHI system, although some preventive services are still provided by public health centres. One example is the immunization service. The immunization of children under six years old is a necessary service provided by public health centres. The immunizations provided by public health centres include: tuberculosis, hepatitis, diphtheria, tetanus, pertussis, polio, measles, Japanese encephalitis, typhoid fever, influenza and chickenpox (http://www.ehealth.or.kr/bogunso). Financing for these immunizations is borne by the central and local governments. Other preventive services are mostly provided by the NHIC, including health check-ups and infant care programmes. Health check-ups are targeted at higher risk groups: for instance, cervical screening is targeted at women aged 30 and over. According to the National Health Insurance Act (Art. 47), the insured are entitled to receive periodic health check-ups. The health preventive programme for infants and young children aged between 4 months and 5 years is designed to improve childhood health, on the basic assumption that good health in childhood is critically important for lifelong health. Services include diagnosis, consultation, health education and dental care. The costs for preventive services are covered by the NHIC with no co-payments.

Occupational health services are operated differently from those under the NHI scheme. The Korean Labour Welfare Corporation (KLWC) administers occupational health care services, including preventive, curative and

rehabilitative services. The corporation contracts with providers on behalf of patients suffering from occupational health problems. Financing for occupational health services is based on various contribution rates depending on the industry, type of economic activity and accident risk profile. As a result, 61 contribution rate categories range from 48.9% of gross salary for the logging industry to 0.4% for legal and accounting services. Employers of any business employing one or more workers pay the contributions for their employees. Like the health insurance system, the KLWC is a single insurer, calculating contribution rates, collecting contributions, paying health service costs to providers and so on.

Inequalities in health status among different social groups emerged as one of the major problems in the early 2000s, with the prevalence of economic crisis. Since then, the health status gap between high and low income groups has become a social issue. According to a study by Kang (2006), the mortality rate in the highest income decile declined compared to that of the lowest income group. In fact, the mortality rate for the lowest income bracket was 2.63 times higher than that of the highest income earners. Researchers have only recently begun analysing the problems deriving from this health status difference. Moreover, as the health status disparities among the population have been highlighted, the government has begun looking more closely at its causes, such as income gaps, differences in residential areas and levels of education. At both the central and local government levels, various specialized public health programmes in target areas have been reinforced. For instance, health promotion programmes targeting smoking and obesity have been implemented at either the community or school level. These programmes are based on the presumption that children living in lower income households and poorer areas are more susceptible to being obese and taking up smoking. Smoking and obesity in childhood can lead to harmful health effects in adult life, thus contributing further to the health status gap. Other measures have been implemented by the NHIC. The NHI scheme has targeted children's health by reducing OOP payments when children under five years of age use any kind of treatment, both inpatient and outpatient services.[37]

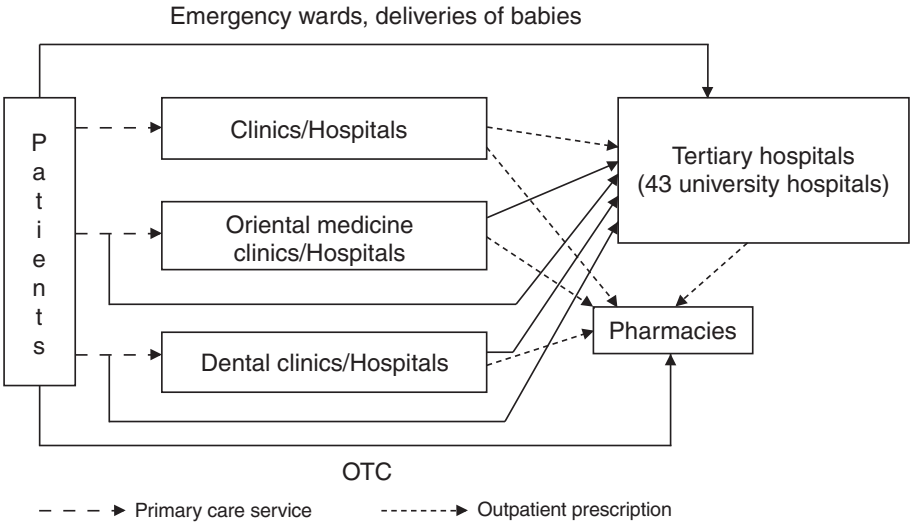
Other health related policies to promote public health are implemented in various areas, such as traffic safety, food safety, social welfare and so on. Of the policies outside the health insurance scheme, food safety is way ahead in terms of its role in public health improvement. The Korean Food and Drug Administration (KFDA) is responsible for food safety, promoting public health through ensuring the safety and efficacy of food, pharmaceuticals, medical devices and cosmetics, and supporting the development of the food and pharmaceutical industries (http://www.kfdc.go.kr).

[37] While this programme targets all children, it has a greater impact on the health of children from low-income families, thus contributing to the reduction of health disparities.

6.2 Patient pathways

The first point of contact for a patient within the NHI scheme is a primary care doctor. All patients should first access primary care facilities, which consist of clinics, dental hospitals and general hospitals (MIHWFA Directive 408). Secondary care is provided by specialized general hospitals, which are mostly university hospitals. Specialized general hospitals satisfy a set of criteria, in terms of facilities, medical equipment, medical staff and education and research. Secondary care hospitals have a privileged status compared to primary care physicians/institutions, such as higher fee schedules and special consultation fees. Therefore, to use medical resources reasonably, patients should not obtain secondary care without first obtaining a referral from a primary care physician. However, accessing secondary care is relatively easy, as first contact physicians do not function as actual gatekeepers to higher level care. Moreover, there are exceptions to the referral requirement. Patients can directly access secondary care when they need emergency care, or for deliveries of babies and haemophilia services. In addition, a patient who needs an oriental medicine intervention or dental care can directly choose specialists in a secondary care hospital (Fig. 6.2). The process for obtaining oriental medicine services is different to the western medicine process: patients can visit any hospital, including tertiary hospitals,

Fig. 6.2 Patient pathway in the National Health Insurance system



Note: OTC: Over-the-counter drugs.

directly. Overall, without a family doctor system playing the role of gatekeeper, patients have relatively easy access to secondary care facilities.

6.3 Primary care

The role of primary care within the health care system is not one that undertakes a strict gatekeeping role. Anyone can obtain treatment in primary care either in ambulatory care facilities or clinics, depending on a person's preference. Historically and currently, primary care in South Korea has not followed the traditional model pursued elsewhere in the world, so it does not focus on the coordination of primary care services with those at other levels of the health care system. Because physicians working in clinics do not work as family doctors or gatekeepers, physicians' services do not tend to focus on outpatient care. Some primary care physicians provide specialized inpatient care services and thus compete with secondary care specialists. The fee schedule for primary care providers is based on FFS (rather than on capitation), resulting in physicians not having an incentive to focus on health prevention and promotion, an important function usually carried out by GPs. In addition, freedom of choice of ambulatory care physicians, including GPs and specialists, is fully exercised. Under these circumstances, 'induced demand' by physicians and 'medical shopping' by patients are more likely to take place.

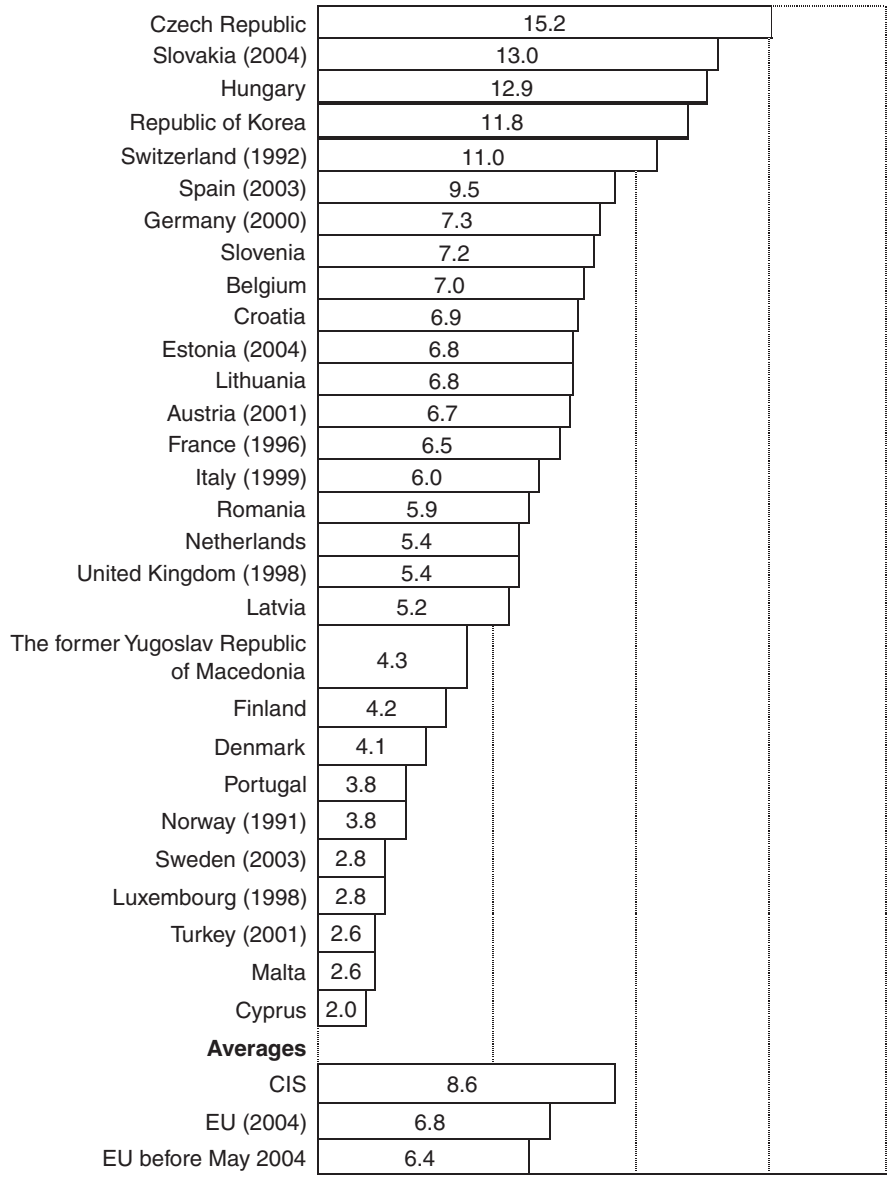
Although it is somewhat difficult to find a relationship between having no real gatekeeping mechanism and the number of outpatient contacts per person, there is no doubt that not having a functioning gatekeeping system could result in higher volumes of ambulatory services, as shown in Fig. 6.3.

6.3.1 Primary care facilities

Approximately 90% of total primary care facilities are private providers. Doctors operate their own practices independently, either in solo or group practices. As Table 6.1 shows, various types of health care provider and facility supply primary care and/or family doctors' services. Such services provided in hospitals and clinics include general medical care, diagnostic services, child health care, operations, dispensing of pharmaceutical prescriptions, preventive services such as immunizations and screening, emergency aid, rehabilitation, nurse's services, patient transport and health promotion services.

There are many differences in the way primary care services are delivered depending on the provider. The functions and services of hospitals providing ambulatory care are, by and large, like those of tertiary hospitals. These hospitals

Fig. 6.3 Outpatient contacts per person in European countries and the Republic of Korea, 2005 or latest available year



Sources: WHO Regional Office for Europe, 2007; OECD, 2008.

Note: CIS: Commonwealth of Independent States.

Table 6.1 Number of primary care facilities by type of health care institution, 2000–2006

	Hospitals[a]	Clinics	Public health centres	Oriental medicine facilities[b]	Pharmacies
2000	986	30 280	3 483	6 972	19 530
2006	1 699	38 791	3 420	10 442	20 633

Source: NHIC, 2008a.

Notes: [a]Includes dental hospitals; [b]Includes hospitals and clinics.

undertake almost all treatments within their premises. Furthermore, they are equipped with state-of-the-art technology for diagnoses and surgery. Therefore, hospitals that provide primary care to some extent compete with tertiary hospitals for inpatient and outpatient care. Meanwhile, public health centres concentrate on public health; people receive services such as immunizations and screening. Moreover, health centres located in every county respond to the health needs of their population, providing health promotion, family planning, health education and other activities to address health risk situations (see Section 6.1 above).

6.3.2 Challenges and reforms

The problems currently facing primary health care in South Korea are not inconsiderable. Among the most important problems are the absence of a gatekeeping system and the limited number of public providers. The absence of a gatekeeping function in conjunction with the FFS reimbursement method makes the situation worse. As may be expected, these characteristics are more likely to bring about 'induced demand' by providers. In addition, patients tend to 'shop around' for doctors. These factors all contribute to the relatively higher level of outpatient contacts per capita compared to other countries.

The size of public providers can also be problematic. This number is so small that most patients have to use private facilities. To make matters worse, public health centres, which are expected to provide good quality primary care services compared to private providers, are not numerous enough to play a major role. In addition, primary care tends to focus on curative services and, thus, preventive care, which is more important, is not emphasized. As a result, the current system of primary care exerts a serious burden upon the health care system, failing to control the rapid increases in expenditure and not allowing

the system to deal properly with the increasing prevalence of chronic health conditions, which need a long-term and coordinated approach.

Lastly, the inequitable distribution of primary care facilities between urban and rural areas is also an issue of concern. Currently, the number of doctors practising in rural areas is relatively small, meaning that patients – mostly elderly and frail farmers – are required to travel long distances to see a doctor. As shown in Table 6.2, the number of primary care doctors in seven metropolitan cities is 37.3% higher than that of other areas. This problem will become worse, as younger physicians prefer to practise in urban areas, favouring the higher incomes and living conditions for their families. Given this inequity, policy measures that could be introduced to address this disparity include building additional public health centres in rural areas. In addition, allocating qualified staff (either temporarily or for a set period of time) and medical equipment to rural areas also would be a valuable option. Designing an incentive system (e.g. subsidies or weighted fees to providers in rural areas) to facilitate an equitable distribution of primary health care centres across urban and rural areas also would be a helpful measure.

To tackle the range of problems in primary care, a series of proposals designed to overhaul the system have been suggested recently, with academics and civil society groups leading the way. Two of the major proposals put forward are the establishment of a GP gatekeeping system and a new fee schedule for primary care services, based on a payment mix of FFS and capitation methods (NHIC, 2009b).

Table 6.2 Geographical distribution of primary health care facilities in the Republic of Korea, 2007

Type of clinic	Seven major metropolitan cities (pop., 22 927 000)	Other areas (pop., 26 342 000)
Clinics	13 946	12 319
Dental clinics	7 487	5 793
Oriental clinics	6 031	4 864
Affiliated clinics	99	83
Midwifery clinics	28	24
Total	27 591	23 083
No. clinics per 1 million population	1 203	876

Source: MIHWFA, 2008.

6.4 Secondary care

In general, secondary care includes specialized ambulatory medical services and hospitalization services, covering outpatient and inpatient services. Tertiary care focuses on medical services of high complexity, and usually of high cost, and is provided at university hospitals (Mossialos, Allin and Figueras, 2007).[38] In the South Korean context, secondary services are provided in tertiary care facilities. While tertiary hospitals also carry out some ambulatory functions, they offer more specialized care and carry out research and teaching. For specialist services at tertiary care institutions, patients should obtain a referral letter from either a clinic or a general hospital.

Specialized ambulatory medical services are provided by various types of medical institution. Specialists working in their own practices provide outpatient care. Specialists' care delivered via clinics is very common. In fact, of the 30 891 physicians practising in clinics, 90.9% are specialists (MIHWFA, 2008). This kind of phenomenon is uncommon in other countries, and the predominance of specialists in the primary care sector in South Korea leads to an inefficient use of medical resources. The other means of providing specialized ambulatory medical services is through the outpatient departments of hospitals, including general and tertiary hospitals.

The hospitals carrying out the majority of ambulatory and inpatient care are mostly private not-for-profit, and these make up the greatest proportion of all hospitals in the country (Table 6.3). Most tertiary hospitals have more of a quasi-public character in terms of ownership. University hospitals are managed by universities and people tend to classify them as not purely private entities because they are usually operated by foundations and any surpluses are reinvested into the hospitals. Although the Medical Act currently does not allow hospitals to have for-profit status, most of the private not-for-profit hospitals actually operate like FPHs.

The geographical distribution of hospital care facilities is concentrated in Seoul, the capital. This is particularly the case for tertiary hospitals that provide complex treatments with highly skilled specialists, and state-of-the-art medical equipment. Of the 43 tertiary (university) hospitals in the country, almost half are in Seoul. This concentration is exacerbated by the fact that the so-called 'big four' hospitals maintain an almost monopolistic position, so that most patients, regardless of their residence, come to Seoul to obtain treatment from one of these hospitals (NHIC, 2008a). According to a hospital quality evaluation, these

[38] In reality, tertiary care in South Korea is somewhat different from that of other countries. Without a family doctor or strict gatekeeping system, patients can obtain relatively simple treatments at tertiary hospitals, such as straightforward deliveries of babies or treatments for influenza.

Table 6.3 Categories and public–private ownership mix of hospitals

Type of hospital	Total	Public	Private not-for-profit	Private for-profit
Tertiary hospitals	43	9	34	–
General hospitals	253	30	223	–
Hospitals	1 322	63	1 259	–
Dental hospitals	136	5	131	–
Oriental medicine hospitals	145	2	143	–

Source: NHIC, 2008a.

hospitals also provide superior services. Clearly, this distributional inequity in geographical location can cause access problems, with the worse-off being less likely to access medical services in these hospitals compared to the better-off or people living in the capital.

Hospital management is relatively autonomous compared to other countries where public hospitals are more common. Hospital owners, whether a medical foundation or an individual, enjoy a great deal of freedom in managing their facilities: by and large, they can also build, buy, sell or close down hospitals with almost no restrictions.

The degree of cooperation between primary and secondary care is not high, nor are the two sectors closely integrated. For instance, laboratory tests done in a primary care facility would not be used fully within a secondary care institution, even though the Medical Act (Art. 21) states that tests and other information issued at the primary care level should be shared when a patient visits a secondary care facility.[39] Nor is it compulsory for medical records to pass from primary care doctors to secondary care doctors, or vice versa. In addition, communication between hospital-based doctors and primary care-based doctors is very rare, which can be explained by cultural factors. For doctors, sharing information and talking to each other to secure better treatment for a patient might be construed as undermining their individual medical authority. To encourage the sharing of patients' medical records between institutions, the introduction of an electronic medical record system and an integrated consultation system are required.

Given these problems, some reform policies have been proposed by academics and government officials. The introduction of a formal family doctor

[39] According to Art. 21 of the Medical Act, medical records or information on a patient should be made available, provided that the medical institution treating the patient and the patient request the medical record.

system is advocated by the Korean Academy of Family Medicine, which has led the family doctor system for a long time. The Academy has suggested implementing a framework not dissimilar to the GP system in the United Kingdom. The GP's role would include functions such as coordinating care between the primary and secondary sectors and improving efficiency through the well-organized use of resources (Lee J, 2007). The other policy proposal stresses the importance of public hospitals providing acute care, and, given their relative scarcity in South Korea (compared to other developed countries), one way to secure a more appropriate number of public hospitals is to have the NHIC build and operate more of them. At present, the national insurer operates one hospital. The government has encouraged both the NHIC and local governments to acknowledge the important role that public facilities can play in the health care system and thus to build more public hospitals.

6.4.1 Day care

Day care services are provided mainly in hospital settings and, at present, make up a relatively small proportion of overall services. For example, the proportion of day care undertaken by Seoul National University Hospital was 6.5% in 2006 (http://www.snuh.org). Currently, many hospitals have started to introduce or expand day care services to capitalize on its advantages (e.g. high bed rotation rates, the low cost and convenience of short stays). Usually, day care services are provided by several departments, such as eye surgery, internal medicine and mental health departments; and the number of areas is set to rise, as many hospitals are focusing on expanding these types of service. Fees vary according to facilities, but are the same as an institution's fixed inpatient fees. On top of that, fees for consultations and treatments can be claimed by providers on the basis of FFS (NHIC, 2007b).

6.5 Emergency care

According to the Emergency Care Act, emergency care covers the entire process from the outbreak of an emergency to all the measures necessary to secure the patient, including consultation, rescue, transportation, first aid and diagnosis. Emergency care is separate from the NHI scheme; emergency care centres are run and financed by MIHWFA using a special fund (sourced from national and local taxation, government subsidies and donations) that can only be used for such services. In addition to the headquarters in Seoul, there are 450 emergency care centres across the nation (MIHWFA, 2008). To secure emergency care

around the clock, MIHWFA has designated 40 emergency care hospitals at various locations. These hospitals operate 24 hours a day to provide urgent care when required. A communication satellite system is in operation to facilitate rapid transportation of patients to hospitals. In addition, emergency centres have about 5619 emergency cars (MIHWFA, 2008) and 25 helicopters to dispatch rescuers and to pick up patients (Lee G, 2004).

A typical patient pathway in an emergency care situation is as follows. The process starts with an emergency call (119 or 1339) being placed. The communication satellite centre shows the caller's location and dispatches an emergency vehicle from the nearest 119 emergency centre. The emergency aid team in the vehicle can obtain appropriate and urgent information about the nearest emergency hospital from the control centre and transports the patient to this facility. These specialized services by 119 emergency centres are not related to the NHI scheme. However, all health care services provided after arrival at the hospital are covered by the NHI system.

6.6 Pharmaceutical care

The distribution of pharmaceuticals to the public is quite a complex process. When domestic manufacturers and importers obtain market authorization from the KFDA, wholesalers distribute drugs to sellers, such as hospitals and pharmacies. In hospitals, inpatients can obtain medicines from drug dispensaries within hospitals (where a 20% co-payment is charged), while patients using outpatient services receive prescriptions to obtain drugs from pharmacists. There were approximately 250 domestic drug manufacturers in 2004 and more new companies are entering the pharmaceutical industry. Total production by the drug industry was about 1.49% of GDP in 2007 and there were 72 170 employees working in the pharmaceuticals sector in 2007 (Korean Pharmaceutical Manufacturers' Association, 2009). Among the drug companies, only five manufacturers employ more than 1000 employees. Most companies are small-size enterprises employing around 30 workers. As the trend in globalization continues, mergers to increase company size will be inevitable if enterprises are to survive the strong competition from global, foreign drug companies.

The process of market authorization is not very complex. As in other countries, manufacturers have to submit data on safety and efficacy when they develop a new product. Moreover, there is no strict regulation to govern the availability of alternative or complementary medicines. No direct-to-consumer

advertising of prescription drugs is allowed (Art. 56 of the Medical Act), nor are mail order or Internet pharmacies permitted.

Price control of prescription drugs has been an urgent and important issue since 2000. Since then, various price control measures have been discussed, and some of them have actually been implemented. Price controls were inevitable in a situation where the proportion of pharmaceutical costs reached nearly 30% of total health care spending. As Table 6.4 shows, the growth rate of pharmaceutical costs has increased steadily over the past decade, taking an increasingly larger share of total health care costs. Among the price control policies, a positive list was introduced in December 2006. The newly adopted method was based on the assumption that continuing to allow the reimbursement of over 22 000 drug items, which were not excluded under the previous negative list system, contributed to increased drug expenditure. Therefore, curtailing the numbers of reimbursable drugs and explicitly placing them on a positive list became one of the easiest available options. As a result, unlike under the negative list system, all drugs that obtained market authorization from the KFDA would not automatically be reimbursable under the NHI scheme.

Under the new system, drugs that demonstrate cost–effectiveness can be included on the reimbursable (positive) list. Another policy taken to control drug prices is the method chosen to negotiate their reimbursable prices. To decide the price of a drug that is to be included in the positive list, the insurer (the NHIC) and the relevant pharmaceutical company start negotiations as soon as the decision on reimbursability is taken. The factors that determine whether a product can be reimbursed are based on efficacy, safety and economic evaluation. Other factors, including the expected volume of sales and patients using the drug, are also considered. There is, by and large, no regulation

Table 6.4 Trends in pharmaceutical costs as a proportion of total health care expenditure (billion won), 2001–2007

	2001	2002	2003	2004	2005	2006	2007
Total health expenditure (increase rate)	17 819	19 061 (7.0%)	20 533 (7.7%)	22 356 (8.9%)	24 797 (10.9%)	28 571 (15.2%)	32 233 (12.8%)
Drug expenditure (increase rate)	4 180	4 801 (14.9%)	5 583 (16.3%)	6 354 (13.8%)	7 229 (13.8%)	8 400 (16.2%)	9 500 (13.1%)
Ratio of drug expenditure to total health expenditure	23.5	25.2	27.2	28.4	29.2	29.4	29.5

Source: Lee P, 2008.

of wholesalers and pharmacies with regard to the prices of drugs. Neither the government nor the NHIC is directly involved in regulating drug prices in pharmacies. The price of generic products is decided by the Drug Price Reimbursement Scheme, which sets the price of the first generic on the market at 68% of the original (branded) drug's price. For further generics entering the market (i.e. second to fifth market entries), the price of the last generic is set at either the lowest price of those already available or 85% of the highest-priced pre-existing generic. The prices of over-the-counter (OTC) medicines are decided by pharmaceutical companies and are not regulated.

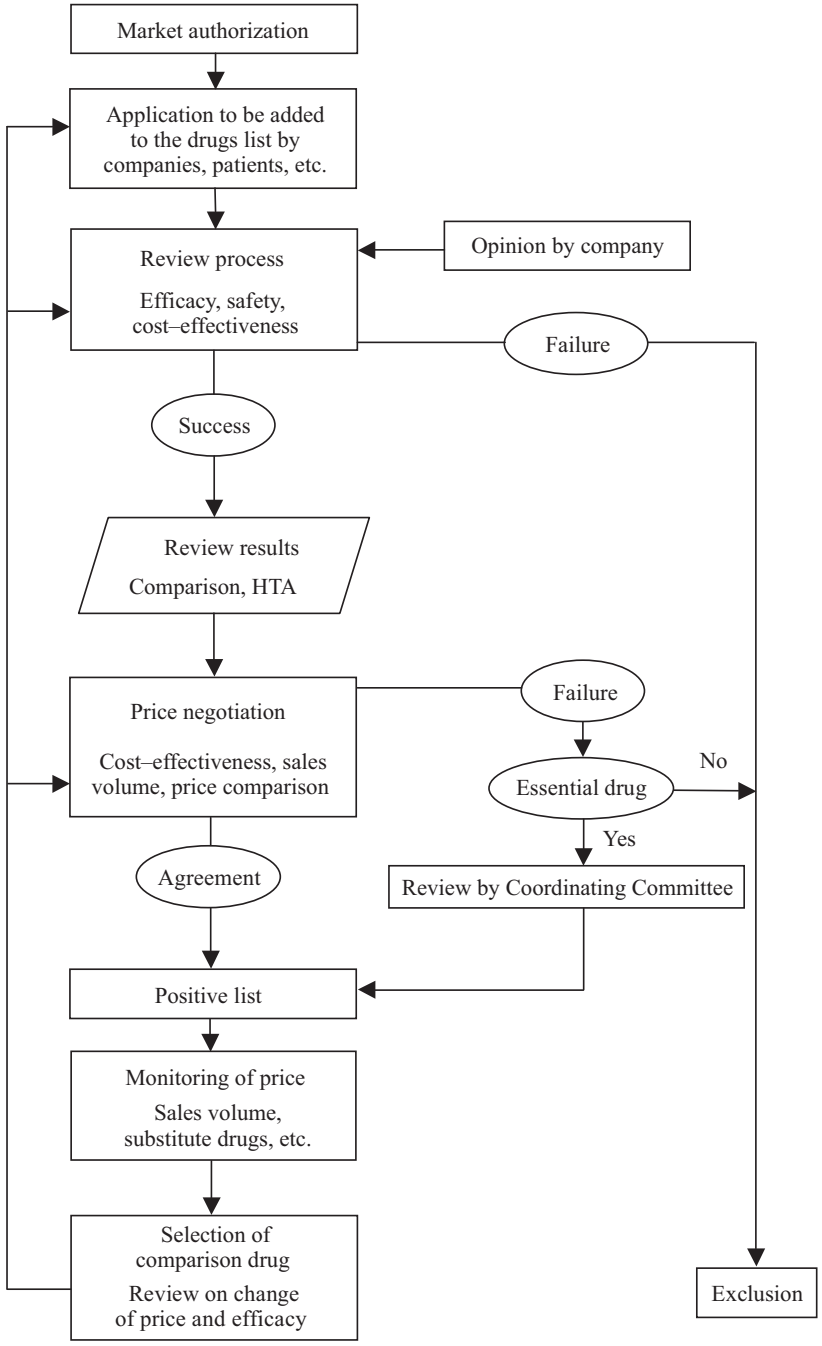
There are no special entry requirements to establish new pharmacies: according to the Pharmaceutical Affairs Act, pharmacies should be opened and operated only by qualified pharmacists and be equipped with the necessary facilities such as a dispensing room. As of December 2006, the number of pharmacies and pharmacists in the country was 20 633 and 31 237, respectively (NHIC, 2008a). Up until now, all drugs, including OTC medicines, are available only at pharmacies, although the sale of OTC medicines in supermarkets is being discussed.

Pharmacists can make generic substitutions if the substitution satisfies two conditions: firstly, the generic drug should have the same ingredients, dosage form and strength; and, secondly, pharmacists should first obtain the permission of the prescribing physician. In addition, an incentive scheme to promote lower-priced drug substitutions was implemented in 2001 as part of a wider strategy to contain pharmaceutical expenditure; 30% of the savings made from each substitution is given back to pharmacists who choose and dispense low priced drugs with bioequivalence. The total value of these incentives is increasing every year: it grew from 8 million won in 2003 to 81 million won in 2008 (http://www.dailymedi.com).

Public reimbursement of pharmaceuticals takes place through the 'actual transaction price' system, under which pharmacists are reimbursed the amount that the pharmacy actually paid for reimbursable drugs and takes into account any discounts given by the producer. This reimbursement method was adopted in November 1999 to keep pharmaceutical expenditure under control. In addition, pharmacists can claim a dispensing fee and drug management fee.

Figure 6.4 illustrates the procedure for a pharmaceutical to be added to the positive list of reimbursable items. Firstly, to enter into the market, drug companies must pass a series of tests set by the KFDA. After market authorization is achieved, manufacturers submit data to the Pharmaceutical Evaluation Committee at HIRA to obtain a cost–effectiveness review of the applicant drug. Lastly, upon completion of the review process, drug manufacturers begin negotiations with the NHIC on the (reimbursable) price of the drug.

Fig. 6.4 Process for inclusion in the reimbursable drug list



Co-payments on pharmaceuticals for people aged over 65 are lower than for other groups. The elderly pay a fixed amount of 1200 won if the price of the dispensed drug is less than 10 000 won. In addition, co-payments for orphan drugs are lower, so that patients who suffer from rare diseases only pay 10% as a co-payment. Pharmaceutical co-payments for cancer treatments are 10% of total drug expenditure (5% from December 2009), much less than for other types of inpatient and outpatient treatment where the co-payments are 20% and 30%, respectively.

In 2008, the Drug Utilization Review (DUR) programme, which will automatically monitor physicians' prescribing and pharmacists' dispensing patterns, was implemented to safeguard against adverse drug interactions and to improve the cost-effective consumption of pharmaceuticals. In the first stage of its operation, the DUR's computer system will check that no inappropriate prescribing is occurring in specific age categories, with a view to undertaking full monitoring at a later date. As expected, doctors opposed this monitoring system when the DUR was first implemented, but, in the end, providers have had to accept it and, as a result, almost all doctors have launched the new computer-based programme. It is expected that the system will be able to exert reasonable control over drug expenditure in the future.

6.7 Rehabilitation services

As more rehabilitative services are needed in modernized societies, the importance of such care has increased. A rise in the number of car accidents and an ageing population has put additional pressure on policy-makers to develop a coordinated strategic framework for rehabilitation services. So far, rehabilitation services tend to be integrated into part of the acute care structures in hospitals and clinics. As a result, after receiving treatment in hospitals most patients tend to stay in the same facility until their therapy is over. In particular, patients who need rehabilitative care by specialists (in some departments) have to stay in hospital for a long period as it is very difficult to find alternative specialized rehabilitative care facilities. However, for some rehabilitative services, patients can choose specific rehabilitative centres, of which there are many. Benefits under this type of care, such as paraffin baths for Hansen's disease, are covered under the NHI scheme if the services are medically necessary.

6.8 Long-term care

The rapid transformation of South Korea's demographic structure no longer makes it possible to maintain the traditional system of family-based long-term care for older people. According to a recent report, given that 63% of older citizens in need of care and assistance do not receive appropriate care from family or the community, there was no option but to establish a new long-term care scheme to deal with rapid demographic change (MIHWFA and NHIC, 2008). The long-term care programme began operations in July 2008 after a long gestation period.

Entitlement to long-term care services is granted to those aged 65 or over with chronic disabilities and diseases such as dementia and stroke. In some cases, those aged less than 65 are also entitled to services when they suffer from certain diseases, such as dementia and other old-age related diseases. Assessment is based on need and the assessment level is determined by the Long-term Care Needs Assessment Committee, which consists of 15 members. A decision on what long-term care category a person falls into is based on various criteria, including the person's health and functional status.

There are three assessment level categories (MIHWFA and NHIC, 2008):

Category 1 (needs assessment grade: more than 95 points):

- incapable of activities for daily living and getting in and out of bed;
- requires full assistance in all daily life activities; and
- has a condition with behavioural problems due to severe cognitive impairment.

Category 2 (needs assessment grade: 75–94 points):

- requires full assistance with eating, dressing and chewing; and
- reduced judgement abilities and memory with dementia.

Category 3 (needs assessment grade: 55–74 points):

- requires partial assistance with eating, dressing and bathing; and
- needs assistance for household activities or activities outside the home.

The long-term care scheme is financed through contributions paid by the insured, government subsidies and co-payments. Currently, the long-term care contribution rate is 4.78% of a person's NHI contribution (see also Chapter 2, Section 2.3). The government finances 20% of the expected total long-term care revenue every year, and co-payments from beneficiaries vary depending on the type of service used and category of beneficiary. The co-payment for home care is 15% of expenses, and for institutional care it is 20%. Those living on the poverty line as defined by the National Basic Livelihood Security Act are

exempted, and co-payments for those receiving an old age allowance is 50% of long-term care services received (see Chapter 3).

Long-term care services include home care, residential care and special cash benefit services. Home care is provided by care workers. Care workers in home care services visit beneficiaries' houses and assist with bathing, going to the toilet, dressing, cooking, grocery shopping, cleaning and so on. At the same time, institutional services provide long-term care services at licensed residential care facilities. In some cases, cash benefits are provided to help older people and their families defray the substantial costs of long-term care when older adults in need of care live in remote areas or islands (where few long-term care facilities are available), and when older people in need of care have difficulty being admitted to long-term care facilities due to natural disasters, or their physical, psychological and personal characteristics (MIHWFA and NHIC, 2008).

At the time of writing, the number of long-term care beneficiaries during the first year of the scheme's operation was expected to be around 150 800. Among these, about 39 000 people need residential care services, while about 100 000 people need home care services. The rest would be expected to obtain services in long-term care hospitals, which are specialized facilities for older people. Such services are not reimbursable from the NHIC, as they are not contracted health facilities. As of March 2008, there were 1543 residential facilities in service, while home care facilities numbered 1644 (NHIC, 2008b) (see Chapter 7 for more information on the establishment of the long-term care programme).

6.9 Services for informal carers

In oriental societies such as South Korea and China, informal care for parents by a family member has been a very common phenomenon throughout these countries' long histories. In particular, a generation ago, informal care was the only possible option for looking after the elderly and therefore no other policy was considered. It was common for wives, daughters and daughters-in-law to take care of the elderly suffering from dementia and other old-age related diseases. However, with rapid sociodemographic changes, informal services that depend on family carers are no longer a sustainable tool. In order to maintain traditional informal care in the midst of the new social structure, some policies that recognize the value of informal care are in place. One example is the tax exemption for informal carers who take care of and live with those aged 65 or over. Another policy revolves around incentives given to informal

carers – for instance, they are given additional points when they apply for public housing (based on apartment lottery contracts).

With regard to the number of individuals providing informal care, it is difficult to estimate exact figures. Before the long-term care scheme officially started, it would be true to say that the majority of over 65-year-olds were receiving some form of informal care through informal carers. Many elderly persons receive services from either home nursing or residential facilities, which are provided by local governments, religious and charity organizations, and communities. Table 6.5 shows the proportion of elderly households in 2004. According to a MOHW survey in 2004, the proportion of elderly people living alone and/or with only their spouse made up more than 50% of total old-aged households (MOHW, 2004a). Surprisingly, a survey by a research institute estimated that the proportion of households with occupants living alone and/or with only their spouse would increase to 70.0 % in 2010 (KIHASA, 2005). In these circumstances, and even with the implementation of the long-term care scheme, the number of informal carers is not expected to decrease rapidly in the near future.

Table 6.5 Proportion of elderly households, 2004

	Live alone (%)	Live with spouse only (%)	Live with children (%)	Others (%)
National level	20.6	34.4	38.6	6.4
Urban areas	19.2	31.7	42.2	6.9
Rural areas	23.6	40.3	30.9	5.3

Source: KIHASA, 2005.

6.10 Palliative care

Palliative care is one of the newer areas of the health care system. For example, hospice care started as a pilot project in 2003 for a two-year period, and some palliative care services are part of the national health care system. The medical aspects of palliative care and symptom management services are reimbursed, on an FFS basis, under the NHI system. For the pilot project, the government selected more than 30 palliative care centres for the allocation of government funds. Through the pilot study, the government aimed to secure an adequate

number of specialist palliative care teams, specialist nurses and care attendants. As palliative care services are not covered as NHI benefits, families caring for patients who need pain relief have difficulties accessing specialist palliative care services. Consequently, medical resources are not used as efficiently, as patients who need palliative care services have to occupy acute care beds in hospitals.

There are three types of palliative care facility. The first is located in a hospital and combines palliative care and acute care within a hospital building. The second and third types are separate and independent palliative care centres; the former locates palliative and acute care centres separately within a hospital's grounds while the latter is a specific facility for palliative care. In addition to hospital-based centres, Table 6.6 outlines other non-hospital based palliative care centres, such as home visits and day-care centres.

Table 6.6 Number and type of palliative care centres by ownership category

	Separated type	Combination type	Independent type	Home-visit type	Day-care type
Social welfare	–	3	4	5	–
Religious groups	–	3	2	8	2
Private groups	2	2	–	7	–
Hospitals	9	24	–	22	3
Clinics	2	1	2	7	2
Total	13	33	8	49	7

Source: MOHW, 2003.

With regard to specialists, there are various kinds of specialists involved in providing palliative care services in different types of facility, even though the number is small. As expected, the number of specialists will increase rapidly, as the government-led pilot study was successfully concluded in 2005. Based on the results of this pilot programme, the government is now considering the time frame to launch a new hospice scheme and which institution will act as the insurer organization for the scheme. Table 6.7 shows the number of people involved in palliative care facilities.

Table 6.7 Number of specialists in palliative care centres, 2003

	Medical facilities (40)		Nonmedical facilities (24)	
	No. facilities with these personnel	No. persons	No. facilities with these personnel	No. persons
Physicians	36	61	18	40
Nurses	35	151	17	43
Social workers	26	33	13	18
Religious	36	62	22	41
Volunteers	34	2 223	23	8 783

Source: MOHW, 2003.

6.11 Mental health care

As modern society has become more competitive and complex, the importance of mental health care policy has become a major issue globally. Mental health care policy is an area of much focus in South Korea, as interest in this area has increased over the last few years. There are some specific national strategies for mental health care, such as suicide prevention measures, a community-based mental health programme and a campaign for moderation in drinking. It is estimated that the prevalence rate of mental health conditions among the general population was 12.9% in 2006 (MIHWFA, 2008).[40] As a part of its general mental health care policy, the government built mental health hospitals in many locations to house patients with mental health disorders and to provide adequate care for these patients. In addition, hospitals and psychiatric clinics have mental health beds within their facilities, usually for temporary patients. There are approximately 1200 mental health care institutions across the nation, and these account for 69 702 beds. According to management type, 18 of the institutions are public mental health hospitals, 93 are private hospitals, and 813 are mental health clinics; the remainder are mental health facilities (wings or departments) within ordinary hospitals (MIHWFA, 2009b).

The Mental Health Act (1995) established a framework for the direction of mental health care policy. It describes the role of both the central and local governments for the management of mental health conditions. To provide an adequate number of beds for mental health patients, Art. 8 stipulates that "local governments should build and operate mental health hospitals".

[40] This figure has increased significantly compared to the prevalence rate of 2.16% for mental health conditions in the late 1980s.

In addition, several articles obligate MIHWFA to evaluate the quality of mental care facilities every three years. Furthermore, to safeguard against inappropriate compulsory treatment or detention, the Act requires owners of mental health care facilities to ask patients and family members whether they want to stay in the facility each year. Specifically, MIHWFA announced a comprehensive plan to secure the human rights of patients housed in mental health hospitals and other types of facility. The measures include the following requirements (MOHW, 2004b):[41]

- civic group participation in the Mental Health Care Deliberation Committee and in the process of quality evaluation of mental care facilities;
- education on human rights for staff in mental health hospitals;
- transparent and thorough admission and discharge procedures;
- expansion of mental health care infrastructure; and
- health information provision on mental health treatments.

An indirect way of quantifying the scope of provision of mental health services is to look at the data on professionals involved in the delivery of mental health care services. Many types of medical professional work in this area. Table 6.8 outlines the number of specialists working in the sector in 2008.

With regard to treatments received in hospitals, most individual mental health treatments are listed in the NHI benefit package and are covered by the national insurance scheme. Inpatient fees are calculated on a capitation basis. For treatment of patients with cognitive and affective disorders, patients, in general, first use the mental health department within acute hospitals to receive diagnoses and treatments. After this, if patients need longer-term treatment, they can use mental health hospitals.

Table 6.8 Number of professionals working in the mental health care sector, 2008

	Number
Psychiatrists	2 872
Psychologists	178
Psychiatric nurses	1 797
Mental health psychologists	354
Mental health social workers	992
Social workers	1 488
Psychiatric social workers	992

Source: MIHWFA, 2008.

[41] These measures were already reflected in the amendment of the Mental Health Care Act (2008).

6.12 Dental care

Although all dental clinics and hospitals are under the compulsory contract system, OOP payments are relatively high due to the large number of treatment exclusions from the NHI benefit package. The benefit package includes treatments such as examinations, diagnosis, root canal work and extractions, but excludes many others, such as fillings, crowns, dentures and bridges, for which patients must pay out of pocket. Faced with criticism over the high levels of OOP expenses and the incompleteness of the dental health package, in June 2009 the government announced the inclusion of new benefit items: sealant[42] services for children aged 5–14 (from December 2009) and dentures for those over 75 (from 2012) (MIHWFA, 2009a).

To ensure good dental care services, in January 2000 the government passed a basic law to improve the population's dental health. The Oral Health Act (Act No. 8852) stipulated the obligation that central and local governments have to provide good oral health. For instance, comprehensive action plans, many of which were preventive dental health programmes, were developed in various areas, including water fluoridation, school oral health, mother–child oral improvement, oral health for the ageing population and infant oral improvement. In addition, central and local governments must allocate sufficient funds for implementing these plans. As an example, a sealant service for children's oral health is provided to primary school students. Public health centres in most local government areas provide this service for poor households free of charge (MOHW, 2005).

Prices for dental services listed in the NHI benefit package are regulated. National tariffs defining benefit items and medical fees strictly regulate the prices of all treatments and dental materials for services that are covered by the NHI. In contrast, the prices of treatments that are excluded from the NHI benefit package are not regulated. For example, dentists can charge whatever prices they wish for dentures and crowns, and patients have to pay the full price out of pocket. To monitor the quality of dental care services, the Dental Care Service Review Task Force Team[43] has begun to review the dental care sector every year. In 2007, a pilot study to review the quality of care in dental hospitals was implemented for a three year period. Actual evaluations of dental hospitals will take place from 2010 after the completion of the three-year pilot study (KIHASA, 2008a).

[42] A plastic resin used in dentistry to coat the chewing surfaces of the back teeth to prevent the growth of cavity-causing bacteria.

[43] The task force membership includes representatives from academia, civic groups and the dental association.

6.13 Complementary and alternative medicine

CAM refers to a broad set of health care practices that are not part of a country's own tradition, or not integrated into its dominant health care system (Mossialos, Allin and Figueras, 2007). In other words, WHO defines it as "health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises to treat, diagnose and prevent illnesses or maintain well-being" (http://www.who.int). Unlike western countries, many oriental countries such as South Korea, Japan and China tend to use and treat CAM as an important part of orthodox medicine. For example, in South Korea, some oriental medicine treatments, such as acupuncture and herbal medicines, are included in the NHI benefit package, and thus CAM forms an essential part of the health care system.

Because it is part of the mainstream health care system, or more appropriately, because of CAM's role in South Korea's long medical history, regulation has been inevitable. The government and the national insurer, the NHIC, treat CAM the same way as western medicine, since CAM has been covered by the NHI since 1989. Cerebrovascular, sprain and joint fractures are common diseases for which CAM treatments such as acupuncture and various types of herbal medicine can be used.

Some available data on the number of medical professionals working in the area and the size of CAM expenditure may shed some light on the important role of herbal medicine. As of December 2006, the total number of oriental medicine facilities was 10 442 (145 hospitals and 10 297 clinics). At the same time, there were 13 523 oriental medicine physicians. Health expenditure on oriental medicine is about 5.97% of total health care expenditure (NHIC, 2008a).[44]

With regard to future developments in CAM, there is a great deal of support for it among the government and medical experts. According to a survey by the Korean Oriental Medicine Association, CAM's market expansion will increase rapidly in future in Asian countries, and currently is equal to US$ 35 billion. Furthermore, the study pointed out that the prospects for oriental medicine are very bright, particularly due to the following causes: the expansion of CAM demand among the ageing population, an increase in self-medication by patients, growing attitudes valuing naturalism, and the safety and efficacy of CAM (http://www.medipharmnews.com).

[44] This figure is calculated from the items covered under the NHI benefit package only; therefore, expenditure on the large number of excluded items will be substantial.

6.14 Health care for specific populations

As mentioned in Chapter 2, the majority of South Koreans, more than 96% of the total population, are beneficiaries under the compulsory NHI system. The remaining 3–4% are insured under the MAP programme, which provides medical services for the poor. Other specific populations, such as foreign residents, have varying degrees of access to health care services. Foreigners who are employed in companies are entitled to receive NHI benefits in the same way as the domestic population, provided that they pay their contributions based on their income. Foreigners who have self-employed status, such as students, researchers and consultants, are also entitled to be covered by the NHI if they wish to be enrolled and pay their contributions. However, illegal immigrants and temporary travellers are not entitled to access national health care services, but can obtain care provided that they pay out of pocket for any treatments they receive.

7 Principal health care reforms

When the Korean peninsula was liberated from Japanese colonial rule in 1945, the country's infrastructure had been destroyed. In the 1950s, the economy relied mainly on aid from abroad (Hoare and Pares, 2000). However, entering the 1960s, and with severe poverty still predominant, South Korea concentrated on accelerating industrialization and economic development. This push for economic development was even more pronounced during the 1970s, when it was accompanied by an 'economic growth at all costs' ideology (Buzo, 2002). In this environment, matters of social welfare and health care were not considered to be major policy issues.

South Korea began to pay attention to health care from the late 1970s, albeit in a very weak way, with the introduction of the health insurance scheme in 1977. Since the 1980s, general concerns about health care have grown rapidly, in line with continued improvements in economic performance. In parallel, with the consecutive introduction of many insurers in a multi-fund system, the need to reform the health care system also increased. A further factor impacting on reform developments was the successful nationwide expansion of health insurance coverage in the late 1980s; with this expansion, the general public's interest in health care and their concerns about reform also grew. In particular, spurred on by progress in political democratization, pressure was exerted by external forces, including civic groups.

Against this backdrop, reform has kept pace with the steady institutionalization of health care since the 1980s. Table 7.1 outlines some of the major events.

Among the diverse examples in Table 7.1, this chapter analyses in more detail five reforms that have special importance for policy-making and health system dynamics: (a) the reform that prohibits doctors from dispensing medicines to patients from their clinics and bans pharmacists from prescribing drugs; (b) the merger of multiple health insurance funds into a single insurer;

Table 7.1 Major health reform events

Date	Reform
July 1977	Start of statutory NHI scheme
February 1987	Health insurance benefits coverage extended to oriental medicine
July 1989	Universal health insurance coverage achieved
October 1989	Health insurance benefits coverage extended to pharmacies
July 2000	Separation of drug prescribing and dispensing introduced
	Single-payer system implemented
July 2008	Long-term care insurance scheme for the elderly launched

(c) the introduction of the long-term care insurance scheme; (d) the gradual expansion of the NHI benefits package; and (e) we also look at another issue currently being debated extensively among policy-makers and health sector stakeholders, namely, whether to allow FPHs to operate within the health care system.

7.1 The separation of drug prescribing and dispensing

7.1.1 Clarifying occupational remits

The separation of drug prescribing and dispensing responsibilities (henceforth 'the separation') aims to provide the general public with better quality medical services and to prevent the misuse and overuse of medicines by ensuring that two major health care professionals – physicians and pharmacists – operate within a framework of checks and balances. This separation was needed to clarify the respective occupational remits of physicians and pharmacists, who for a long time had benefited financially from the accepted practice that allowed both professionals to provide medications to patients (Lee J, 2000). Before the separation in 2000, physicians habitually dispensed the drugs they prescribed in their offices (charging their own prices), while pharmacists were able to dispense drugs without a doctor's prescription. Although this practice was deemed to be convenient for both physicians and patients, it had the potential to cause harm to patients. For example, side-effects from medicines (incorrectly) prescribed by pharmacists could threaten the health of people who take the drugs dispensed.

The Ministry of Health and Social Affairs (MHSA) began its efforts to separate the two functions and to differentiate medical practices from dispensaries in the early 1960s by revising the Pharmaceutical Affairs Act. However, the effort was frustrated repeatedly by the government's irresolution and opposition from both physicians and pharmacists. In the early 1980s, the government again tried to introduce the reform. Between 1982 and 1984, it carried out a pilot project in Mokpo City where a pilot regional health insurance programme was also being implemented. At the time, physicians and their national association, the KMA, opposed the reform, eventually giving the government no other option but to abandon it (Lee S, 2003). A further attempt to enforce the separation also failed in the late 1980s because of physicians' strong opposition.

In 1994, the Pharmaceutical Affairs Act was revised following a debate on the composition of herbal medicines between pharmacists and oriental medicine doctors; the bill included a provision for the mandatory separation of prescribing and dispensing within three to five years. Following this decision, the Medical Care Reform Committee in the MOHW (this Ministry later became the MIHWFA) recommended, in 1997, that the separation be implemented gradually from 1999 to 2005. Adding impetus to the reform, presidential candidate Kim Dae Jung included the separation as one of his election pledges in the 1997 election, confirming it as one of the 100 major tasks to be tackled by his administration (Cha Y, 2007).

7.1.2 Implementing the separation as a key health care reform

When the Kim Dae Jung Government came to power in 1998, the debate on the separation of prescribing and dispensing began in earnest. In contrast to earlier attempts, this time both physicians and pharmacists did not oppose the introduction of the reform per se, since the revised Pharmaceutical Affairs Act (1994) had already confirmed its implementation within a specified time period. Instead, they tried to delay implementation. However, once it became clear that even this tactic would not work, given the countervailing pressure from civic groups, physicians and pharmacists tried to amend the terms of the separation to their advantage. Physicians aimed to compensate for any loss of income by raising their medical fees, and pharmacists asked for the creation of a dispensing fee to bolster their revenues once the reform took effect.

The separation debate can be divided into several stages, taking into account major players and policy brokers. The first stage started when MOHW made public, in March 1998, its intention to drive forward the separation reform and ended in November 1998, when both physicians and pharmacists publicly requested its postponement.

In May 1998, MOHW established the Council for Promoting the Separation of Dispensing and Prescribing, whose remit was to study appropriate models to implement the separation of functions. The Council consisted of representatives from MOHW (who were key actors) and physicians, pharmacists and civic groups, and it steered the terms of the debate during this period. By holding five meetings between May and October 1998, the Council was able to reach an agreement to implement the reform fully. However, medical and pharmaceutical interest groups, represented by the KMA and the Korean Pharmaceutical Association (KPA), respectively, then began to argue that the reform should be delayed as the conditions were not yet right for its implementation. They also lobbied congressmen to block the legislation (Kim Y, 2003). The situation was counterbalanced by civic groups, who accused the medical and pharmaceutical professionals of being selfish, with some civic groups revealing that physicians were also planning to raise their medical treatment fees should the reform go ahead.

The second stage of the debate started in early December 1998, when President Kim Dae Jung ordered the ruling National Congress for New Politics (NCNP) Party to play a leading role in settling the dispute. The NCNP proposed an alternative policy on 23 December 1998[45] and bargained with the KMA and the KPA over the details of implementation. The NCNP agreed a final compromise on February 1999, but first-line physicians refused to accept it, whereas pharmacists supported it. Despite these objections, physicians were forced to accept the separation, as both the NCNP and MOHW were determined to implement the reform as planned. In response, physicians and pharmacists suggested a postponement of one year and agreed to accept any new alternative terms mediated by civic groups. This compromise was accepted.

It was natural that civic groups emerged as key policy brokers during the third stage of the separation debate from March 1999. Major civic groups formed the Citizen's Committee for the Separation of Dispensaries from Medical Practices in March 1999 to negotiate the final (amended) terms of the separation. The Committee suggested a final mediation in May 1999 on the grounds that the reform would be enforced by July 2000. In addition, the Committee recognized that there were some exceptional types of products (e.g. prescribed intravenous medicine) and permitted some pharmacists (e.g. in remote villages) to prescribe these. This mediated alternative was accepted by both the physicians' and pharmacists' associations. Following this compromise between civic groups and health care professionals, MOHW formed the Executive Committee for the Separation of Dispensaries from Medical Practices (ECS), with representatives

[45] Although there were few differences between the NCNP proposal and the original, the fact that it came from the powerful ruling political party gave the policy considerable authority.

from the MOHW, physicians, pharmacists and civic groups, to concretely shape the mediated agreement. Even though front-line physicians again raised objections, the ECS persevered and the revised Pharmaceutical Affairs Act was passed by parliament in December 1999 (Ahn, 2001). However, as the National Assembly was debating the revisions to the Act, fierce protests from physicians began again. Between November 1999 and July 2000, physicians mobilized diverse means of opposition, including street protests and wide-scale strikes. During this period, even though civic groups criticized physicians' self-interested behaviour, the latter did not seem to take account of the criticism. Confronted with this fierce opposition, the government again revised the legislation in July 2000 to prohibit pharmacists' quasi-prescribing without physicians' prior agreement and pharmacists' sale of medicine by individual tablets. This final revision allowed the reform to go ahead from August 2000 (Lee K and Kwon, 2004).

Despite reaching a final agreement, this resolution did not mark the end of conflict, but rather saw the start of further disputes between the government and physicians. Although the separation began in July 2000, physicians again staged demonstrations; in particular, interns and residents in general hospitals raised objections that their incomes would be reduced if they were not permitted to sell medicines. In response, the government proposed various inducements, including a public apology and the resignation of the Minister of Health and Welfare,[46] and eventually succeeded in forming a tripartite body with the participation of MOHW, KMA and KPA. This body finally agreed to rewrite the Pharmaceutical Affairs Act in November 2000 and the legislation was revised again in February 2001 with provisions to safeguard incomes.

The separation reform had both positive and negative effects. In terms of antibiotic use, the number of antibiotics prescribed by doctors dropped after the reform. As Table 7.2 shows, the average number of prescribed antibiotics per prescription dropped to 0.51 items in May 2004 from 0.90 items in May 2000. In addition, the proportion of prescribed antibiotics (as a percentage of total prescriptions) decreased to 38.79% from 54.70% over the same period (KIHASA, 2008b). However, the policy also might have brought about some unintended consequences. According to a study by Kim H and Ruger (2008), the separation of prescribing and dispensing increased the cost of pharmaceuticals per episode by 11.80% (from 1170.20 won to 1308.30 won). This result might be due to a change in the prescribing behaviour of doctors. Without incentives (income) under the new system, physicians tend to prefer expensive branded drugs to inexpensive ones.

[46] Citizens demanded some accountability, as the volatile reform process caused upheavals in many medical establishments and doctors' strikes contributed to the deaths of some patients.

Table 7.2 Change in antibiotics prescribed, 2000–2004

	May 2000	May 2001	May 2002	May 2003	May 2004
No. of antibiotics prescribed per prescription	0.90	0.79	0.69	0.55	0.51
Percentage of antibiotics prescribed per total prescriptions	54.70	53.43	48.35	40.99	38.79

Source: KIHASA, 2008b.

7.2 Merger of health insurance funds

7.2.1 The long journey towards the unified health insurer system

Although the Medical Insurance Act was enacted in 1963, voluntary affiliation was destined to fail given the economic conditions of the time – that is, per capita GDP was less than US$ 100 (Korean Government, 1962). In 1976, the government completely revised the Act to make national insurance compulsory from July 1977, offering obligatory coverage to employees in companies with 500 or more workers. From the very beginning, South Korea adopted a health insurance system rather than a tax-based national health service, given the limited supply of health care institutions in the public/private sector and the government's unwillingness to shoulder a greater financial burden for health care provision (Kwon, 2002). Table 7.3 provides a timeline of major milestones in achieving health insurance coverage and unifying multiple insurance funds.

When compulsory health insurance began in 1977, South Korea adopted a multiple insurer system to cover company employees and the self-employed, giving each health insurer administrative and financial autonomy. It was thought that a multiple insurer system would be more effective in gradually extending health insurance coverage and avoiding a financial burden on the part of the state. However, it soon became clear that the multiple insurer system produced inequity between policyholders from different socioeconomic groups and exerted downward pressure on insurance benefits across the board (Cha H, 1992). Moreover, small- and medium-sized health insurance funds were less efficient in delivering health services. In parallel, in 1979, the government established the Korean Medical Insurance Corporation (KMIC) for government and private school employees. Therefore, until the organizational merger of all health insurers in July 2000, South Korea maintained a dual health insurance

Table 7.3 Major milestones in the National Health Insurance system

Year	Milestone
1963	Enactment of the Medical Insurance Act providing voluntary participation in health insurance for company employees and the self-employed
1976	Amendment of the Medical Insurance Act to make health insurance coverage compulsory
1977	Start of compulsory health insurance
1979	Start of the health insurance scheme for government and private school employees and the establishment of the single insurer for these groups, the Korean Medical Insurance Corporation (KMIC)
1981–1982	Pilot programme for extending health insurance to the self-employed
1988	Health insurance scheme for the rural self-employed
1989	Health insurance scheme for the urban self-employed
1997	Enactment of the National Medical Insurance Act to partially merge insurers for the self-employed with the KMIC
1999	Enactment of National Health Insurance Act, which merged insurance funds but excluded the integration of the Medical Aid Programme for the poor
2000	Establishment of the National Health Insurance Corporation
2003	Merger of finances of the health insurance funds

system, consisting of the KMIC, on the one hand, and multiple insurers for company employees and the self-employed, on the other (NHIC, 2004).

As the health insurance programme was extended to cover the self-employed in the 1980s, there were heated debates about the form that the health insurance system should take. While advocates of a single insurer scheme insisted on the merits of an integrated system in achieving a balance between health insurance benefits and premiums, the proponents of the multiple insurer system emphasized the benefits generated by the autonomy of each insurer (Kwon, 2002). The merger debate has continued for nearly two decades, making it a symbolic policy in the field of health care reform.

The head of the (then) MHSA initiated the first merger debate in September 1980. He announced publicly that the government would move towards the establishment of a single, unified health insurance scheme to lay the foundations of a nationwide health insurance programme (Wong, 2004). The ruling party supported the statement, but staff in the Office of the President persuaded the president to oppose the merger of health insurers, emphasizing the potential problems that might arise in a single insurer system (Lee K, 2000). Public health insurers providing policies for company employees and business associations

also advocated the maintenance of the multiple insurer system (Chun, 2005). Despite turbulence between 1980 and 1982, the issue did not make any additional headway, given the opposition from the Office of the President, and, in fact, in November 1982, the president ordered a stop to further debate on the merger of health insurers.

The second merger debate was initiated by the introduction of the health insurance scheme for the rural self-employed in January 1988. In contrast to the first debate, the ruling party and the MHSA switched their positions to support the multiple insurer system, citing the unequal distribution of medical institutions between regions.[47] Notably, South Korea's political system changed dramatically in the mid-1980s, making a transition from authoritarian politics to the current democratic system (Kihl, 2005). Thus, farmers' groups and progressive health care professionals played key roles in triggering the second debate. Opposition parties held the parliamentary majority in the 1988 general election, and they promoted the merger of health insurers on the grounds that it would promote social equity and solidarity. Even though legislation for the merger of insurance funds was passed in an opposition-dominated National Assembly in March 1989, the second attempt was again frustrated by a presidential veto (Choi J, 2003; Chung and Cho, 2001) (see Chapter 2).

Entering the 1990s, civic groups formed a united front to propose the merger of health insurers, but the Kim Young Sam Government (1993–1997) stuck by the multiple insurer system. Confronted by the government's tenacious attachment to this system, civic groups pressured opposition parties to promote their goal. The two main opposition parties responded by proposing a merger bill in 1996, even though it was invalidated by the objections of the ruling party, which had a parliamentary majority (Kim J-D, 2002). However, approaching the 1997 presidential election, the political map changed in favour of proponents of the merger. The ruling party altered its position to back the merger, anticipating the benefits in the coming election. In these circumstances, the National Assembly passed the National Medical Insurance Act in November 1997, which aimed to partially merge the 227 insurers for the self-employed with KMIC. As a result, the National Medical Insurance Corporation (NMIC) was established in October 1998. However, MOHW (the new name of the MHSA), was reluctant to implement the partial merger (Kim Y, 2003).

[47] The Ministry feared that, under a single-payer system, rural residents might be less likely to access medical facilities, inevitably causing dissatisfaction among the rural insured.

7.2.2 Completion of the full merger of health insurers

The merger debate became particularly turbulent during the Kim Dae Jung Government and was transformed into a symbolic agenda for health care reform. Kim Dae Jung, who had been an ardent supporter of the single insurer system, won the December 1997 presidential election. As a matter of course, he had proposed the merger of health insurers as another of his election pledges (see above for an account of his other major reform). But even under this new political situation, MOHW tried to block the implementation of the agreed partial merger by lobbying the Presidency Undertaking Commission (PUC), a government transition committee that designs major policies for incoming presidents (PUC, 1998).

It was the KTC, made up of government, business and labour representatives, that decided to proceed with the full merger of health insurers (henceforth, 'the full merger'), including all management organizations and their finances. The KTC agreed, in February 1998, to legislate for the full merger by the end of 1998 and added it to the 100 national policies to be pursued by the Kim Dae Jung Government. MOHW then had to change its mind to play a practical role in drawing up a government draft (Korean Tripartite Commission, 2008).[48] In October 1998, the NMIC was established by partially merging the management organizations of self-employed insurers with that of the government and private school employee insurance fund (Kim J-D, 2002).

The final stretch of the road to achieving the full merger was characterized by many more detours. While a government bill to fully merge all health insurers was passed by the State Council (the Cabinet) in December 1998, the main opposition Grand National Party planned to amend the National Medical Insurance Act to incorporate the government-sponsored MAP for the poor into the NHI scheme. However, the parliamentary Standing Committee on Health and Welfare introduced alternative legislation for the full integration of insurers in December 1998, which aimed to establish a single health insurer in terms of both organization and finance, but excluded MAP from the NHI scheme (Cho W, 2001). Meanwhile, another of the National Assembly's committees, the Legislation and Judiciary Committee, recommended that the finances of self-employed insurers be separated from those of employee insurers, worrying that problems may arise from a financial merger of the various funds – for example, if one insurer had accumulated large surpluses while others had large deficits (Chung and Cho, 2001) (see also Chapter 2).

However, the Legislation and Judiciary Committee was unable to reach agreement, due largely to the Grand National Party's boycott of any plans that

[48] Because the Ministry previously had opposed the merger, the incoming government did not assign a major role to it in the pursuance of the policy.

did not include the incorporation of MAP into a NHI scheme. The National Assembly's Speaker then referred the Standing Committee on Health and Welfare's full integration policy to the Assembly's plenary session, without the agreement of the Legislation and Judiciary Committee. This plenary session endorsed the policy proposal as the National Health Insurance Act in January 1999 without the attendance of opposition members (Shim, 2004) and the Act came into force in February 1999.

After the National Health Insurance Act came into force, supporters of the mergers' major concerns shifted to the still unresolved practical issue of how to implement a full financial merger among insurers, which threatened to stall the organizational merger. Despite legislation to the contrary, the opposition Grand National Party still advocated a separate financing system in the hope that the delay caused in trying to renegotiate this aspect of the reform would postpone the merger of insurance funds indefinitely or perhaps even derail it completely (Kim S-Y, 2006). Meanwhile, the ruling party and the government planned to delay the organizational merger for six months and the financial merger for two years in order to accommodate concerns and to keep the reform alive (see Chapter 3). In contrast, civic groups insisted on the immediate and full merger of health insurers both organizationally and financially, as prescribed by legislation.

Therefore, the attempt to revise the National Health Insurance Act began in earnest from the middle of 1999. In September 1999, MOHW requested the National Assembly to put off the organizational merger for six months (Chung and Cho, 2001). Conservative trade unions that were reluctant to support the full merger also filed a petition asking for a deferral (FKTU, 1999). As before, the Assembly's Standing Committee for Health and Welfare put forward a substitute that combined various suggested bills, and it was endorsed in December 1999. With this decision, the National Health Insurance Act was revised to postpone the organizational merger of health insurers until June 2000 and the financial merger until December 2001. In July 2000, the merger was implemented as scheduled, thus launching a single unified health insurer, the NHIC.

Merging the insurance funds financially was an even bigger challenge because of the difficulties involved in developing a single criterion to set the insurance contribution rate. The government and the ruling party wanted to delay the timing of the financial merger, while opponents of the merger argued that it should be cancelled altogether. During the 2002 presidential election campaign, the ruling party promised to proceed with the financial merger as agreed, whereas the main opposition candidates supported the idea of maintaining the multiple financial systems by types of policyholder. As the ruling party candidate Rho Moo Hyun won the election, the financial merger

was finally implemented in July 2003. Table 7.4 provides a brief chronology of the process leading to the full merger of health insurers, while Table 7.5 compares the changing positions of participants in the full merger debate.

Looking back nine years after the implementation of a single insurer system in South Korea, one lesson is clear – health care reform is not easy. As illustrated by the current attempts at health care reform by the Obama administration in

Table 7.4 Chronology of events leading to the full merger of health insurance funds

Year	Event
November 1997	Enactment of the National Medical Insurance Act (partial merger of the management structures of health insurers)
October 1998	Establishment of the NMIC (by integrating 227 self-employed insurers with the KMIC for government/private school employees)
January 1999	Enactment of the National Health Insurance Act (full organizational and partial financial mergers by December 1999 and full financial merger by December 2001)
December 1999	Revision of the National Health Insurance Act (deferral of the merger: organizational merger by June 2000, partial financial merger by December 2000, and full financial merger by December 2001)
July 2000	Full organizational merger (inauguration of the NHIC as a single insurer by integrating 140 employee insurers with the NMIC)
January 2002	Postponement of scheduled full financial merger until June 2003

Notes: NMIC: National Medical Insurance Corporation; KMIC: Korean Medical Insurance Corporation; NHIC: National Health Insurance Corporation.

Table 7.5 Participants' changing positions during the full merger debate

		Supporting the merger	Opposing or postponing the merger
1998	Official actors	OP, OPM, KTC	MOHW officials (not openly)
	Unofficial actors	Ruling party, opposition parties, civic groups, KCTU, self-employed insurers union, etc.	FKTU and employee insurers union, business interests, etc.
1999	Official actors	MOHW officials	MOHW (not openly) and other government departments
	Unofficial actors	Civic groups, KCTU, self-employed insurers union, etc.	FKTU and employee insurers union, business interests etc.

Notes: FKTU: Federation of Korean Trade Unions; KCTU: Korean Confederation of Trade Unions; KTC: Korean Tripartite Commission; MOHW: Ministry of Health and Welfare; OP: Office of the President; OPM: Office of the Prime Minister.

the United States, any reform brings together many conflicting stakeholders who struggle to safeguard their interests. Stakeholders who expect to lose out from reform measures inevitably oppose them, while stakeholders who stand to gain express strong support. For instance, the provider organizations in South Korea resisted the insurer merger, fearing the monopsony power that could be exerted by a single public organization. In the South Korean political and policy context, eventually most health care reform tends to involve difficult rounds of negotiations and conflicts. However, such situations also mean that reform attempts do not end in deadlock.

7.3 Implementation of the long-term care insurance scheme

7.3.1 Rapid increase of population ageing

In the 1960s and 1970s, South Korean society experienced problems with rapid population growth. A campaign slogan encouraging low fertility stated, 'have fewer babies, bring them up well'. However, about two decades later, the situation was reversed, with a falling fertility rate reaching 1.19 per 1000 population, the lowest rate in the world. Therefore, the government is now dealing with low fertility as a priority in order to maintain the sustainable growth of the health care system as well as a sustainable society. A special task force, the Low Fertility and Ageing Society Committee, was set up within MIHWFA to suggest reasonable social policies that might result in increased birth rates. As Table 7.6 shows, however, despite all efforts, the fertility rate did not increase between 2005 and 2008.

More alarmingly, the speed of ageing in South Korea is projected to be much faster compared with other countries. The percentage of older people (aged 65 or over) is expected to reach 14% by 2018, taking just 18 years to double the current figure of 7%; this is the shortest period for such an increase among developed countries (Table 7.7).

Table 7.6 Change in total fertility rate[a], 1960–2008

Year	1960	1970	1980	1990	2000	2005	2006	2007	2008
Fertility rate	6.00	4.53	2.83	1.59	1.47	1.08	1.12	1.25	1.19

Source: National Statistical Office (various years), *Report on census.*

Note: [a]Fertility rate is the number of live births per 1000 women of childbearing age.

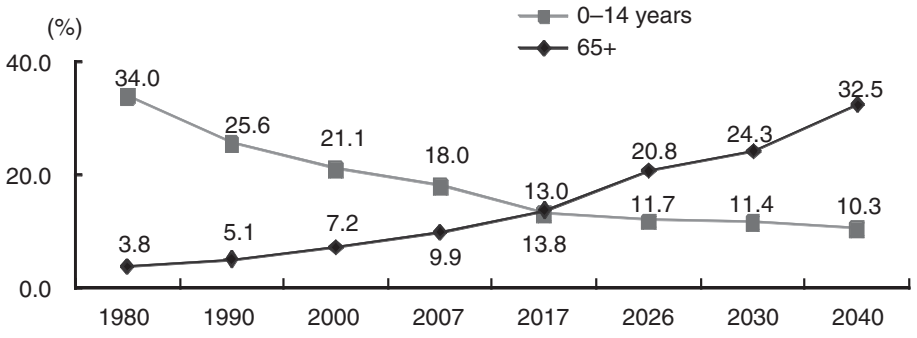
Table 7.7 Speed of population ageing, selected countries

	Share of elderly in total population			Duration (years)	
	7%	14%	20%	7%→14%	14%→20%
	Year	Year	Year		
France	1864	1979	2020	115	41
Germany	1932	1972	2012	40	40
Italy	1927	1988	2007	61	19
Japan	1970	1994	2006	24	12
Republic of Korea	**2000**	**2018**	**2026**	**18**	**6**
Sweden	1887	1972	2012	85	40
United Kingdom	1929	1976	2021	47	45
United States	1942	2013	2028	85	15

Source: Jeong, 2006.

The rapidly ageing population will have a significant impact on the country's age dependency ratio. While it was 7 people aged 20–64 for every person aged 65 and over in 2008, the ratio will decrease to 1.4 people in the working population for every elderly person by 2050 (NHIC, 2008b). This ratio is significantly lower than the projected OECD average of 2 to 1 (*Economist*, 2009). Figure 7.1 is a demographic projection of different age groups and highlights the dual problem of low fertility and an ageing population in South Korea.

Fig. 7.1 Demographic projection of age groups in the Republic of Korea, 1980–2040



Source: National Statistical Office, 2004.

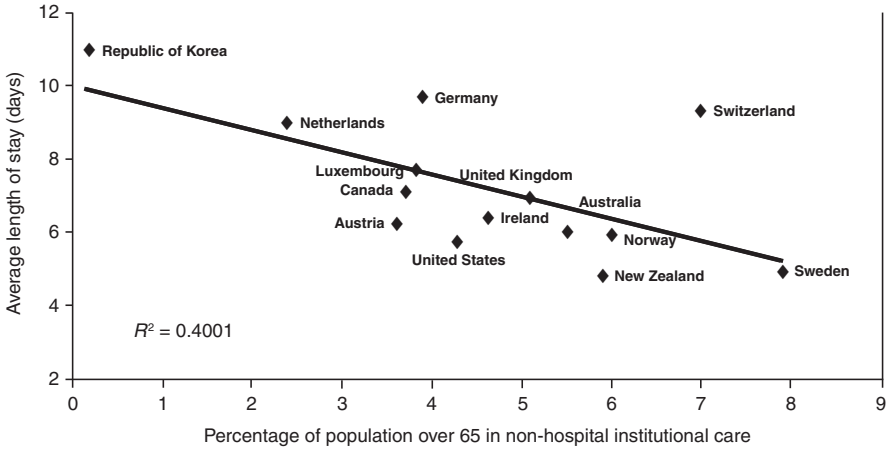
7.3.2 Implementation of the long-term care insurance scheme

In short, amid the rapid growth of the ageing population and changes in family structure, launching the long-term care scheme was inevitable. In July 2008, after a third pilot study was successfully completed, the full long-term care insurance scheme was launched as part of the social insurance system (NHIC, 2008b). In the demographic context described above, traditional informal care by family members of parents and grandparents is no longer sustainable. Moreover, the long-term care insurance scheme was needed by the health care system in order to control rapidly increasing health care expenditures due to rising lengths of stay in acute hospitals by the elderly. It is expected that new efficiencies will be gained by the ageing population using long-term care facilities instead of acute hospitals. As Fig. 7.2 shows, the average length of stay in acute hospitals for those over 65 years is much longer in South Korea compared to other countries, while the receipt of care in designated long-term care institutions is lower.

The first proposal for a long-term care scheme emerged in October 2001, when President Kim Dae Jung suggested that it was necessary to establish a system of long-term care to deal with social problems arising from elderly people's care. Later, in March 2003, the Task Force Team for Public Long-term Care was established under the then MOHW (now MIHWFA). A pilot project followed in July 2005 for a term of three years (until June 2008).

In the midst of the pilot project, the Long-term Care Insurance Act was passed by the National Assembly in 2 April 2007. The Act sets out basic and specific

Fig. 7.2 Length of stay in acute hospitals and percentage of the population over 65 receiving care in long-term care institutions



Source: Hurst, 2006.

rules and guidelines for the operation of long-term care. The Act separated long-term care from health care, although the scheme's administration is still run by the NHIC. The financing of long-term care is separate from NHI contributions, and long-term care services mainly focus on the disabilities of old age. Chapters 2, 3 and 6 outline further details on the eligibility criteria, financing and provision arrangements for the long-term care scheme.

Difficulties in launching the long-term care scheme were somewhat different from those of the other major health care reforms discussed above. The major stakeholders did not strongly express different opinions on the need for a long-term care scheme, as all were aware of the looming problems presented by the rapidly ageing population. Rather, the major issue during the policy–decision process centred on which body would administer the new insurance scheme. Two institutions were proposed as potential insurers – the NHIC and local governments. The NHIC had the advantage in terms of management capability, given its long experience in operating the NHI scheme. Thus, major groups, including civic groups and MIHWFA, supported the choice of this organization as the new long-term care scheme's insurer. Meanwhile, local governments were centrally involved in the long-term care scheme, partly because they pay a certain proportion of its revenue as subsidies, and partly because they operate long-term care facilities. Despite these involvements, the option of using local governments as the insurer for long-term care was ruled out during the final legislative process on the grounds that it would be inefficient to duplicate national insurance bodies to separately operate the health and long-term care schemes. Another minor issue that concerned stakeholders was the financial burden that the long-term care scheme would impose on younger members of the population. At the time of the debate, younger people tended to express hesitation about paying long-term care contributions, given that the benefits would not be received until many years in the future.

7.3.3 Future challenges

Although it is too early to evaluate the effects of the long-term care insurance scheme, at its first anniversary, the outcomes seem considerable and meaningful to the population. For example, a recent survey showed an 87% satisfaction rate with the scheme (NHIC, 2009b). This high satisfaction rate seems to be related to the survey responses of families and beneficiaries receiving services through the scheme. Nonetheless, this figure can be taken as a barometer of the level of interest in long-term care provision among the ageing population. In addition, efficient administration by the NHIC (which manages the long-term care insurance scheme) will also contribute to the new scheme's sound development, particularly in its early stages.

In spite of the positive outcomes so far, there are a few problems that need to be addressed. Among these are the current shortages of long-term care facilities, the quality of care provided within them, and the predominantly private supply of facilities. While the number of long-term care facilities has expanded rapidly, access to institutions still remains a problem in some areas such as Seoul, where people have to wait to access services, particularly residential care. On the other hand, some residential facilities in rural areas are facing insufficient demand. Secondly, ensuring the quality of long-term care is likely to be challenging. Variations in the quality of services across locations and institutions are common, and unskilled carers are partly responsible for the low quality of care. Therefore, appropriate monitoring systems and advanced training for care givers will be necessary to upgrade the quality of long-term care services. Thirdly, the dominance of privately owned long-term care facilities needs much attention to ensure the sustainable development of the long-term care system (Kwon, 2009). To keep private providers honest[49] and to encourage competition between public and private providers, more public providers are desirable, although currently there is no consensus on the optimum size of each sector. Lastly, cooperative relationships between the insurance scheme, local governments and the community are crucial to assist in the gradual integration of social care services.

7.4 Benefit expansion

7.4.1 Start of the low benefits package

Unlike that in European countries, the benefits package in South Korea was less comprehensive when voluntary health care insurance was launched. Nor was a comprehensive package possible when the compulsory health insurance system was introduced in 1977. The level of economic development was not such that the government was willing to contribute subsidies to the health insurance system or that the insured could pay higher contributions. Inevitably, the policy was oriented towards low contributions in order to first achieve universal coverage. Contribution rates until early 2000 were about 2.8% for company employees and 3.4% for government officials and private school employees. Consequently, many services that were necessary for the treatment of certain diseases were excluded from coverage,[50] and the benefit coverage ratio, which

[49] There have been problems with fraudulent claims by private providers.

[50] That is, such services were not included in the NHI benefits package, leaving individuals liable for the full cost or the costs over and above what is covered (Kutzin, 1999).

is defined as the ratio that will be reimbursed by the insurer against total health costs, was only about 60% until the early 2000s. Therefore, health insurance was not enough to provide financial security for patients should they have suffered severe diseases such as cancer or experienced a catastrophic illness. As a result, for over a decade, the low benefits coverage ratio was a key issue in the health care reform debate.

7.4.2 Expansion of the benefits package

Full-scale debate on expanding benefits started with health insurance integration in 2000. After the integration, unlike under the multipayer system, health care issues became nationwide news and people started to pay attention to the problems arising from the low level of benefits coverage. Complaints from patients became critically important concerns for the public, and major newspapers competitively reported the issues as major news stories. Faced with these situations, health economists and government officials started to discuss the reform of the benefit package.

By 2001, the issue was no longer avoidable for the central government, political parties and presidential candidates. In 2002, in its presidential election manifesto, the ruling Democratic Party announced a target of achieving a benefit ratio of 80% by 2008. Having succeeded in winning the presidential election, the government publicized the so-called 'Participatory Welfare Five Year Plan', which targeted a benefit security ratio of up to 70% (Kim J-H, 2007). The first and practical plan for increasing benefits was suggested by the MOHW in November 2003, and all the proposals took effect from January 2004. Benefit expansions included lowering the co-insurance[51] rate for outpatient cancer patients from 30–50% (according to the type of institution) to 20%. The plan also introduced an OOP maximum,[52] whereby the NHIC pays back a certain amount if patients' OOP spending is over 3 million won (US$ 3000) within any six-month period. After the first benefit expansion plan, a series of other expansion plans followed. The second plan, which took effect in September 2007, was almost the same as the previous plan in terms of content and direction – that is, it concentrated on reducing co-insurance rates and adding new benefits. The third plan, which adds new benefit items such as ultrasonography and dentures, was announced in June 2009.

[51] That is, the percentage of the total charges for a service that must be paid by the beneficiary (Kutzin, 1999).

[52] An OOP maximum is a defined limit on the total amount of OOP spending for which an insured person or household will be liable for a defined period, over and above which all expenses are paid by the insurer (Schoenman, 1993).

Achieving benefit expansion was not an easy task, and resulted in conflicts between major stakeholders. Different views and opinions over what items to include in the benefits package are inevitable, and require social consensus to reach agreement. The debate is closely related to priority setting and rationing, and thus various patients' groups continue to be deeply involved in trying to influence such decisions. Moreover, employers and the insured also are intimately involved as they are required to pay higher contributions to cover any new or increased items in the benefits catalogue. As Table 7.8 shows, benefits expansions were implemented step by step over a long period. The issue is destined to be a permanent feature of the health policy debate. While the NHI scheme must remain financially viable, if people are under-insured by the public health insurance system they will continue to make high OOP payments for their health care either through direct payments to providers or through premiums for private health insurance policies (NHIC, 2009b).

Table 7.8 Timeline of major health care benefits expansions

Date	Benefit item
January 2004	Reduction of co-insurance rate for cancer and orphan diseases from 30–50% to 20%
July 2004	Reduction of OOP maximum from 120 million won per month to 300 million won per six-month period
January 2005	MRI included in benefits package OOP exemption for vaginal deliveries in childbirth
April 2005	Equipment (electric wheelchairs, scooters, etc.) for the disabled included
September 2005	Reduction of co-insurance rate for cancer and catastrophic diseases from 20% to 10%
January 2006	Inpatient OOP exemption for children under five years of age
June 2006	PET for cancer and myocardial infarction etc. treatments included
June 2007	Reduction of outpatient OOP of children under six years of age
July 2007	Reduction of the OOP maximum from 300 million won to 200 million won within a six-month period
November 2007	Infant (aged 0–6 months) health screening programme included
June 2008	Additional categories of orphan/chronic diseases included
July 2009	Reduction of orphan/chronic diseases OOP payments from 20% to 10%
December 2009	Reduction of cancer/catastrophic diseases OOP payments from 10% to 5%

Notes: MRI: Magnetic resonance imaging; OOP: Out-of-pocket (payments); PET: Positron emission tomography.

7.5 Ongoing debate on for-profit hospitals

Currently, large-scale debate in South Korea is occurring on the perceived need to reinforce 'health care industrialization'. Discussions about industrialization differ over whether health care should be isolated from the rest of industry. Proponents view it as an integral part of economic development, which will suffer adverse effects if the sector is subjected to over-regulation. In contrast, opponents of this view see health care as a unique area of public policy that cannot be industrialized and therefore should remain separate from the general economy. The split over this issue has not abated. As a result, the two sides have contrasting views on several major issues, including whether to allow the introduction of FPHs.[53]

The government stepped into the FPH debate by setting up, in October 2005, the Health Care Industrialization Committee (HCIC) under the Office of the President. The Committee was chaired by the prime minister and consisted of representatives of various major stakeholders. Experts from both sides – those who saw health care as not being distinctively different from general industry and those who thought that health care should be confined to the health policy sector – took part in the Committee as members of the task force team. Although the Committee's terms of reference were to find a way of developing the health care sector in the future, the issue of FPHs was one of the foremost items on the agenda. The Committee's work did not go smoothly, with deep divisions manifesting themselves from the beginning.

The unexpected entry of FPHs onto the political agenda under the centre-left Rho Moo Hyun Government (2003–2008) brought out strong opposition from many people and organizations, including the MOHW. Opponents include civic groups, labour unions and opposition parties,[54] who believe that FPHs will bring down the fledgling public health care system. They contend that FPHs will lead to the overall privatization of health care in the future, which will result in inequities in accessing and financing the national health care system, thus reinforcing social polarization between the better-off and worse-off. On the other hand, proponents of FPHs, including government departments in the economic sector, private health insurance companies and provider groups, advocate a different theory and set of assumptions. With MOSF leading the way, and despite minor differences of opinion, providers generally support the introduction of FPHs, for two main reasons. First, they think funding from

[53] Currently, the Medical Act only allows hospitals with not-for-profit status to operate in the health care system, and only doctors and non-profit foundations can own medical facilities.

[54] In general, the public also opposes FPHs. According to a survey, while 60.6% of respondents are opposed to FPH, only 34.9% support the idea (Chun, Yoon and Moon, 2006a).

external investment sources is essential to maintain the health care industry's competitiveness in an increasingly globalized era. They contend that not-for-profit hospitals that are strictly regulated cannot generate enough resources to compete with FPHs (investor-owned hospitals) in industrialized countries, such as Singapore and India. Unlike not-for-profit hospitals, FPHs can draw capital into the hospital sector from investors, and can enjoy far more autonomy. Proponents also argue that competition between not-for-profit hospitals and FPHs should be encouraged, as this will result in better quality care in the health care sector overall. Second, they argue that deregulation is necessary in health care and this will be partly achieved through allowing FPHs. In particular, providers think that not-for-profit hospitals, which are constrained by the same fee schedule applicable to all hospitals, cannot satisfy some people who would be willing to pay more for higher quality facilities and services.

These arguments for and against FPHs loomed large, and experts from various backgrounds were not easily able to reach a consensus. In fact, the Presidential Committee, the HCIC, suspended its work in July 2007 and concluded that further discussions on FPHs should be postponed until actual data from newly approved FPHs in South Korea's free economic zones are available (see Chapters 2 and 6).[55]

The notion of FPHs has reappeared as one of the top health care issues under the Lee Myung Bak Government (2008–present). MOSF, which supports the idea of FPHs, has again been counterbalanced by oppositions from civic groups and labour unions. At the time of writing, a cabinet-level committee was set up again in January 2009 to discuss FPHs and to reach agreement on this critical issue. After six months, however, in July 2009, the committee announced another incomplete conclusion and deliberations have been postponed until the results of a study come out in November 2009.

Whether desired or not, the issue of allowing FPHs in South Korea has been placed at the centre of the health care reform agenda. Contrasting views on FPHs will not be easily resolved soon, partly because the issue is related to the overall problem of finding the right mix of providers for the health care system, and partly because it is related to the different ideologies of the stakeholders involved. Although it is difficult to predict the direction that the government will take on FPHs, it is clear that allowing the establishment of such hospitals should be supported by a substantial 'safety net' that allows the NHI system to ensure the health care security of the population. For example, keeping the 'compulsory provider contract rule' and regulation of investor-owned hospitals would be appropriate means of safeguarding the system.

[55] South Korea has five 'special economic zones', where more liberal economic and regulatory provisions allow foreign investors to build FPHs.

8 Assessment of the health system

8.1 The stated objectives of the health system

The objectives of the Korean health care system have changed over the last three decades. Specific policies throughout this period developed and can be classified into three stages; the introductory period (1963–1977), the coverage extension period (1977–1989), and the institutionalization and development period (1990–present). Each stage has its own specific and different objectives, but in broad terms they contributed towards expanding the benefits package of the NHI scheme and increasing accessibility to medical facilities while trying to maintain the overall efficiency of the health care system.

During the introductory period, selective coverage, or the strategic targeting of employees working in large companies who were able to pay their health insurance contributions, was one of the more important objectives. In addition, establishing a health care system funded primarily by the private sector became an inevitable objective, particularly as governments put large resources into economic development rather than social policies in the late 1960s–1970s. Despite the 'economy first' environment, successive governments could not ignore the necessity of establishing a health care programme. During the second period, from the beginning of compulsory social health insurance in 1977 to when all the population was covered in 1989, the stated objectives were accessibility and universality. As a result, ensuring access to basic health care was a priority. In addition, achieving universal coverage was a very important goal, especially as the incumbent governments needed coverage extension to provide 'public goods' to the population who urgently needed a health insurance card. Finally, the stated objectives under the development period have focused on efficiency, equity and quality of care. These objectives emerged from the lessons learnt in the previous two periods. Up until the second period, it was

true that health care objectives targeted 'quantity growth' rather than 'quality growth'. Therefore, the objectives in the third period led to the reforms of the NHI scheme, resulting in the integration of existing health insurance funds into a single national fund in the early 2000s. While different objectives were predominant in the separate periods, elements of all of them have been evident throughout the last three decades, and characterize the main developments of the South Korean health care system.

The architects of these different objectives were diverse. In the first period, the health care objectives originated solely from the government, which set the objectives as well as the strategies of the health care system. During the second period, business and industry began to play a major role in health care policy. Thus, the relationship between government and business developed into a sound partnership, particularly with regard to health insurance policy. As a strong partner, business contributed substantially to financing health insurance. As the system evolved further, during the third period, another group, labour unions, joined the network. This triumvirate spearheaded health insurance reforms and singled out efficiency and equity as the foremost objectives.

It is important to note that, during the three stages of health system development, the implementation record has been strong. Coverage extension to achieve universal health care was successfully completed by July 1989, 12 years after the NHI scheme began. In addition, efficiency and equity were greatly improved, as the health insurance integration policy in 2000 has substantially contributed to developing the NHI system. Examples of enhanced efficiency gains can be seen in the reduced administrative costs achieved and the implementation of the 'ability to pay' principle (i.e. the same contribution rate levied uniformly on all of the insured) after the insurance fund integration. The integration of funds also reduced overall expenditure as the single-payer, the NHIC, can now use its monopsonic power when negotiating with providers, and can downsize its staffing and organizational structures as necessary.

8.2 The distribution of the health system's costs and benefits across the population

Within South Korea's health care reforms, equal access to medical institutions and equity in financing were always foremost issues, particularly for health policy experts. Consequently, improvements in various aspects of equity have been achieved over a number of years. Above all, equity in terms of public health insurance contribution rates and benefits received is an important aim of the

health care system. However, equity in the distribution of medical resources and regarding access to medical institutions has not been substantively improved.

The three main sources of funding of the health care system are health insurance contributions, government subsidies and OOP payments. Of these different funding sources, contributions, in general, are proportional, as they are based on the same proportion of gross income for all those insured.[56] According to published research, overall income redistribution between social groups actually takes place under this system. For example, a study by Chun (2005) analysed the new contribution method and found this to be so. However, both government subsidies and OOP payments are inclined to be regressive, as, in the case of the former, the subsidy is the same for all of the insured and, in the case of the latter, the level of payments depend on the risk profiles of patients. The high levels of OOP payments that patients still pay ultimately lead to a regressive funding structure. Moreover, spending on private health insurance should not be underestimated. Although it is very difficult to calculate the proportion of health care spending from private health insurance, private insurance might occupy part of OOP payments based on the size of private insurance policy holders. According to one study, the total amount of premiums from private health insurance equals nearly half of total contributions to the NHI scheme (Jung, 2007). About 63.7% of the population has more than one private health insurance plan (Korea Development Institute, 2007).

The distribution of health care personnel and facilities across the nation is not equitable. Most of the highly specialized centres, as well as personnel, are concentrated in Seoul and other major cities (see Chapter 6). As a result, the utilization of health care services is to some extent related to income level or socioeconomic status rather than need. A recent study (Yoon, 2009), using data from the NHIC, compared the use of medical facilities by different social groups. The findings show that higher income groups tend to access medical facilities much more often than lower income groups, resulting in a big gap between the highest and lowest levels. In fact, patients in the top 10 percentile visit medical facilities 35.4 times per year while the bottom 10 percentile only visit 14.3 times a year.

Barriers to accessing health care services also exist. The causes of these barriers are related to relatively high user charges and regional disparities in the location of facilities. In particular, access to highly specialized centres such as tertiary hospitals is extremely difficult for the poor, as the OOP payments in these hospitals are significantly higher than those of other facilities. As a result, patients in the bottom 10 percentile use such facilities only 0.16 times

[56] This has contributed to greater equity in that after the insurance fund integration in 2000, contributions rates were levied by the insurer on net income.

a year while those in the top 10 percentile use them 0.82 times per year (Yoon, 2009). In addition, access barriers can be found according to residential areas. Urban residents are able to see highly specialized physicians in tertiary hospitals quite easily, and thus visit them on average 1.41 times a year. However, people living in remote areas visit only 0.69 times a year. The contrast between these two groups, based on differing locations, illustrates that there are large barriers to accessing health care services (Yoon, 2009).

With regard to benefits, as a result of the single-payer NHI scheme, benefits are now the same across the population (see Chapter 3). Before the single-payer structure, benefits were different among the various insurers, and this issue caused serious social conflict. In fact, the difference in benefits was one of the underlying causes that precipitated health care reforms, leading to NHI integration (see Chapter 2).

8.3 Efficiency of resource allocation in health care

In terms of allocative efficiency, it is very important that current allocations of resources for health care meet the needs of the population. In this respect, health care systems dominated by inpatient care and specialists rather than having a balance between primary and secondary care tend to undermine the efficient allocation of resources. In 2008, the proportion of inpatient care provided in hospitals as a percentage of all care provided was 57.5% (NHIC, 2008a). Primary care services, which mainly provide outpatient care in clinics, represented 42.5%. Meanwhile, the percentage of specialists providing primary care services such as family medicine is very high. In fact, specialists who should be providing sophisticated care in hospitals are operating in primary care clinics, as the doctor training culture predominantly produces specialists.

There are no rules or regulations to help increase allocative efficiency. The government and the insurer (NHIC) do not set spending levels for each health care sector, partly because most medical facilities are in the hands of private providers, and partly because the payment method is on an FFS basis. As a result, spending among different types of provider does not follow the same patterns compared to other developed countries where primary care plays an important role. For instance, the budget allocation for primary care in the United Kingdom occupies more or less 80% of the total National Health Service budget (http://www.nhs.gov.uk). However, in South Korea, the opposite trend is apparent: spending on primary care is less than 50% of total health care expenditure (NHIC, 2008a). Allocations for prevention, long-term nursing care and curative care also do not conform to principles that would increase

allocative efficiency. That is, spending on prevention is negligible, even though it is well known that prevention is better than treatment. Spending on long-term nursing care has been increasing rapidly since the launch of the long-term care insurance scheme in July 2008. The spending allocation for mentally ill people also is not high; in fact, a large part of expenditure for mentally ill patients is funded through capitation payments in mental health hospitals built by the government.

Allocations for fixed costs such as personnel and utilities is actually not known, as the private owners of medical facilities are not willing to publicly disclose all the details of their fixed costs. Spending on medicines is quite significant. Therefore, MIHWFA and the NHIC have made great efforts to contain expenditure on pharmaceuticals (see Chapter 6). Nevertheless, drug expenditure levels have not decreased for over a decade despite a myriad of cost-containment measures. Capital investment in medical facilities is in the hands of their owners. Until recently, there was no strict regulation on capital investment and, as a result, many providers purchased state-of-the-art technology in hospitals to attract more patients. In the early 2000s, the government issued a directive, the Expensive and High Technology Installation and Approval Review Regulation, to encourage the efficient utilization of high technology medical equipment (see Chapter 5).

To prevent unregulated capital investment by individual medical institutions, MIHWFA revised and restricted the Regulation on Specialized Medical Equipment in 2008, and revised the Medical Act in 2009. For example, nursing care hospitals are not allowed to use MRI and CT scanners. The costs of unregulated capital investment may be one of the major contributors to the significant rises in health care expenditure, as providers eventually pass on the costs of big ticket items onto patients through higher OOP payments or put upward pressure on fees during the fee schedule negotiations with the NHIC.

8.4 Technical efficiency in the production of health care

In general, technical efficiency assesses whether the health care system provides good value for money. Productivity in several areas of the health care system has been improved since the integration of the health insurance funds in 2000. One good example of this is the fact that administrative costs have fallen significantly over the last two decades, from 8.1% in 1998 to half of this figure in 2008. But there is still room for improvement; incentive structures for providers who treat patients efficiently should be designed to increase technical

efficiency. For example, instituting a system of 'payment by results' or 'payment for performance' (incentive schemes for providing good quality care) may be a way to kill two birds with one stone, as it is likely to improve both quality of care and efficiency. Indeed, the relative advantages and disadvantages of these methods are starting to be discussed by the NHIC and academics.

One option for achieving greater efficiency is to implement carefully crafted substitution policies. In developed countries, including many European countries, several such policies already exist; for example, branded pharmaceuticals may be substituted by generic equivalents, nurses may undertake some care functions in place of doctors, or dental assistants may perform some tasks previously undertaken by dentists. Thus, the judicious employment of similar substitution policies could contribute to the more efficient use of well-educated health professionals. Nonetheless, these policies are not encouraged in South Korea and, in fact, they are strictly prohibited by the Medical Act. In general, the law prohibits nursing care substituting doctors' care, as well as dental assistants performing tasks for dentists. At the moment, generic substitution of branded pharmaceuticals is allowed only to make savings on pharmaceutical expenditure (see Chapter 6).

8.5 Quality of care

Giving priority to quality of care is a recent trend. The quality of care provided by physicians has become one of the foremost indicators in health care, and quality issues, in general, have been placed at the forefront of the health policy agenda since the transformation of the health insurance system into a single-payer structure in 2000. As mentioned earlier, health insurance fund integration in 2000 was seen as a way of developing the NHI system in terms of 'quality' rather than 'quantity'.

To prioritize quality of care, the government amended the Medical Act to include compulsory quality evaluations (see Section 4.1.4). As these quality evaluations become more developed and sophisticated, positive impacts will occur in several areas. In particular, hospitals themselves strive to increase their quality of care in order to gain a good reputation, which is critically related to the levels of revenue that can be secured. As an example, major hospitals in urban areas compete to achieve accreditation under the Joint Commission International, one of the internationally well-known accreditation institutes based in the United States. In addition, quality evaluations can lead to fundamental changes in managerial and organizational capacities, and thus can contribute to devising further improvements. In addition, the evaluation of the

reasonableness of medical care benefits by HIRA will enhance the quality of care in that the inappropriate provision of health services by medical facilities can be highlighted and addressed. The development of electronic health data and telemedicine, which are increasing in importance, is also an area with the potential to improve the quality of care in the long run.

8.6 Contribution of the health system to health improvement

As mentioned by Fuchs (1991), the determinants affecting individuals' health improvement lie in various elements such as exercise, diet, the health care system, social environment and so on. Therefore, it is difficult to single out precisely what contribution the health care system can make to improving health status. However, it can be postulated that, among these various determinants, the health care system is one of the main factors that have contributed to increasing the population's health. With the advent of the universal health insurance scheme, barriers to assessing hospitals virtually disappeared, thus making it possible to achieve early diagnosis and treatment. It is also reasonable to speculate that easier access to medical facilities might also contribute to reducing mortality rates.

In a study published in the *Journal of Korean Medical Science*, Chung J-I et al. (2008) looked at the health care system's contribution to reducing mortality rates from 1983 to 2004. Their underlying hypothesis was that a health care system that is able to implement preventive measures, early diagnoses and appropriate interventions can contribute to increasing population health improvements and to lowering mortality rates. They concluded that the mortality rates in 2004 fell by 42.9% compared to 1983. Moreover, the 'avoidable death rate' in 2004 fell by 37.6% during the same period.

Meanwhile, life expectancy has increased to the same level as the OECD average. It was 60.2 for men and 67.9 for women in 1975, just two years before the health insurance system was implemented. In 2006, life expectancy was 75.7 for men and 82.4 for women. Furthermore, life expectancy will increase as the health care system allocates more resources to areas such as health improvement and prevention, and quality of care.

9 Conclusions

The health care system has developed quite successfully in a number of ways. More than anything, achieving universal population coverage within 12 years of the launch of the NHI scheme was an unprecedented outcome, particularly when one considers that at the start (in 1977), only 8.79% of the total population was covered. Taking note of the achievement over such a short period, international organizations such as the ILO have started to pay attention to South Korea's experiences in developing universal coverage. An ILO representative at the 1st World Social Security Forum in Moscow in 2007 mentioned South Korea's universal coverage as an example for many east Asian and African countries striving to expand coverage for self-employed and rural residents (Ron, 2007). Moreover, the NHI system has maintained relatively high efficiency levels in health care management and expenditure since it was transformed into a single-payer system in 2000. With health expenditure currently at 6.8% of GDP, the NHI system is able to provide fairly comprehensive health care benefits and universal coverage of the population.

That said, today's health care system is experiencing a great deal of conflict and its development provides a few lessons. First, the step-by-step approach towards universal coverage has proven to be very successful. In circumstances where, for many years, economic development topped the political agenda, the launch of a social health insurance scheme could not occur in a single leap. To a few political leaders at the time, health insurance was not considered helpful to the economy. Thus, to overcome the opposition of the 'economy-first' ethos, the gradual approach was an appropriate strategy. As a result, people who were able to pay their own contributions (mainly employees of large companies) became the first health insurance enrollees, without receiving any government subsidies. The government eventually started to cover the self-employed in rural areas and then urban populations.

The second (theoretical and practical) lesson to be learnt from the development of South Korea's NHI system relates to the strength of path dependency[57] in the policy-making sphere. The country's health care system began with a multipayer health insurance scheme, with 602 funds nationwide. Inefficiencies under this system ensued and led to an alternative that reformed the multipayer structure. Soon after the implementation of the health insurance system in 1977, the debate over the structure of the health care system and the pros and cons of the multipayer scheme took hold, culminating over two decades later in the transformation of the multiple funds into a single-fund scheme. However, this proved to be inadequate. Repeated failures in further reform of the health care system were partly due to path dependency, exacerbated by stakeholders defending their vested interests.

The third lesson learnt relates to what makes health care reform possible. South Korea's experience mainly focused on health system integration, which is closely related to the involvement of major stakeholders. Reform was possible only by breaking through the entrenched views on the pros and cons of a single-payer structure.

The reform process demonstrated that the power relations between stakeholders in the health care system are changeable, depending on their strategies and enforceable influence. In South Korea, the balance that had been maintained for over two decades in favour of the multipayer system began to shift towards the proponents of a single-payer system when the power relations between major stakeholders changed, around late 1998. As new power elites emerged and endorsed social democratic principles, they started to influence policy on insurance fund integration, which rapidly transformed into the single-payer scheme. The policy implications of this shift towards integration are that health care policy is decided by the degree of relative power exercised by major stakeholders, including provider groups, labour unions and government leaders.

Despite the achievements of the NHI scheme, many challenges lie ahead. First, although accessibility to medical facilities is no longer a barrier, a low-level benefits package, with many exclusions, is leading to inequity in medical care usage between social classes. The narrowness of the benefits package is due to low levels of public expenditure on health care services. In other words, a substantial proportion of medical costs are paid out of pocket by patients. According to studies on OOP payments, approximately 35% of total medical costs come from patients whenever they visit medical facilities (NHIC, 2009a).

[57] Path dependency is the view that technological change in a society depends quantitatively and/or qualitatively on its own past.

The second challenge relates to the rapidly ageing population. South Korea has the fastest growing ageing society in the world and statistics show that it will still be the highest in 2050 (OECD, 2005). This process will increase health care expenditure, as ageing populations tend to use more medical care and tend to suffer from chronic illnesses.

The third challenge is to find a payment method that can encourage reasonable use of health care services for both patients and providers. FFS can no longer be a sustainable payment method. Other methods, including the DRG and the 'global budget' methods, should be reviewed as possible alternatives for choosing a more appropriate payment method for providers. Ideally, the analysis should be undertaken by academics or an independent body consisting of experts with diverse views,[58] as more neutral third-party brokers, which will enable the two main parties, the NHIC and providers, to accept more readily the best single or mixed payment method that will contribute to sustainable health care development.

The fourth challenge relates to the fact that the health care system has experienced a long period of rising pharmaceutical expenditures. Drug expenditure is about 30% of total health care costs. To reduce the proportion of drug costs, several policy measures have been adopted, but no results are available so far on their efficacy. Continuous policy options are still needed in the pharmaceutical sector, including a national campaign to promote the appropriate use of drugs.

Last but not least, the South Korean NHI system must try to secure evidence-based health care. Evidence-based health care would provide the means to investigate ways of reducing health care expenditure and increasing quality of care. Efficient and equality-oriented health care is the long term goal. In this respect, more emphasis on HTA and the development of clinical guidelines should become a priority, and research in these two areas should be encouraged. Also, emphasis on preventive health care should be reinforced in order to enhance quality of care in the long run. A paradigm shift from the current system of acute care dominance to preventive care, particularly in this era of increasing chronic diseases, is necessary, both in terms of maintaining the sustainability of the NHI system and the health of the population.

The future prospects of the South Korean health insurance scheme will depend on how it transforms and maintains a sustainable health care system. Most importantly, it must be a financially sustainable system in the context of an ageing population and high demand for state-of-the art technology. In addition,

[58] As an example, the establishment of a committee within the National Assembly may be a good way to determine ways to revise the National Health Insurance Act. This committee could recommend proposals on various crucial issues such as the payment system, contribution rates and so on.

people's attitudes towards NHI will be a critically important barometer of what direction any further reforms should take. Major stakeholders who contributed to the achievements of the health care system over the last three decades have a responsibility to develop health care, not only for their generation but also for their descendants. Their interests will play a pivotal role in building a sustainable health insurance scheme and health system.

10 Appendices

10.1 References

Ahn B-C (2001). The political character and feature in policy formation process: A case study on separation of prescribing and dispensing drugs. *Korean Policy Studies Review*, 10(2):23–55 [in Korean].

Anderson G (1989). Universal healthcare coverage in Korea. *Health Affairs*, 8(2):24–34.

Bank of Korea (various years). *Economic statistics yearbook*. Seoul, Bank of Korea [in Korean].

Bank of Korea (1981). *Economic statistics yearbook*. Seoul, Bank of Korea [in Korean].

Bank of Korea (2007). *International trade balance trends, 2006*. Seoul, Bank of Korea [in Korean].

Buzo A (2002). *The making of modern Korea*. London, Routledge.

Carrin G (2002). Social health insurance in developing countries: A continuing challenge. *International Social Security Review*, 55:57–69.

Cha H-B (1992). The development of the medical security system in Korea. In: Lee D-H et al., eds. *National medical security*. Seoul, Nanam:245–357 [in Korean].

Cha Y-J (2007). *Quality of care management method of the health prevention programme*. Seoul, National Health Insurance Corporation [in Korean].

Cho J-H et al. (2005). *The vision and response of health insurance industry*. Seoul, Insurance Development Institute [in Korean].

Cho N-H (2006). New challenges of fertility and family policies in Korea. *Paper presented at the Policy Forum on Low Fertility and Ageing Society, Seoul, 13–14 September 2006*.

Cho W-T (2001). Medical insurance and its development. *Health insurance white paper*. Seoul, National Health Insurance Corporation [in Korean].

Choi B-H (2008). The health insurance financial stabilization strategy: Stabilization of revenue structure. *Health Insurance Forum*, 7(1):2–14 [in Korean].

Choi J-K (2003). *Democratisation and the political welfare reform: The development of public pensions and national health insurance in Korea, 1961–2002* [PhD thesis]. Canterbury, University of Kent.

Chun C-B (2004). *Single-payer health care reforms and major forces behind the reform* [MSc dissertation]. London, London School of Economics and Political Science.

Chun C-B (2005). *Two paths to healthcare reform: The Republic of Korea and the United States* [PhD thesis]. Seoul, Hankook University of Foreign Studies.

Chun C-B, Yoon T-H, Moon S-O (2006a). *Profitability of medical institutions: For-profit hospital*. Seoul, National Health Insurance Corporation [in Korean].

Chun C-B, Yoon T-H, Moon S-O (2006b). *For-profit hospital policy and medical tourism in some Asian countries*. Seoul, The Office of the Prime Minister [in Korean].

Chung H-K, Cho J-I (2001). *National health insurance law*. Seoul, Korea Legislation Research Institute [in Korean].

Chung J-I et al. (2008). Trends in avoidable death over 20 years in Korea. *Journal of Korean Medical Science*, 23(6):975–981.

Chung M-K (2008). Institutional complementarities and change: The relationship between production and welfare regimes in Korea. *Paper presented at the International Symposium on Globalization and the Future of East-Asian Welfare Capitalism, Taipei, National Chung-Cheng University, 1–2 November 2008*.

CIA (2008). World fact book [web site]. Washington, DC, Central Intelligence Agency (https://www.cia.gov/cia/publications/factbook/index.html, accessed 13 March 2008).

Connor ME (2002). *The Koreas: A global studies handbook*. Santa Barbara, CA, ABC-CLIO.

Cumings B (1997). *Korea's place in the sun: A modern history*. New York, WW Norton.

Economist (2009). Ageing in the rich world: The end of retirement. *The Economist* (http://www.economist.com, accessed 25 June 2009).

FKTU (1999). *Annual report*. Seoul, Federation of Korean Trade Unions [in Korean].

Fuchs RV (1991). National health insurance revisited. *Health Affairs*, 10(4): 7–17.

Ha T-K et al. (1998). *Modern Korean government*. Seoul, Bobmunsa [in Korean].

Healthcare Alliance for Integration and Benefits Expansion (2001). *Activity report: The chronicle of 10 years' struggle for health insurance integration*. Seoul, Healthcare Alliance for Integration and Benefits Expansion [in Korean].

HIRA (2008). *Year 2007 HIRA statistical report*. Seoul, Health Insurance Review and Assessment Service [in Korean].

Hoare J, Pares S (2000). *Korea: The classic introduction*. London, Kegan Paul International.

Hurst J (2006). Issues in health financing and expenditure related to ageing and low fertility trend across OECD countries. *Paper presented at the Policy Forum on Low Fertility and Ageing Society, Seoul, 13–14 September 2006*.

Jang J-H (2008). A review of long-term care for senior citizens and the direction of the LTC programme. *Health Insurance Forum*, 7(2):1–14 [in Korean].

Jeong H-S (2006). Financing and expenditure of Korean healthcare system towards an ageing society: Current status and prospects for future development. *Paper presented at the Policy Forum on Low Fertility and Ageing Society, Seoul, 13–14 September 2006*.

Jeong H-S, Lee J-H (2003). Structural change of total health expenditure caused by the reform of separating the prescribing and dispensing of drugs in Korea. *Korean Health Economic Review*, 9(2):79–96 [in Korean].

Jung K-T (2007). *Challenge and development of private health insurance in Korea*. Seoul, Kyunghee University [in Korean].

Jwa S-H (2001). *A new paradigm for Korea's economic development: From government control to market economy*. Basingstoke, Palgrave Macmillan.

Kam S (2004). Problems with for-profit-hospitals. *Journal of Preventive Medicine and Public Health*, 37(2):99–103 [in Korean].

Kam S (2008). Health insurance finance stabilization strategy: Expenditure management through reform of payment methods. *Health Insurance Forum*, 7(1):15–27 [in Korean].

Kang Y-H (2006). Health inequality in Korea. *Paper presented at the conference organized by the Hankyoreh Newspaper and Korean Health Equality Research Association, Seoul, 9 February 2006* [in Korean].

KIHASA (2005). *Old aged households' living and welfare needs survey, 2004*. Seoul, Korean Institute for Health and Social Affairs [in Korean].

KIHASA (2008a). *Demonstration project on dental health accreditation, 2008*. Seoul, Korean Institute for Health and Social Affairs [in Korean].

KIHASA (2008b). *Evaluation of the separation of prescribing/dispensing and review of alternatives for its development*. Seoul, Korean Institute for Health and Social Affairs [in Korean].

Kihl Y-W (2005). *Transforming Korean politics: Democracy, reform and culture*. New York, ME Sharpe.

Kim C-B (2006). Legislation of private health insurance and national health insurance. *Health Insurance Forum*, 5(3):69–77 [in Korean].

Kim D-K (2005). *The history of Korea*. Westport, CT, Greenwood Press.

Kim D-S (2007). The year 1976 report on the framework proposal for national health insurance. *Chosun ilbo*, 4 July 2007.

Kim H-J (2004). A study on equity of out-of-pocket spending by social classes. *Korean Journal of Social Welfare*, 56(3):113–135 [in Korean].

Kim H-J, Ruger JP (2008). Pharmaceutical reform in South Korea and the lessons it provides. *Health Affairs*, 27(4):260–269.

Kim J-D (2002). *A new welfare paradigm for the people*. Seoul, ibook.store [in Korean].

Kim J-H (2007). The health insurance challenge: Expansion of the benefit security ratio. *Health Insurance Forum*, 6(2):37–59 [in Korean].

Kim J-H (2008). Introduction of a fixed rate cost-sharing system for outpatient services. *Health Insurance Forum*, 6(3):6–19 [in Korean].

Kim J-H et al. (2009). NHI co-payment survey, 2006. *Health Insurance Forum*, 7(1):41–58 [in Korean].

Kim J-S, No S-Y (2007). Development process of the health insurance fee-schedule contract and policy implications for contracts by types of providers. *Health Insurance Forum*, 6(4):4–8 [in Korean].

Kim S-H (2009). 40% increase in foreign patients. *Dong-ilbo*, 4 June 2009.

Kim S-Y (2006). *The politics of health insurance reform in Korea: Institutions, policy networks and policy outputs* [PhD thesis]. London, London School of Economics and Political Science.

Kim S-Y (2008). The East Asian developmental state and its economic and social policies: The case of Korea. *International Review of Public Administration*, 12(2):69–88.

Kim Y-M (2001). *Health insurance white paper*. Seoul, National Health Insurance Corporation [in Korean].

Kim Y-M (2003). *The history of modern Korean politics*. Seoul, Eulyoo Moonhwasa [in Korean].

Ko M-C (2008). A study on the determinants of the national healthcare expenditure of OECD countries. *Korean Social Security Studies*, 24(1):123–148 [in Korean].

Korea Development Institute (2007). *Study on private health insurance beneficiaries and their medical use*. Seoul, Korea Development Institute [in Korean].

Korean Government (1962). *The first 5-year economic development plan (1962–1966)*. Seoul, Korean Government [in Korean].

Korean Pharmaceutical Manufacturers' Association (2009). *Pharmaceutical industry statistical yearbook 2008*. Seoul, Korean Pharmaceutical Manufacturers' Association [in Korean].

Korean Tripartite Commission (2008). *The 100 national policies to be pursued by the Kim Dae Jung Government*. Seoul, Korean Tripartite Commission [in Korean].

Kutzin J (1999). The appropriate role for patient cost sharing. In: Saltman R et al., eds. *Critical challenges for healthcare reform in Europe*. Philadelphia, Open University Press:78–112.

Kwon S-M (2002). *Achieving health insurance for all: Lessons from the Republic of Korea*. ESS (Extension of Social Security) Paper 1. Geneva, International Labour Organization.

Kwon S-M (2003). Healthcare financing reform and the new single payer system in the Republic of Korea: Social solidarity or efficiency? *International Social Security Review*, 56:75–94.

Kwon S-M (2009). The introduction of long-term care insurance in South Korea. *Eurohealth*, 15(1):28–29.

Lee G (2004). Proposal for improving the emergency medical delivery system and transforming the system. *Journal of Korean Hospital Association*, November–December:60–71 [in Korean].

Lee J-H (2000). *A study on the change and process of Korean medical insurance policy* [PhD thesis]. Seoul, Korea University [in Korean].

Lee J-H (2007). The healthcare system and family doctor system. *Journal of Korean Academy of Family Medicine*, 28(11:Suppl: November):97–106 [in Korean].

Lee J-Y (2005). The responsibility of the state for the financing of national health insurance. *Korean Journal of Social Welfare*, 57(4):321–342.

Lee K-H, Kwon S-M (2004). The separation of drug prescribing and dispensing: The impact of interest groups and lessons from the policy process. *Korean Policy Studies Review*, 13(5):255–277 [in Korean].

Lee K-S (2000). Policy formulation of health insurance and its problems in Korea. *Korean Journal of Health Policy and Administration*, 10(1):57–94 [in Korean].

Lee P-S (2008). *Proposal for maintaining appropriate pharmaceutical expenditure levels*. Internal report. Seoul, National Health Insurance Corporation [in Korean].

Lee S-H (2003). An analysis of four cabinet councils in the Dae Jung Kim administration. *Korean Public Administration Review*, 37(3):1–22 [in Korean].

Lee S-Y (2005). The changing situations surrounding the healthcare system and its reform strategy in Korea. *Health Insurance Forum*, 4(2):1–12 [in Korean].

Lee S-Y et al. (2005). *Study on the industrialization and publicity of healthcare services*. Seoul, National Health Insurance Corporation [in Korean].

MHSA (1980). *Internal report by the Insurer Integration and Dismantling Committee*. Seoul, Ministry of Health and Social Affairs [in Korean].

MIHWFA (various years). *Yearbook of health and welfare statistics*. Seoul, Ministry for Health, Welfare and Family Affairs [in Korean].

MIHWFA (2008). *Health and welfare statistics 2007*. Seoul, Ministry for Health, Welfare and Family Affairs [in Korean].

MIHWFA (2009a). *Benefit security expansion in cancer and dentistry*. Seoul, Ministry for Health, Welfare and Family Affairs (http://www.mw.go.kr, accessed 14 July 2009) [in Korean].

MIHWFA (2009b). *Health and welfare statistics 2008*. Seoul, Ministry for Health, Welfare and Family Affairs [in Korean].

MIHWFA, NHIC (2008). *Introduction of long-term care insurance in Korea*. Seoul, National Health Insurance Corporation [in Korean].

Ministry of Information and Communication (2007). *Annual statistics on information technology*. Seoul, Ministry of Information and Communication [in Korean].

MOHW (2003). *News release: The plan for a pilot study on palliative care*. Seoul, Ministry of Health and Welfare, 6 January 2003 [in Korean].

MOHW (2004a). *Old-aged households lifestyles survey*. Seoul, Ministry of Health and Welfare [in Korean].

MOHW (2004b). *News release: The protection of the human rights of mental hospital patients*. Seoul, Ministry of Health and Welfare, 6 December 2004 [in Korean].

MOHW (2005). *News release: The plan for an oral health improvement project*. Seoul, Ministry of Health and Welfare, 26 August 2005 [in Korean].

MOHW (2006a). *Annual report on health and welfare statistics in Korea*. Seoul, Ministry of Health and Welfare [in Korean].

MOHW (2006b). *The current situation on healthcare institutions and beds in Korea*. Internal document. Seoul, Ministry of Health and Welfare [in Korean].

MOHW (2006c). *White paper on health and welfare in Korea*. Seoul, Ministry of Health and Welfare [in Korean].

MOHW (2007a). *Health and welfare statistical yearbook 2006*. Seoul, Ministry of Health and Welfare [in Korean].

MOHW (2007b). *The regulation on the installation and running of big ticket technologies*. Seoul, Ministry of Health and Welfare [in Korean].

MOHW (2007c). *Report on healthcare resources in Korea*. Seoul, Ministry of Health and Welfare [in Korean].

Mossialos E, Allin S, Figueras J (2007). *Health systems in transition: Template for analysis*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

National Statistical Office (various years). *Annual report on the causes of death statistics*. Seoul, National Statistical Office [in Korean].

National Statistical Office (various years). *Report on census*. Seoul, National Statistical Office [in Korean].

National Statistical Office (various years). *Report on the social statistics survey*. Seoul, National Statistical Office [in Korean].

National Statistical Office (2004). *Demographic projection*. Seoul, National Statistical Office [in Korean].

National Statistical Office (2008a). *Economically active population survey*. Seoul, National Statistical Office [in Korean].

National Statistical Office (2008b). *Live births and deaths statistics*. Seoul, National Statistical Office [in Korean].

National Statistical Office (2008c). *Population and housing census*. Seoul, National Statistical Office [in Korean].

NFMI (1998). *Medical insurance statistical yearbook 1998*. Seoul, National Federation of Medical Insurance [in Korean].

NHIC (2004). *2004 NHIC white paper*. Seoul, National Health Insurance Corporation [in Korean].

NHIC (2006). *NHIC statistical yearbook 2005*. Seoul, National Health Insurance Corporation [in Korean].

NHIC (2007a). *National health insurance benefit fee schedule*. Seoul, National Health Insurance Corporation [in Korean].

NHIC (2007b). *NHIC internal report on administrative costs*. Seoul, National Health Insurance Corporation [in Korean].

NHIC (2008a). *NHIC statistical yearbook 2007*. Seoul, National Health Insurance Corporation [in Korean].

NHIC (2008b). *Understanding long-term care in Korea*. Internal report. Seoul, National Health Insurance Corporation [in Korean].

NHIC (2009a). *Internal report on proposals for benefit package expansion*. Seoul, NHIC [in Korean].

NHIC (2009b). *NHIC statistical yearbook 2008*. Seoul, National Health Insurance Corporation [in Korean].

Oberdorfer D (1997). *The two Koreas: A contemporary history*. Indianapolis, IN, Basic Books.

OECD (2003). *OECD reviews of health care systems: Korea*. Paris, Organisation for Economic Co-operation and Development.

OECD (2005). *Projecting OECD health and long-term care expenditures: What are the main drivers?* Paris, Organisation for Economic Co-operation and Development.

OECD (2007). *OECD health data 2006*. Paris, Organisation for Economic Co-operation and Development.

OECD (2008). *OECD health data 2007*. Paris, Organisation for Economic Co-operation and Development.

OECD (2009). *OECD health data 2008*. Paris, Organisation for Economic Co-operation and Development.

Oh Y-H (2006). *Long-term estimation on the provision of healthcare services*. Seoul, Korea Institute for Health and Social Affairs [in Korean].

Park C-H (1979). *Korea reborn: A model for development*. Englewood Cliffs, NJ, Prentice-Hall.

PUC (1998). *White paper of the 15th Presidency Undertaking Commission*. Seoul, Presidency Undertaking Commission [in Korean].

Ron A (2007). Extension of social health protection through cost control and consolidation. *Paper presented at the 1st World Social Security Forum, Moscow, 9–15 September 2007*.

Schoenman JA (1993). Use of patient cost sharing as a means of controlling healthcare costs. *Paper presented at Project HOPE/Western Consortium Conference on Health Reforms in Central Europe: National Strategies for Cost Containment, Prague, 15 May 1993*.

Shim J-Y (2004). *The history of Korean political parties: The politics of crisis and integration*. Seoul, Baiksanseodang [in Korean].

Shin D-C, Rose R (1997). *Koreans evaluate democracy: A new Korea barometer survey*. Glasgow, University of Strathclyde, Centre for the Study of Public Policy.

Shin D-C, Rose R (1998). *Responding to economic crisis: The 1998 new Korean barometer survey*. Glasgow, University of Strathclyde, Centre for the Study of Public Policy.

Shin D-M (2000). *Social and economic policies in Korea, 1960–present: The dynamics of ideas, networks, and linkages* [PhD thesis]. Bath, University of Bath.

Shin E-H (2007). Footprint of the Korean national health insurance system. In: MOHW, ed. *Understanding national health insurance in Korea*. Seoul, Korea Human Resource Development Institute [in Korean].

Shin Y-S et al. (2007). *A study on the methods of the unified NHI contribution calculation system*. Seoul, Korea Institute for Health and Social Affairs and National Health Insurance Corporation [in Korean].

Song H-K (2003). The birth of a welfare state in Korea: The unfinished symphony of democratization and globalization. *Journal of East Asian Studies*, 3(3):405–432.

Tat Y-K (2000). Power alternation in Korea. *Government and Opposition*, 35(3):370–391.

Thomson S, Foubister T, Mossialos E (2009). *Financing healthcare in the European Union: Challenges and policy responses*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Vegdahl S, Hur BS (2005). *Culture shock: Korea*. Singapore, Marshall Cavendish.

WHO (2006) [web site]. Global Health Observatory Map Gallery. Geneva, World Health Organization (http://gamapserver.who.int/mapLibrary/default.aspx, accessed 22 February 2010).

WHO (2009). *World health statistics 2008*. Geneva, World Health Organization (http://www.who.int/whosis/whostat/EN_WHS09, accessed 8 August 2009).

WHO Regional Office for Europe (2007). European Health for All database [online database]. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/hfadb, accessed).

WHO WPRO (2008). *Republic of Korea: Country context*. Manila, World Health Organization Regional Office for the Western Pacific (http://www.wpro.who.int/countries/kor/KOR.htm, accessed 13 March 2008).

Williams JK (1999). *Modern nations of the world: South Korea*. San Diego, CA, Lucent Books.

Wong J (2004). *Health democracies: Welfare politics in Taiwan and South Korea*. Ithaca, NY, Cornell University Press.

Yang B-M (2001). Outcomes and challenge of a new integrated health insurance system. *Paper presented at the Symposium Commemorating the First Anniversary of the Korean National Health Insurance System, Seoul, 28 June 2001* [in Korean].

Yoon Y-K (2009). *Study on equity in healthcare and policy options in the Republic of Korea* [MA dissertation]. Daejeon, Graduate School of Public Administration, Chungnam National University [in Korean].

10.2 Further reading

Anderson G et al. (2004). *Special issues with single-payer health insurance systems*. Washington, DC, World Bank.

Choi B-H, Shin Y-S, Shin H-O (2005). *Equity of national health insurance and policy challenges*. Seoul, Korean Institute for Health and Social Affairs [in Korean].

Choi I-D, Lee Y-G, Suh N-K (2008). *Introduction of an internal competition scheme in the national health insurance system*. Seoul, National Health Insurance Corporation [in Korean].

Hussey P, Anderson G (2003). A comparison of single- and multi-payer health insurance systems and options for reform. *Health Policy*, 66:215–228.

Kim J-H et al. (2008). *Study on restructuring of payment methods in the national health insurance scheme*. Seoul, National Health Insurance Corporation [in Korean].

Kim Y-M (2000). The performance, issues, and future of National Health Insurance. *Health Insurance Trends*, 17:1–15 [in Korean].

Kwon H-J (2002). Welfare reform and future challenges in the Republic of Korea: Beyond the developmental welfare state? *International Social Security Review*, 55:23–38.

Kwon J-H et al. (2008). *Long-term care users' behaviour and satisfaction ratio survey*. Seoul, National Health Insurance Corporation [in Korean].

Lee J-H et al. (2009). Development of the Korean primary care assessment tool: Measuring user experience: Tests of data quality and measurement performance. *International Journal for Quality in Healthcare*, 21(2):103–111.

Moon C-J (2008). *Health and Welfare Policy*. Seoul, Naman [in Korean].

Moon C-I et al. (2002). Globalization, social inequality, and democratic governance in South Korea. In: Tulchin JS, Brown A, eds. *Democratic governance and social inequality*. Boulder, CO, Lynne Rienner Publishers:131–162.

Moon O-R et al. (2000). *Health security theory*. Seoul, Sinkwang [in Korean].

Moon T-J (2004). Suggestions for the political empowerment of medical provider groups. *Medical Policy Forum*, 2(1):7–11 [in Korean].

Morone AJ (1984). The citizen's role in health politics: Democratic wishes and sensible reforms. In: Litman JT, Leonard SR, eds. *Health politics and policy*. New York, John Wiley & Sons.

Mossialos E et al. (2002). *Funding healthcare: Options for Europe*. Buckingham, Open University Press.

National Statistical Office (various years). *Economically active population survey*. Seoul, National Statistical Office [in Korean].

National Statistical Office (various years). *Live births and deaths statistics*. Seoul, National Statistical Office [in Korean].

National Statistical Office (various years). *Population and housing census*. Seoul, National Statistical Office [in Korean].

National Statistical Office (various years). *Population movements statistical yearbook*. Seoul, National Statistical Office [in Korean].

Park J-Y et al. (2008). Policy proposal on healthcare for the ageing population. Seoul, National Health Insurance Corporation [in Korean].

Rice T (1998). *The economics of health reconsidered*. Chicago, IL, Health Administration Press.

Yang B-M et al. (2008). Economic evaluation and pharmaceutical reimbursement reform in South Korea's national health insurance. *Health Affairs*, 27(1): 179–187.

10.3 Principal legislation

Blood Supply Management Act (1970)

Child Welfare Act (1962)

Constitution of the Republic of Korea (1948)

Convenient Use of Facilities for the Disabled, the Elderly, and Pregnant Women Act (1997)

Emergency Medical Act (1994)

Food Sanitation Act (1962)

Government Public Agency Management Act (2005)

Health Preventive Services Act (2008)

Infectious Disease Prevention Act (1957)

Long-term Care Insurance Act (2007)

Medical Act (1951)

Medical Act (2009)

Medical Insurance Act (1963)

Mental Health Act (1995)

Mental Health Care Act (2008)

National Basic Livelihood Security Act (1999)

National Health Insurance Act (1999)

National Health Promotion Act (1995)

National Medical Insurance Act (1997) (succeeded by National Health Insurance Act (1999))

Oral Health Act (2000)

Performance Evaluation Act for Public Organizations (2004)

Personal Data Protection Act (1994)

Pharmaceutical Affairs Act (1953)

Public Health Care Act (2000)

Special Act for Financial Stabilization (2002)

Welfare Act for the Disabled (1981)

10.4 Useful web sites

10.4.1 National sites

Citizen's Coalition for Economic Justice: http://www.ccej.or.kr

Democratic Party: http://www.minjoo.kr

Federation of Korean Industries: http://fki.or.kr

Federation of Korean Trade Unions: http://www.inochong.org

Financial Supervisory Service: http://www.fss.or.kr
Grand National Party: http://www.hannara.or.kr/ohannara/english/index.jsp.
Health Insurance Review and Assessment Service: http://www.hira.or.kr
Health Rights Network: http://www.konkang21.or.kr
Korea Centers for Disease Control and Prevention: http://cdc.go.kr
Korea Democratic Labour Party: http://www.kdlp.org
Korea Development Institute: http://www.kdi.re.kr
Korea Rural Economic Institute: http://www.krei.re.kr
Korean Confederation of Trade Unions: http://www.inochong.org
Korean Employers Federation: http://www.kef.or.kr
Korean English Newspapers: http://www.koreaherald.co.kr; http://www.koreatimes.co.kr
Korean Hospital Association: http://www.kha.or.kr
Korean Institute for Health and Social Affairs: http://www.kihasa.re.kr
Korean Medical Association: http://www.kma.org
Korean Statistical Information Service: http://www.kosis.kr/
Korean Women's Association United: http://www.women21.or.kr
Liberty Forward Party: http://www.jayou.or.kr
Ministry for Health, Welfare and Family Affairs: http://ms.go.kr
Ministry of Strategy and Finance: http://www.mosf.go.kr
National Assembly of the Republic of Korea: http://www.assembly.go.kr
National Council of the Green Consumer Network in Korea: http://www.gcn.or.kr
National Evidence-based Healthcare Collaborating Agency: http://www.neca.re.kr
National Health Insurance Corporation: http://www.nhic.or.kr
National Statistical Office: http://www.nso.go.kr
People's Solidarity for Participatory Democracy: http://www.peoplepower21.org
Policy Portal Site of the Republic of Korea: http://www.korea.kr/newsWeb/index.jsp

10.4.2 International sites

International Labour Organization: http://www.ilo.org
Organisation for Economic Co-operation and Development: http://www.oecd.org/health/healthdata

United Nations: http://www.un.int/korea/index.asp
World Health Organization: http://www.who.int/countries/kor/en/

10.5 HiT methodology and production process

The Health Systems in Transition (HiT) profiles are produced by country experts in collaboration with the Observatory's research directors and staff. The profiles are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources and examples needed to compile HiTs. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The most recent template is available online at: http://www.euro.who.int/observatory/Hits/20020525_1.

Authors draw on multiple data sources for the compilation of HiT profiles, ranging from national statistics, national and regional policy documents, and published literature. Furthermore, international data sources may be incorporated, such as those of the OECD and the World Bank. OECD Health Data contain over 1200 indicators for the 30 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All database. The Health for All database contains more than 600 indicators defined by the World Health Organization (WHO) Regional Office for Europe for the purpose of monitoring Health for All policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments, as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard Health for All data have been officially approved by national governments. With its summer 2007 edition, the Health for All database started to take account of the enlarged European Union of 27 Member States.

HiT authors are encouraged to discuss the data in the text in detail, including the standard figures prepared by the Observatory staff, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT profile consists of 10 chapters.

1 Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.

2 Organizational structure: provides an overview of how the health system in the country is organized and outlines the main actors and their decision-making powers; discusses the historical background for the system; and describes the level of patient empowerment in the areas of information, rights, choice, complaints procedures, safety and involvement.

3 Financing: provides information on the level of expenditure, who is covered, what benefits are covered, the sources of health care finance, how resources are pooled and allocated, the main areas of expenditure and how providers are paid.

4 Regulation and planning: addresses the process of policy development, establishing goals and priorities; deals with questions about relationships between institutional actors, with specific emphasis on their role in regulation and what aspects are subject to regulation; and describes the process of HTA and research and development.

5 Physical and human resources: deals with the planning and distribution of infrastructure and capital stock; the context in which IT systems operate; and human resource input into the health system, including information on registration, training, trends and career paths.

6 Provision of services: concentrates on patient flows, organization and delivery of services, addressing public health, primary and secondary health care, emergency and day care, rehabilitation, pharmaceutical care, long-term care, services for informal carers, palliative care, mental health care, dental care, complementary and alternative medicine, and health care for specific populations.

7 Principal health care reforms: reviews reforms, policies and organizational changes that have had a substantial impact on health care.

8 Assessment of the health system: provides an assessment based on the stated objectives of the health system, the distribution of costs and benefits across the population, efficiency of resource allocation, technical efficiency in health care production, quality of care, and the contribution of health care to health improvement.

9 Conclusions: highlights the lessons learned from health system changes; summarizes remaining challenges and future prospects.

10 Appendices: includes references, useful web sites and legislation.

The quality of HiTs is of real importance, since they inform policy-making and meta-analysis. HiTs are the subject of wide consultation throughout the writing and editing process, which involves multiple iterations. They are then subject to the following:

- A rigorous review process (see the following section).
- There are further efforts to ensure quality while the profile is finalized that focus on copy-editing and proofreading.
- HiTs are disseminated (hard copies, electronic publication, translations and launches). The editor supports the authors throughout the production process, and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

One of the authors is also a member of the Observatory staff team, and they are responsible for supporting the other authors throughout the writing and production process. They consult closely to ensure that all stages of the process are as effective as possible and that the HiTs meet the series standard and can support both national decision-making and comparisons across countries.

10.6 The review process

This consists of three stages. Initially, the text of the HiT is checked, reviewed and approved by the research directors of the European Observatory. The HiT is then sent for review to two independent academic experts and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health, or appropriate authority, and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

10.7 About the authors

Dr Chang Bae Chun is Research Fellow at the National Health Insurance Corporation, the Republic of Korea. He studied International Health Policy at the Wharton School, the United States, and the London School of Economics and Political Science, United Kingdom. He holds a PhD in International Relations from Hankuk University of Foreign Studies, the Republic of Korea. He is adjunct professor in Social Welfare at Kyungbok College. His academic interests are health care systems, health politics and the evaluation of policy change.

Dr Soon Yang Kim is Professor of Public Policy and Administration at Yeungnam University, the Republic of Korea. He has a PhD in Public Policy and Administration from Seoul National University, and a PhD in Social Policy from the London School of Economics and Political Science, United Kingdom. His main research interests are in social and health policies, policy theories and welfare administration.

Dr Jun Young Lee is Professor in the Social Welfare Department at the University of Seoul, the Republic of Korea. He holds an MA and PhD in Social Policy from Köln University, Germany. He is the President of the Academy of Korean Social Welfare Administration and his academic interests are social and health policy, health care information and social welfare systems.

Dr Sang Yi Lee is Professor in the Department of Health Policy and Management at the School of Medicine, Jeju National University, the Republic of Korea. He has an MD, PhD and MPA, and is a specialist in preventive medicine. He is co-chairman of the Welfare State Society, a Korean non-profit corporation for policy research and social movements. His research has focused on the areas of health policy, welfare state policy and politics.

The Health Systems in Transition profiles

A series of the European Observatory on Health Systems and Policies

The Health Systems in Transition (HiT) country profiles provide an analytical description of each health care system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health systems and reforms in the countries of the WHO European Region and beyond. The HiT profiles are building blocks that can be used:

- to learn in detail about different approaches to the financing, organization and delivery of health services;
- to describe accurately the process, content and implementation of health reform programmes;
- to highlight common challenges and areas that require more in-depth analysis; and
- to provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in countries of the WHO European Region.

How to obtain a HiT

All HiT country profiles are available in PDF format at www.euro.who.int/observatory, where you can also join our listserve for monthly updates of the activities of the European Observatory on Health Systems and Policies, including new HiTs, books in our co-published series with Open University Press, Policy briefs, the *EuroObserver* newsletter and the *Eurohealth* journal. If you would like to order a paper copy of a HiT, please write to:

info@obs.euro.who.int

HiT country profiles published to date:

Albania (1999, 2002[a,g])
Andorra (2004)
Armenia (2001[g], 2006)
Australia (2002, 2006)
Austria (2001[e], 2006[e])
Azerbaijan (2004[g])
Belarus (2008[g])
Belgium (2000, 2007)
Bosnia and Herzegovina (2002[g])
Bulgaria (1999, 2003[b], 2007[g])
Canada (2005)
Croatia (1999, 2007)
Cyprus (2004)
Czech Republic (2000, 2005[g], 2009)
Denmark (2001, 2007[g])
Estonia (2000, 2004[g,j], 2008)
Finland (2002, 2008)
France (2004[c,g])
Georgia (2002[d,g])
Germany (2000[e], 2004[e,g])
Hungary (1999, 2004)
Iceland (2003)
Ireland (2009)
Israel (2003, 2009)
Italy (2001, 2009)
Japan (2009)
Kazakhstan (1999[g], 2007[g])
Kyrgyzstan (2000[g], 2005[g])
Latvia (2001, 2008)
Lithuania (2000)
Luxembourg (1999)
Malta (1999)
Mongolia (2007)
Netherlands (2004[g])
New Zealand (2001)
Norway (2000, 2006)
Poland (1999, 2005[k])
Portugal (1999, 2004, 2007)
Republic of Korea (2009)
Republic of Moldova (2002[g], 2008[g])
Romania (2000[f], 2008)
Russian Federation (2003[g])
Slovakia (2000, 2004)
Slovenia (2002, 2009)
Spain (2000[h], 2006)
Sweden (2001, 2005)
Switzerland (2000)
Tajikistan (2000)
The former Yugoslav Republic of Macedonia (2000)
Turkey (2002[g,i])
Turkmenistan (2000)
Ukraine (2004[g])
United Kingdom of Great Britain and Northern Ireland (1999[g])
Uzbekistan (2001[g], 2007[g])

Key

All HiTs are available in English. When noted, they are also available in other languages:

- [a] Albanian
- [b] Bulgarian
- [c] French
- [d] Georgian
- [e] German
- [f] Romanian
- [g] Russian
- [h] Spanish
- [i] Turkish
- [j] Estonian
- [k] Polish

The European Observatory on Health Systems and Policies is a partnership between the WHO Regional Office for Europe, the Governments of Belgium, Finland, Norway, Slovenia, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the World Bank, the London School of Economics and Political Science and the London School of Hygiene & Tropical Medicine.

HiTs are in-depth profiles of health systems and policies, produced using a standardized approach that allows comparison across countries. They provide facts, figures and analysis and highlight reform initiatives in progress.

ISSN 1817-6127