Financing Health Care with
Particular Reference to Medicines
의학분야에 관한 보건의료 재정

Volume 17

THE HEALTH CARE SYSTEM IN KOREA
한국 보건 의료 정책

n/e/r/a
National Economic Research Associates
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PREFACE

This study of the Korean health care system has been prepared by National Economic Research Associates (NERA). Funding was organised by a group of research-based international pharmaceutical companies operating in Korea. The views and recommendations in the report are solely those of NERA.

NERA is an economics consultancy with offices in North America and Europe and an international list of clients. It receives no financial support from governmental or non-governmental sources, apart from the money it earns from clients. Its clients come from both the public and private sectors across a wide range of countries.

From 1992 to 1993, NERA undertook a major study of the health care systems of twelve leading industrial countries. The study was entitled 'Financing Health Care with Particular Reference to Medicines' and consists of sixteen volumes. Its aim was to learn from the diverse experiences of these countries as they tackled broadly similar problems. From those experiences, NERA distilled some recommendations aimed at helping governments to design health care reforms suited to their own circumstances.

'Financing Health Care with Particular Reference to Medicines' was sponsored by the Pharmaceutical Partners for Better Healthcare (PPBH), a group of research-based pharmaceutical companies. Their objectives include finding ways to achieve the best use of resources in the provision of high quality and cost-effective health care. Towards that end, they fund research aimed at promoting public policy discussion of approaches that will improve the quality of, access to, and cost-effectiveness of health care provision.

This present study is an extension of that work to help address the current situation in Korea. NERA's brief was once again to draw its own independent conclusions, and to base its recommendations on its own experience.

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1.1 SUMMARY

- Structure

The health care system in Korea is paid for by a mixture of private and public funding; but the provision of care is mainly in private hands. An insurance fund system pays for a significant part of total health care costs. Since 1989, insurance funds have covered the whole population; making Korea the second East Asian country, after Japan, to cover everyone with health insurance. However patients have to make substantial payments towards their treatments. Consequently, although everyone is insured, the cover is not full.

Everyone has to join one of more than 400 insurance funds. Their choice of fund depends mainly on where people work and where they live. There are three different insurance fund schemes. Of these, two cover employees and their families, while the third type of scheme covers the self-employed in a particular area.

Health insurance premiums for employees are calculated as a percentage of earnings. For the self-employed, other factors, such as property, are also taken into account. Premiums differ widely between different funds. Copayments from patients meet part of the cost of services that are paid for by the insurance funds. Patients pay in full for other services.

The government also pays part of the cost of health care. It does this partly by subsidising insurance funds, but in addition it runs a medical aid programme for the poor and helpless.

- Total Spending

The level of spending on health care is decided by the providers and the patients. The providers are doctors and hospitals. They are entitled to be paid for each service they decide to provide. If the service is on the fee schedule for reimbursable health care goods and services, they are paid by the insurance fund and the patient copayment. Hence there is no limit on total spending even for insured services. Additionally, patients pay in full for goods and services which are not on the fee schedule.

Estimates of total spending on health care depend on precisely what is included, particularly with regard to out-of-pocket payments. It is estimated that, in 1992, Korea spent between 5 and 7 percent of its gross domestic product on health care. This is marginally less than the average of OECD countries.

- Incentives

Insurance Funds: Insurance funds have only small influence over spending on health care. The volume of medical services is decided by providers and patients; the prices for medical services are fixed by the national fee-for service schedule. However, the premiums that insurance funds charge depend on what they have to pay out to their members. Hence, if they want to keep premiums down, they have incentives as follows: to resist the inclusion of extra services in the fee schedule; to dispute claims for excessive services; and, where relevant, to ask for an increase in government subsidies.

Providers: Primary care doctors and hospitals are paid mainly on a fee-for-service schedule covering several thousand items. They therefore have an incentive to treat as many patients as possible; and to give each patient as much treatment as possible. This may expand the volume of services beyond that which is ideal on medical grounds. Furthermore hospitals have an incentive to expand medical-technological facilities for providing services that are outside the fee schedule; there is no price control on such services.

- Issues

Although Korea has established universal health care, problems remain. These include widening differences in insurance fund premiums. This tendency may eventually erode the social solidarity which is one of the aims of universal health insurance.

The methods of paying providers also cause concern about the quality of care. The high level of copayments, and the low prices set for individual services in the fee schedule, tend to distort the pattern of treatment. Low fees for service encourage excessive treatment and very short patient sessions with primary care doctors. The problem with high out-of-pocket payments by patients is that they create inequities; the concept of health care as an entitlement is not yet well rooted in Korean society. Moreover, out-of-pocket payments create an incentive for hospitals to shift treatments to those facilities which are not price controlled, because they are paid for by patients rather than insurance funds.

- Medicines

  The prices paid for drugs which are dispensed to patients are controlled by government. The government sets price ceilings; and these ceilings are often at levels broadly comparable with prices in European countries. Actual prices, however, decline over time in an unplanned and random manner. This is because actual prices paid for medicines are often fixed in negotiations between individual hospitals and pharmaceutical companies. Prescribing and dispensing of medicines are generally not separated in Korea. In practice this means that nearly all drugs are available without prescription.

- Reforms

  Now that everyone has health insurance, the government is planning further reforms of the health care system. So far the debate has concentrated on some particular issues. The most prominent of these is the sense of unfairness generated by different premiums in different insurance funds. Also being considered are lower copayments by patients and the possibility of a wider list of benefits being covered by insurance funds.

- Politics

  Korea has enjoyed sustained economic growth in the past thirty years. This has transformed it from a largely rural into an industrialised society. Economic success has brought a gradual westernisation of the Korean population. More emphasis is being given to democracy and individualism. At the same time Koreans maintain loyalty to an ancient and rich cultural heritage. In the area of health care, the changes in Korean society may lead to more emphasis on social solidarity, based on individual rights, rather than bonds within social groups.

1.2 STRUCTURE OF THE HEALTH CARE SYSTEM

1.2.1 The Health Care System in Context

The Republic of Korea[1] was founded in 1948 but can trace its origin and culture back to the 17th century. The country has a population of approximately 44 million people. It is one of the most densely populated in Asia, with more than 350 persons per square kilometre.[2] The country remains divided, with the border between South and North Korea along the 38th parallel.

Korea's is a presidential state. The President and the National Assembly (*Kuk Hoe*) are directly elected. The president, elected for a single term of five years, appoints the cabinet, composed of the President, Prime Minister and between 15 and 30 ministers. The National Assembly has one chamber with no fewer than 200 members, elected for four-year terms. Currently there are 299 members, the majority of them elected by the first-past-the-post system. The national government, elected in March 1992, is formed by the Democratic Liberal Party. The main opposition parties are the Democratic Party and the National Unification Party.[3]

The start of a Korean health care system was delayed because of the long period of occupation, first by the Japanese (1910 to 1945), then by the United States (1945 to 1948), the subsequent Korean War (1950 to 1953), and relative political instability lasting until the beginning of the 60s. No central authority, with responsibility for health care policy, existed during this period. Until 1965 most health and welfare benefits were provided by a not-for-profit private sector, including foreign missionary groups.[4]

Since the 1960s Korea has enjoyed sustained and rapid economic growth. This has made it one of the 'economic tigers' of the Asia Pacific region, and has made possible a successful transformation from a largely rural to an industrialised society. Over the last thirty years Gross domestic product (GDP) has grown at an average rate of 10 percent per year. GDP *per capita* increased from US$ 100 in 1963 to US$ 285 in 1971, US$ 800 by 1976 and more than US$ 6,500 by 1992.[5]

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1 Throughout the remainder of the report we will refer to the Republic of Korea as Korea.

2 Flynn, M. L. and Chung, Y.-S. (1990), p. 239.

3 Economist Intelligence Unit (1994).

4 Flynn, M. L. and Chung, Y.-S. (1990), p. 239.

5 Yu, S.-H. and Anderson, G. F. (1992), p. 293. In 1989, *per capita* GNP in Korea had reached US$ 6,340. According to M. Uchibayashi (1992), quoting Kenichi Ohmae, "History suggests that when GNP *per capita* reaches about $5,000, discretionary income crosses an invisible threshold. Above that level, people begin wondering ... whether they have an adequate quality of life." Uchibayashi concludes that it takes "this $5,000 threshold as a stepping-stone for comprehensive health care coverage."

The general rise in income levels was accompanied by an increasingly unequal distribution of wealth. This sparked an interest in policies designed to soften the undesirable effects of rapid economic growth, and in welfare policies in general. That situation in turn led to a debate in the 70s on the desirability of a 'public' health care system; i.e. a system where health care benefits would be available for all. The impetus for reform was also boosted by a concern about falling behind the Northern part of Korea, in terms of access to health care.

The origins of the Korean health care system can be traced back to the Medical Insurance Act of 1963 ; but did not really take off until the Medical Insurance Act of 1976. The latter Act established the beginnings of a universal health insurance system. This task was not completed until 1989. Korea thus became the second country in Asia Pacific, after Japan, to introduce health insurance for everyone.

The Korean health care system reflects two different influences. On the demand side, the Japanese and German influences dominate. Thus the country chose a health care system organised around not-for-profit insurance funds. These have to accept all comers, subject to membership restrictions (as for example employees of an industrial firm). Korean insurance funds are thus broadly comparable to the Japanese employment-oriented sickness funds, the German *Krankenkassen*, or the French *caisses de maladies*.

On the supply side, the Korean system has similarities to the health care system of the United States. This applies in particular to the ownership of health care establishments; the vast majority of hospitals are operated privately, for profit. This influence predates that of the European influence on the demand side. Whereas the concept of insurance funds was not implemented until the 70s, the private ownership of hospitals and primary care clinics was already firmly entrenched in Korean society. As in the United States, doctors and hospitals in Korea are reimbursed on a fee-for-service basis. Health resources are also heavily concentrated in urban areas. More than half the doctors and hospital beds are in the nation's four largest cities, Seoul, Pusan, Inchon and Taegu.

The Ministry of Health and Social Affairs (MoHSA) is in charge of health care policies and administration. This includes: responsibility for public health and prevention of disease; the licensing of primary care doctors and hospitals; the supervision of the manufacturers of medicines; and the setting of prices paid to the prescribers of drugs.

1.2.2 General Features of the Finance System

Korea started universal health insurance by covering first those people who could best afford health insurance. These were industrial workers. As Flynn and Chung point out this scheme succeeded not least because it could pay for itself. At the beginning of the 70s approximately 20 percent of the population worked in manufacturing industry, producing more than 30 percent of the nation's GDP. These industrial workers formed a sufficiently large pool to support self-financing insurance funds with

adequate risk-sharing.[6] The inclusion of industrial workers into health insurance went step by step. Insurance was first made compulsory for large corporations and then, in successive steps through the years, extended to smaller companies. For other groups of the population, notably government employees, separate insurance schemes were established at a later stage.

Today's health insurance system has of four largely separate schemes. These are, *first*, schemes covering industrial workers; *second*, a fund covering government employees (together with private school teachers); *third*, a network of funds covering rural and urban self-employed workers; and *fourth*, a government sponsored medical aid programme which covers health care costs of the poor and helpless. There are currently 417 insurance funds (their number varies slightly from year to year), apart from the medical aid programme. Most are administratively and financially independent and decide themselves on the premiums they charge. However, a large proportion of funds receives subsidies from the government. Despite the subsidies, premiums differ considerably between funds, depending on their financial situation. For some funds, premiums have been virtually constant over the years; for others there have been steep increases. One rural insurance fund is said recently to have increased its premium by 90 percent (partly due to exceptional circumstances).[7]

In the Korean health care system patients are required to pay part of the cost of treatment. These charges are called copayments and they are quite high. Even for benefits covered by the various insurance schemes the 'official' copayment element is approximately 35 to 40 percent of total spending. This is a far higher percentage than in most countries, including Japan and the United States, which of all OECD countries rely most heavily on copayments. Moreover, a large proportion of health care services and goods is not paid for by the Korean insurance funds. Taking this into account, private out-of-pocket spending, as a proportion of total spending on health care, is probably as high as 50 percent.

1.2.3 General Features of the Delivery System

The number of health facilities in Korea has expanded significantly over recent decades. With the implementation of universal health insurance scheme, this expansion continues. There are currently approximately 40,000 doctors working in 13,000 primary care centres, called private clinics; and more than 500 hospitals of various categories. In addition, there are public health centres and health posts, primarily in rural areas,

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[6] Flynn, M. L. and Chung, Y.-S. (1990), p. 242.

[7] De Geyndt, W. (1991), p. 5. According to Eastaugh, average premium increases for all insurance funds announced in 1990 were 23 percent. (Eastaugh, S. R., 1992, p. 23). However this seems not to take into account that this increase was largely to do with the completion of the universal insurance scheme. As the premiums of most industrial funds have been more or less constant over the past decade, the rise in the average premium is caused entirely by the integration of large parts of the hitherto uninsured rural population into the insurance scheme through the establishment of regional insurance funds.

and dental clinics. Furthermore, the Korean health care system features co-existence of Western and Oriental medicine. The two disciplines, however, are relatively strictly separated. Consequently, there are about 5,400 oriental practitioners working in herbal clinics and more than 50 hospitals specialising in Oriental medicine.

Between 1976 and 1985 the number of hospital beds increased fifteen times faster than the total population. It is, however, still lower than in many other countries. In 1986 there were 411 persons per available hospital bed in Korea, compared to 246 in Japan and 171 in the United States. There is also considerable regional variation. For example, for the same year, the number of persons per hospital bed was 310 in urban areas, but 848 in rural areas.[8] The government has introduced measures to increase access to medical care for the rural population but without much success.

The delivery side of the Korean health care system emphasises expensive, specialised, acute care. This is mainly because modern, acute-care facilities were already in place when implementation of the insurance system began. Private ownership of hospitals, and the fact that prices for some high technology services, which are in great demand in Korea, are outside the control of the government, have contributed to this trend.

Doctors and hospitals are paid through a fee-for-service schedule which is largely determined by the government. Currently the fee schedule lists 1,720 treatment service items and 8,100 materials, of which 6,710 are medicines.[9] In principle, there is no distinction between the fee-for-service levels for hospitals and primary care physicians if they provide the same treatment. However, the government allows the scheduled prices for certain medical services to be raised, dependent upon the health care facility which delivers care, as follows:

- Private clinics uplift the fee schedule by 7 percent;
- Small hospitals uplift the fee schedule by 13 percent;
- General hospitals uplift the fee schedule by 23 percent; and,
- Large (university) hospitals with more than 400 beds uplift the fee schedule by 30 percent.

These differences are supposed to cover the different fixed cost elements of different health facilities. There is also a system of copayments in operation which is explained in Sub-Section 1.3.2.4 below. For pharmaceuticals, special rules apply (see Sub-Section 1.3.6). Public health centres in rural areas are not paid on a fee-for-service basis. Instead, they receive a fixed amount per outpatient visit.

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[8] Anderson, G. F. (1989), p. 33.

[9] Eastaugh, S. R. (1992), p. 29.

1.2.4 Inputs and Outputs of the System

There are very few estimates of the total spending on health care in Korea. The official statistics, published by the National Statistical Office, the Ministry of Health and Social Affairs, and the National Federation of Medical Insurance, tend to show only spending by the insurance funds. Their spending in 1992 amounted to 3,731 Billion Won ($4.5 bn 1990),[10] and Chart 1.1 breaks down this figure according to finance source and provider sector. As can be seen, the share of patient copayments in this 'official' health care economy is 37 percent. This is high by international standards. The system of copayments is further explained in Section 1.3.2.4.

However, the data in Chart 1.1 does not take account of large additional amounts of direct patient payments which take place in the Korean health system. These payments are largely for health care services and goods which are not listed in the official fee schedule Such payments are not reimbursed by insurance funds at all. Moreover, these services tend to be technology-intensive services, as well as expensive medicines, which are in great demand by Korean patients.[11]

Payments for services excluded from reimbursement by the insurance system are substantial. Including it leads to estimates of total spending on health care of roughly three times the spending channelled through insurance funds. In 1991, total spending on health care was estimated to be 10,706 Billion Won ($12.8 bn 1990). This figure comes from the Korea Institute of Health Services Management and was published only in 1994. Unpublished estimates of total spending on health care for 1992 are 12,333 Billion Won ($14.8 bn 1990), an annual increase of 15 percent. Estimates made by the Korea Development Board put the figure even higher. Chart 1.2 attempts to break down the figure for 1991 according to finance source and provider sector. According to Chart 1.2 direct patient payments now stand at approximately 65 percent, a figure which has almost certainly declined in the years following 1991. It is generally acknowledged that direct patient payments nowadays account for approximately 50 percent of total spending on health care. Also significant is the share of medicines in total spending, which is approximately 20 percent.

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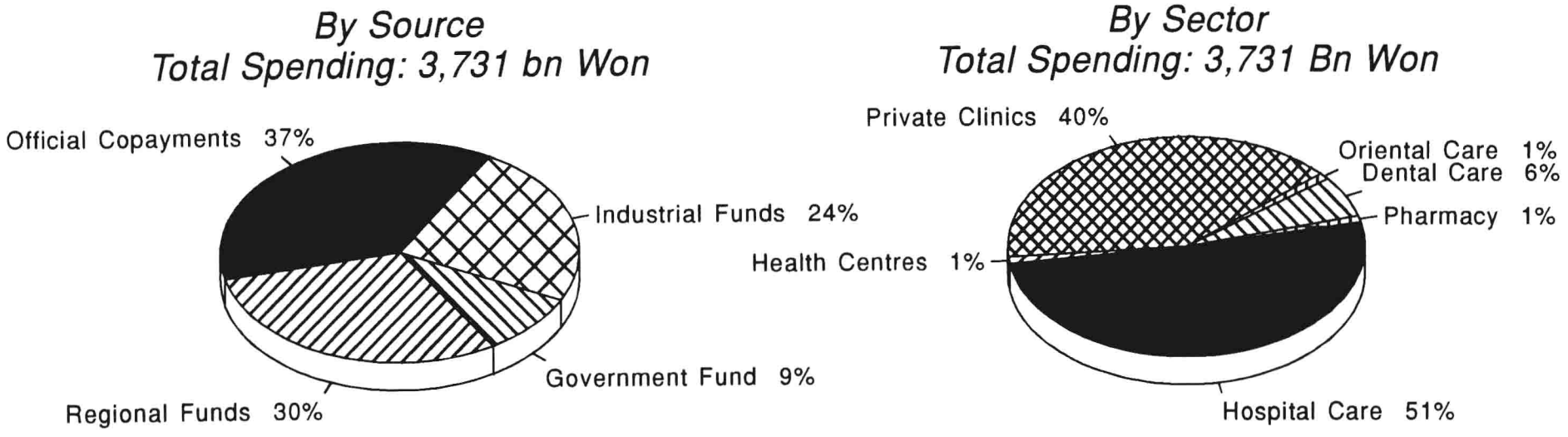
[10] Throughout this report, values are given in local currency and in 1990 US$. Conversions are made at 1990 average market exchange rates. The exchange rate and price deflator are taken from IMF (1994a) and IMF (1994b). Figures in 1990 US$ are effectively equivalent to 1990 ECUs, for purchasing power parity in 1990 suggests a rate of 1 ECU = $1.021. Source: OECD (1992a); OECD (1992b).

[11] Also not included in the official statistics are the so-called 'gift payments' which patients are sometimes expected to make to doctors and clinicians. Gifts to doctors, in appreciation for the services rendered, are traditional in Korea; nowadays these gifts tend to take the form of cash payments, for example in form of an 'extra fee' to get better treatment, or a 'thank you' fee when being discharged. The total amount of such gift payments, however, is not very large.

Chart 1.1
Expenditure on Health Care in Korea, 1992: Insurance Funds Only



Source: Medical Insurance Statistical Yearbook, 1992, pp. 119, 175; NERA calculations.