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2011 Modularization of Korea's Development Experience:

Modernization of Public District General Hospitals

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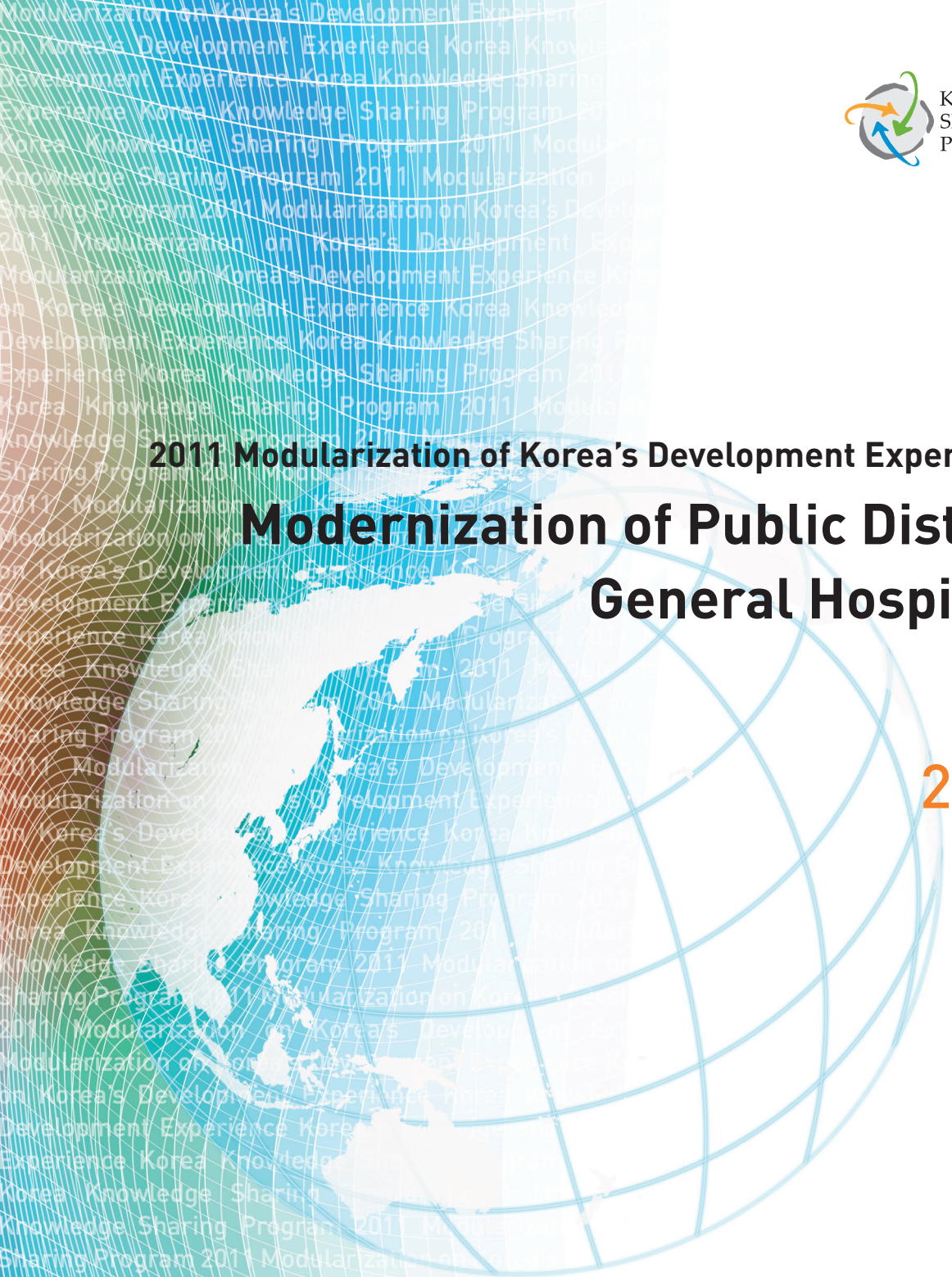

MINISTRY OF HEALTH & WELFARE

KHIDI

2011 Modularization of Korea's Development Experience:

Modernization of Public District General Hospitals

2011 Modularization of Korea's Development Experience

Modernization of Public District General Hospitals

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Preface

The study of Korea's economic and social transformation offers a unique opportunity to better understand the factors that drive development. Within one generation, Korea had transformed itself from a poor agrarian society to a modern industrial nation, a feat never seen before. What makes Korea's experience so unique is that its rapid economic development was relatively broad-based, meaning that the fruits of Korea's rapid growth were shared by many. The challenge of course is unlocking the secrets behind Korea's rapid and broad-based development, which can offer invaluable insights and lessons and knowledge that can be shared with the rest of the international community.

Recognizing this, the Korean Ministry of Strategy and Finance (MOSF) and the Korea Development Institute (KDI) launched the Knowledge Sharing Program (KSP) in 2004 to share Korea's development experience and to assist its developing country partners. The body of work presented in this volume is part of a greater initiative launched in 2007 to systemically research and document Korea's development experience and to deliver standardized content as case studies. The goal of this undertaking is to offer a deeper and wider understanding of Korea's development experience with the hope that Korea's past can offer lessons for developing countries in search of sustainable and broad-based development. This is a continuation of a multi-year undertaking to study and document Korea's development experience, and it builds on the 20 case studies completed in 2010. Here, we present 40 new studies that explore various development-oriented themes such as industrialization, energy, human capital development, government administration, Information and Communication Technology (ICT), agricultural development, land development and environment.

In presenting these new studies, I would like to take this opportunity to express my gratitude to all those involved in this great undertaking. It was through their hard work and commitment that made this possible. Foremost, I would like to thank the Ministry of Strategy and Finance for their encouragement and full support of this project. I especially would like to thank the KSP Executive Committee, composed of related ministries/departments, and the various Korean research institutes, for their involvement and the invaluable role they played in bringing this project together. I would also like to thank all the former public officials and senior practitioners for lending their time and keen insights and expertise in preparation of the case studies.

Indeed, the successful completion of the case studies was made possible by the dedication of the researchers from the public sector and academia involved in conducting the studies, which I believe will go a long way in advancing knowledge on not only Korea's own development but also development in general. Lastly, I would like to express my gratitude to Professor Joon-Kyung Kim for his stewardship of this enterprise, and to his team including Professor Jin Park at the KDI School of Public Policy and Management, for their hard work and dedication in successfully managing and completing this project.

As always, the views and opinions expressed by the authors in the body of work presented here do not necessary represent those of KDI School of Public Policy and Management.

May 2012

Oh-Seok Hyun

President

KDI School of Public Policy and Management

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Summary

After the destruction of many public hospitals, such as Municipal and Provincial Hospitals during the Korean War, the Korean government worked hard to rebuild them; as a result, Municipal and Provincial Hospitals numbered 43 (4,830 sickbeds) by 1979. Note, however, that the hospitals that had played a significant role in the national health system saw their roles shrink, compared to the rapidly growing private hospitals beginning in the 1970s; they played a mere supporting role to private hospitals, and came to be regarded as low-quality hospitals for the low-income brackets. To make matters worse, operational efficiency in the hospitals were fairly low, since the features of the hospitals were not considered important. This prompted the Korean government to go through two rounds of policy promotion to nurture them into public district general hospitals. The first policy promotion was the public health system improvement program, which embraced Municipal and Provincial Hospitals for about eight years, beginning in 1981; the second was the public district general hospitals modernization program, implemented for about five years, starting in 2005. The two main reasons for the first policy promotion were the rapid growth of private hospitals driven by higher demand, due to post-war economic growth, and the introduction of national medical insurance system and the subsequent requests for support for public hospitals, which lagged behind private facilities. In response, the government implemented the program "Public Health System Improvement Measures," involving the unification of Municipal and Provincial Hospitals, the transformation of hospitals into district public corporations, modernization of their facilities and equipment, securing human resources for the hospitals, etc.

The first policy promotion failed due to insufficient social consent for public health, and inadequate experience and expertise in program promotions at the time. Although policy implementation brought about partial legal and institutional changes, expansion of sickbeds, and replacement of old equipment, the operation of the hospitals or national perception did not change remarkably. Despite the first policy promotion, some public district general

hospitals had to face closure or acquisition by private establishments before 2000, due to their low revenues, poor operations, old facilities, and outdated equipment.

By 2000, medium and small cities, as well as rural areas, became neglected due to scarce medical staffing resources and decreasing revenues for hospitals. This led to a gradual deterioration of national medical accessibility and equality. To address this problem, the "Public Health Care Expansion Comprehensive Measures," along with six major projects were conceptualized through government discussions in 2005. As part of the public health care system reform, a plan to promote district and Red Cross Hospitals as public district general hospitals was established, marking the way for the implementation of the second major hospital reform policy. Afterwards, the public health care expansion support task force was formed under the umbrella of the Ministry of Health and Welfare, promoting the modernization of facilities and equipment, in addition to a hospital operation assessment project for the full-scale promotion of the policy. Seven major features made up the modernization plan of public district general hospitals: long-term development scheme and model project promotion, facility and equipment modernization, securing competent human resources through exchanges with national university hospitals, competition stimulation for service among public medical institutions, institutional improvement for regular evaluation and transparent operations, a pursuit of public interest different from private hospitals, and the transfer of supervisory authority as a public district general hospital. To accomplish these tasks, the reorganization of related laws and regulations, including new legislation such as the "Law on the Establishment and Operation of Public District General Hospital," research and guidelines development, and establishment of the public health care expansion task force-a dedicated organization for program promotion-were implemented. For the second promotion policy, its first modernization program had been promoted according to its five-year short-term, mid-term, and long-term plans, but actual promotion was delayed; it is still in progress as of 2011, and visible accomplishment has yet to be seen. Still, its major performance for the last 5~6 years shows that a detailed model for public district general hospital has been established; based on this, long-term plans for each hospital were also established. Moreover, the modernization of facilities and equipment is proceeding through annual government support and private investment. The quality of hospital facilities and equipment has been upgraded based on models for relocation and new construction, refurbishment, and remodeling, along with support from experts. Aside from the modernization of existing hospitals, two new hospitals, including the Jinan Hospital in Jinan, to address the need for more medical care in the Jeonbuk Province, will be constructed. Hospital operation assessment programs have been administered annually since 2006, with desirable results. The operation assessment result was only 61.3 points in 2006, the first year of the program, but it rose to 68.8 points in 2010. Noticeably, scores in "quality of medical care" and "medical services for public interest," items to estimate the service level of public district general hospitals, went up remarkably. Patient satisfaction and employee satisfaction levels also grew, with financial independence improving, albeit slightly. This was attributed to feedback through the hospital operation evaluation programs

and subsequent operation improvement. Unfortunately, however, securing medical human resources through exchanges with national university hospitals has yet to be executed successfully, due to certain circumstances.

As mentioned above, the public district general hospital modernization program was implemented in two rounds of policies. In particular, the second program was promoted based on models established to take on the role of public hospitals, and establish short- and long-term plans in accordance with the financial scale of the government. Utilizing the work of specialized organizations, the current status of existing hospitals was analyzed, mid and long-term directions were suggested for individual hospitals, and finally, directions for program promotion and practical assistance were offered. The main feature of health care systems in most developing countries in Asia, Central and South America, and Africa is that the proportion of their public health care is higher than the private care, unlike in Korea, but the quality is low. Since these countries spend less for public district general hospitals than other sectors, due to their financial constraints, they rely primarily on ODA from overseas. Public district general hospital development models and operation guidelines produced during the promotion process of Korea's public hospitals can be applied to modernization programs of public hospitals in developing nations in a meaningful way, due to the historical similarities in their health care systems.

Chapter 1

Introduction

1. Introduction
2. Definition of Public district general hospitals
3. Policy Types for Public District General Hospitals

Introduction

1. Introduction

To explain the history of public district general hospitals, one must go back to the Japanese colonial era in the early part of the 20th century. Jahye Hospital and other Provincial Hospitals of this era were destroyed during the Korean war. After the war, the Korean government made it a priority to rebuild and expand municipal and provincial hospitals, then under the control of local government authorities. Thanks to such efforts, 43 municipal and provincial hospitals (4,830 sickbeds in all) were operational in 1979.

To promote these institutions as public district general hospitals, the government implemented promotion policies on two separate occasions. The first was a public hospital facility improvement program, which was promoted for about eight years, beginning 1981; the second was the public district general hospital expansion program, spanning about five years from 2005. Both policies had about 24-years terms, with different backgrounds and contents, but ultimately, they had the same goal, i.e., provision of support to public hospitals in performing their authentic functions and roles. The first policy promotion was not very successful, whereas the second seems relatively successful, since it is still being promoted as a government program today.

The backdrop for the first policy promotion was the growth of private hospitals, owing to increasing demand for health care due to post-war economic growth, along with the introduction of the public health insurance system and requests for the improvement in public hospitals, which were comparatively falling behind private facilities. In response, the government supported the "Public Hospital Improvement Measures" for public medical facilities, such as national university hospitals, municipal and provincial hospitals, and health centers. These measures also sought to encourage efficient distribution of human resources and facilities. The goals for this first policy promotion was not fully achieved due to insufficient social consent on public hospitals, as well as the government's lack

of experience and expertise in program promotions. Although the promotion resulted in the expansion of sickbeds, replacement of equipment, and partial legal and institutional changes, it failed to produce significant changes in the operation of public hospitals or national perception. Despite the political efforts, public district general hospitals faced difficult times by 2000, as some were shut down or sold to private institutions due to their deteriorating revenues, poor operation, and outdated equipment and facilities.

By 2000, medium and small cities, as well as rural areas, became neglected due to scarce medical staffing resources and decreasing revenues for hospitals. To deal with this problem, the government established the "Public Health Care Expansion Comprehensive Measures" through governmental discussions with six major promotion projects. As part of the public healthcare system reform, a plan to nurture public hospitals and Red Cross Hospitals as public district general hospitals was established. After that, the public healthcare expansion task force was organized for full-scale program promotion, under the umbrella of the Ministry of Health and Welfare. Using the task force, facility and equipment modernization, and operation assessment, were undertaken.

This research primarily aims to present the background, contents, and cases of the public district general hospital promotion plan, which went through a series of trial and errors for a considerable period, along with two rounds of concept and modernization models. It also seeks to investigate the lessons and implications that can be utilized for cooperation with international organizations or developing nations.

2. Definition of Public district general hospitals

Before defining public district general hospitals, the concept of public healthcare should be clearly established. In the past, public healthcare meant a mere supporter of private health care; beginning in the 21st century, however, it was broadened to stewardship.[1] The past role of public healthcare was limited to medical services for lower-income households, or direct provision of a scarce service; however, it has now changed to cover market failure, create a cost-efficient supply system, and provide high- quality medical care, prevention service, and non-market essential public materials. It also spearheads high technology in biotechnology and industrial development. In this context, Korea legislated the "Law on Public Health Care" in 2000 and defined public healthcare as "all activities performed by public health care institutions for the protection and improvement of national health."

1 WHO, World Health Report 2000.

Table 1-1 | Changes in the Concept and Role of Public Health Care

Classification	20th C	21st C (since 2000)
Concept	· Supporter of Private Hospitals	· Active Steward (stewardship)*
Roles	· Medical Service for Lower-Income Brackets · Direct Provision of Scarce Service (Government-Supported Hospitals, Public Health Doctors, Public Health Centers, etc., for Medical Service in the Rural Areas)	· Complement of Market Failure · Cost-Efficient Supply System · Quality Medical Care and revention · Non-Market Essential Public Materials · High Technology and Industrial Development

* WHO, World Health Report 2000

According to WHO,[2] the target population for public district general hospitals is between 15 thousand and one million, with 200 to 600 beds that are needed; if the hospital accommodates 15 to 30 thousand patients, however, the requirements for beds can be smaller. The level and range of services provided in public district general hospitals are higher than primary medical institutions (hospitals or clinics); they provide services for inpatient, outpatient, one-day surgery, and emergency care, and they retain pharmacy, internal medicine, surgery, pediatrics, OB/GYN, radiology, and clinical laboratory departments. Public district general hospitals perform the treatment of acute conditions, rehabilitation, and education, in addition to researching and supporting the medical care system. They can be classified into four models, according to their capabilities to support their national healthcare system: dominant hospitals, hub hospitals, comprehensive hospitals, and separatist hospitals.

The concept of Korean public district general hospitals was established from the public health care improvement policy promotion of 1981. Social discussions, consent to public healthcare, and results of the public district general hospital modernization policy in 2000 also were influential. Public district general hospitals retain beds for acute conditions, and proper equipment and facilities to provide clinical services that cover about 50% of the total medical care activities (based on ADRG[3]), fulfilling the basic medical demands of the community. and These hospitals also provide comprehensive, steady medical service that is difficult for private hospitals to offer to the community, such as emergency, rehabilitation, long-term care, palliative care, home care, and more. In order to achieve their intended goals, moreover, they create a collaborative system with the medical institutions in the community, such as public health centers, private clinics and hospitals, welfare facilities, etc..

2 WHO, Hospitals in a Changing Europe, 2002.

3 ADRG (Adjacent Diagnosis-Related Group) stands for diagnosis-related patient groups; it is an in-patient classification system developed to define the outputs of hospitals.

Meanwhile, with government policies and laws as the foundation, Korean public district general hospitals refer to local public hospitals established in accordance with the "Law on the Establishment and Operation of Public District General Hospital," and Red Cross Hospitals affiliated with the Korean Red Cross. As of 2011, Korea has 39 public district general hospitals in all-34 public district general hospital including the Seoul Medical Center, and five Red Cross Hospitals, including the Seoul Red Cross Hospital.

3. Policy Types for Public District General Hospitals

Before public district general and Red Cross hospitals developed into what they are today, the Korean government promoted two rounds of policies: the "Public Health Care System Improvement Measures" ("first policy") implemented for about eight years from 1981 to 1988, and the "Public District General Hospital Promotion Measures," (second policy) implemented from 2005 to 2010. As a simple comparison, the second policy (2005) was implemented 24 years after the first (1981), and the Korean government did not refer to them as the first or second policy. Other small-scale programs were also promoted, but the two policies played the biggest role in nurturing public district general hospitals into their current modern state, and they can be regarded as having a connected relationship to one another.

By the 1970s, municipal and provincial hospitals had worked as central medical institutions, but they saw their roles shrink, when compared to private hospitals, which were rapidly growing due to improved economic standards, and the newly introduced institution of national public insurance during the 1970s and 1980s. The first policy was implemented to cope with this issue and improve public health care by changing municipal and provincial hospitals-which had been agencies of city and provincial governments-into local public corporations based on the Public Corporation Law by 1980. The law promoted legal and institutional changes, including the establishment of a new operation method, along with the modernization of facilities and equipment. But the lack of national consent with regard to public healthcare blocked rapid changes in the national health care system, and the lack of expertise in promoting changes deterred securing the political support and finances necessary for better-functioning public hospitals. As a result, the expected goals were not fully realized. The second policy was promoted to modernize public district general hospitals from 2005, based on national and social consent with regard to public healthcare. The second policy incorporated in-depth analysis of reasons why the first promotion failed, and created a concept of public healthcare at the global level.

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Chapter 2

Mordenization of Municipal and Provincal Hospitals the 1980s after the Korean War

1. Policy Introduction Background
2. Major Contents of Policies and Expected Benefits
3. Policy Promotion Process
4. Policy Evaluation

Modernization of Municipal and Provincial Hospitals the 1980s after the Korean War

1. Policy Introduction Background

1.1 Municipal and Provincial Hospitals in the Japanese Invasion Era (1910~1945)

While advanced nations were modernizing their various infrastructure after the industrial revolution, Korea had a clear division between social classes, due to the Lee Dynasty's noble-based bureaucratic political system and agriculture-based economy. As a result, it was very difficult in Korea to create a well-organized healthcare system for the general public. Around the 1870s in the late Joseon dynasty, western medicine was introduced, but was used mainly for royal families; only charity medical care was available for the common people.

Even after the Japanese forcefully annexed Korea in 1910, the establishment of a healthcare system, or the creation of healthcare for Koreans could not be realized. In that year, however, 10 hospitals were established based on the Local Regulations of the Joseon Governor-General of Japan, and Japanese Imperialism's medical system was brought into Korea. The hospitals at the time were directly operated by the Joseon Governor-General, dubbed "Jahye Hospitals."[4] In 1925, when the management right of the hospitals was transferred to each provincial government, they were renamed provincial hospitals. In the 1930s, there were about 30 provincial hospitals nationwide; at a time when private hospitals hardly existed, they were the only medical facilities for local areas, having been established by Japan. Besides provincial hospitals, there were a few clinics opened by practitioners, but only the Japanese or financially affluent people could afford to use them. Medical service, which was very rarely provided to the general public, was utilized as a tool to suppress the

4 Modern hospitals were established by the Japanese, beginning in 1903. Jahye means having generous mercy on others, such as philanthropy or charity; however, they were often utilized as a tool of exploitation of the Korean people, under the ruse of medical charity

colonized Korean population. As such, most Koreans had no choice but to use folk therapy or traditional herb medicine.

Figure 2-1 | View of Gyeongbuk Provincial Hospital (1930s)

1.2 Healthcare After the Independence from Japan (1945~1980)

1.2.1 General Status

During the political turmoil between the end of World War II in 1945 and the beginning of the Korean War in 1950, there was no possibility of developing a Korean healthcare system. Worse, during the Korean War, which lasted until 1953, around 70% of the existing medical facilities were destroyed, and a large number of medical human resources was lost. During and after the war, a multitude of contagious diseases especially acute ones such as typhoid or smallpox were commonplace, and the spread of tuberculosis was a pressing issue. To deal with these conditions, the Korean government mobilized medical workers from the private sector to strengthen group vaccination. The health state of Koreans at the time was similar to the level of underdeveloped nations, and the country had high infant mortality and malnutrition rates. By 1962, improvements in national health indices were hardly realized, due to political, economic, and social unrest.

1.2.2 Economic Development Planning and Finances for the Health Care Sector

For post-war recovery and economic development, the Korean government established its economic development plans and executed them, beginning in 1962. During the First 5-Year Economic Development Plan period, health centers were established in cities, provinces, counties, and districts across the nation, beginning in January 1963. The public

health centers operated contagious disease control programs, mother and child health, and family planning programs. The head of each center was a doctor, with nurses or medical technicians performing their duties. The number of workers in the centers gradually increased; from the Second Economic Development Plan period, at least three health staff members Family Planning Staff, Tuberculosis Staff, and Mother and Child Health Staff were deployed to 1,300 Eups or Myuns (small Korean administrative districts) nationwide, in order to expand health centers programs to small administrative districts, and create a primary health care system driven by them.

With the growth of the private health sector, general hospitals grew 350%, and total medical workers went up 217% by the Third Economic Development Plan period (1972~1976) (see Table 2-1).

Table 2-1 | Facility and Manpower Trend

	1968	1973	1977	Total Change '68~'77 (%)	
Facilities					
General Hospital	12	17	54	+	350.0
Clinic	5,211	5,993	6,008	+	15.3
License Issued					
Physician	12,727	16,377	18,405	+	44.6
Dentist	1,854	2,363	2,823	+	52.3
Herb Doctor	2,446	2,691	2,610	+	6.7
Nurse	11,925	21,953	30,294		159.3
Nurse Aid	850	24,429	40,210	+	4,631.0

Source: Ministry of Health and Social Affairs, Yearbook of Public Health and Social Statistics, 1978

While the economy was growing, a "permissive and classic private medical care system," based on the free clinic opening system that had started from the Japanese Invasion period when Western medicine had been introduced, was naturalized in Korea. After World War II, Japan implemented policies to strengthen the roles of public healthcare, focusing on the free clinic opening system. The difference in Korean healthcare during the Japanese Invasion era and post-Korean war was that a medical specialist system was put into operation through the influence of the American system. To sum up, the supply of medical care was dependent on the free market led by the private sector; although there were public hospitals, they were busy with the maintenance of the existing facilities due to the low investment from the government. As a result, they were unable to perform their pre-war functions due to their bureaucratic operation.

During the Third 5-Year Economic Development Plan period between 1962 and 1976, the Korean economy developed at a remarkable rate; since the strategy of the plan focused on economic development, however, investment in the public healthcare sector was neglected for the most part during this period. Government investment in public healthcare was only around 1% of the total annual investment; the annual government budgets for the health care sector at the time are shown in <Table 2-2>.

Table 2-2 | Government Healthcare Expenditure by Year

(Unit: KRW 100 million)

Year	Government Budget (1)	Health Care Budget (Government) (2)	(2) / (1) × 100
1965	947	8.8	0.90
1970	4,463	43.2	0.97
1975	11,310	95.0	0.84

Source: National Health Plan, 1977-1981, Ministry of Health and Social Affairs, p.23 and Social Development, 1968, Ministry of Health and Social Affairs, p.182

Concentrating on economic development, the priority for the public health sector investment was quite low, as shown in <Table 2-3>; the ratio of the public health sector to total health expenditure went down gradually.

Table 2-3 | National Health Care Expenditure, 1970~1974

(Unit: KRW million)

Category	1970	1971	1972	1973	1975
Public Sector	106	147	165	181	214
Expenditure	(16.4%)	(18.2)	(15.4)	(13.8)	(11.2)
Central Government	47	73	76	82	95
Local Government	59	74	89	99	119
Private Sector	540	659	908	1,127	1,712
Expenditure	(83.6%)	(91.8)	(84.6)	(86.2)	(89.8)
Private Expenditure	523	649	896	1,112	1,681
Voluntary Organization	7	10	12	15	21
Total Expenditure	646	806	1,073	1,348	1,916
	(100%)	(100)	(100)	(100)	(100)
GNP	25,893	31,515	38,600	49,287	67,791
Population (in 1,000)	31,435	31,828	32,360	32,905	33,459
Total Health Expenditure to GNP	2.5	2.6	2.8	2.7	2.8
Per Capita Health Expenditure in KRW	2,055	2,532	3,316	3,975	5,726

Source: Health Sector Plan for the Fourth Five-Year Economic Development Planning Period, Ministry of Health and Social Affairs, 1976

For the Fourth 5-Year Economic Development Plan commenced in 1977. Its keynote was "solid growth and social development," and social investment was increasingly expanded. From the Fifth plan, "advanced economic structure and full-scale social development" were targeted to expand investment in the public health and social sectors. Before the fifth plan, political intervention for the public health sector had been practically nonexistent; beginning the late 1970s, however, political actions for the sector began in earnest (see Table 2-4).

Table 2-4 | Keynotes of the Korean Economic Development Plans

Classification	Year	Keynote
1st Plan	1962~1966	Commencement of Development and Organization of Institutional Foundation
2nd Plan	1967~1971	High Development Realization and Industrialization
3rd Plan	1972~1976	Development of Industrial Structure and Stable Balanced Growth
4th Plan	1977~1981	Solid Growth and Social Development
5th Plan	1982~1986	Advanced Economic Structure and Full-Scale Social evelopment

1.2.3 General State of Medical Human Resources, Facilities, and Equipment

Korea's healthcare system between the 1970s and 1980s could be largely divided into the public and private sectors. The public health care sector consisted of health centers that mainly operated prevention programs, along with national university, municipal, and provincial hospital programs. The vast majority of healthcare programs were operated by the private health care sector.

a. Medical Human Resources

As of 1979, 16 medical colleges, 2 dental colleges, 2 oriental medicine colleges, 51 nursing schools, and a number of medical technician schools were producing healthcare professionals. The number of nurses and nursing assistants grew considerably, with the number of doctors and dentists increasing by 50% for a decade. Like other countries, medical manpower was centralized in urban areas. <Table 2-5> shows the regional distribution of medical workers in Korea. At the time, around half of the Korean population (52%) was living in urban areas. The table below shows that 80-90 % of medical service providers were located in cities, although there were relative differences depending on job type.

Table 2-5 | Distribution of Actively Practicing Manpower in the Health Sector

Manpower	Urban		Rural		Total
Physician	10,457	(89.1)	1,277	(10.9)	11,734
Dentist	1,855	(91.5)	172	(8.5)	2,027
Herb Doctor	1,982	(80.2)	422	(19.8)	2,404
Limited Doctor	35	(7.5)	429	(92.5)	464
Limited Dentist	21	(30.9)	47	(69.1)	68
Midwife	1,367	(78.1)	383	(21.9)	1,750
Nurse	9,214	(84.2)	1,725	(15.8)	10,939

Source: Ministry of Health and Social Affairs, Present Status of Medical Administration, Oct. 1978 (military and other services excluded)

As shown in Table 2-6, the number of doctors in urban and rural areas differed sharply. Seoul had 82 doctors per 100,000 people. In comparison, there were only 11.1 doctors for 100,000 people in the Chungbuk Province.

Table 2-6 | Professionally Active Physicians by City/Province

City/Province	Population	No. of Physicians	Persons/ Physician	MD/100,000 persons
Seoul	7,254,958	5,954	1,219	82.1
Busan	2,573,713	1,272	2,023	49.4
Gyeonggi	4,150,324	754	5,504	18.2
Gangweon	1,842,363	323	5,704	17.5
Chungbuk	1,513,465	168	9,009	11.1
Chungnam	2,960,590	505	5,863	17.1
Jeonbuk	2,445,149	442	5,532	18.1
Jeonnam	4,001,698	714	5,605	17.8
Gyeongbuk	4,902,059	1,091	4,493	22.3
Gyeongnam	3,275,867	435	7,531	13.3
Jeju	420,830	76	5,537	18.1
TOTAL	35,341,016	11,734	3,012	32.2

Source: Present Status of Medical Administration, Published by the Ministry of Health and Social Affairs in Oct. 1978, p.27

Korea, whose medical specialist qualification system was introduced by the US produced a great number of specialists. But a majority of the doctors opened private clinics, since there were few general hospitals or hospitals. According to the national medical institution survey in December 1976, 24.0% of specialists opened their own specialized clinics. <Table 2-7> below shows the changes in the supply of doctors, as estimated by the Korean government in 1981. As of 1978, a doctor dealt with 595 people in the US, 845 people in Japan, and 8,246 people in Thailand, whereas a Korean doctor treated 2,162 people in 1981. The number of doctors that needed to be supplied was provided through annual predictions by the government, but the imbalance among regions (61.8% in Seoul and Busan) was not as easily solved.

Table 2-7 | Doctor Supply Change Estimated by the Government

Classification	1981	1985	1990	1995	2000
Number of Doctors (in 1,000)	17.9	22.9	33.0	42.4	51.2
Population per Doctor	2,162	1,798	1,343	1,115	977

Note: Source: Public Health Care System Improvement Measures, 1981, Data from the Administration Office of the Prime Minister

b. Medical Facilities and Equipment

The Health Care Law in 1979 stipulated Korea's medical institutions and their founders. Medical institutions were classified into general hospitals, hospitals, clinics, dental hospitals, oriental medicine hospitals, oriental medicine clinics, and midwife centers. Those qualified to establish medical facilities are shown in <Table 2-8>.

Table 2-8 | Eligible Persons for Medical Facilities

Type of Medical Facilities	Who Can Establish a Medical Facility
General Hospital	Physician and Med. Cooperative Physician
Hospital	
Clinic	
Dental Hospital	Dentist
Dental Clinic	
Hospital for Herb Medicine	Herb Doctor
Herb Doctor Clinic	
Midwifery Clinic	Midwife

* Exception: The government, local government, judicial foundation for medical service, and non-profit corporation established by the Special Law and the government can establish medical facilities.

Furthermore, the law states minimal standards for medical facilities, depending on type. <Table 2-9> shows the classification of medical institutions based on hospitals.

Table 2-9 | Minimum Requirements by Type of Medical Facility

Type of Medical Facility	No. of Minimum Beds	Minimum Requirement of the Specialist Dept.
General Hospital	80	Internal Medicine
		General Surgery
		Pediatrics
		OB-GYN
		X-Ray, Anesthesiology
		Clinical Pathology
		Dental
Hospital	20	
Clinic	No Requirement	
Dental Hospital	20	
Hospital for Herb Medicine	20	
Dental Clinic	No Requirement	
Midwifery Clinic	No Requirement	

As of 1979, general hospitals in Korea had more than 80 sickbeds, five clinical departments (internal medicine, general surgery, pediatrics, OB/GYN, and dental departments), three supporting departments (radiology, anesthesiology, and clinical pathology), with specialists for each department. Meanwhile, if the medical facility had more than 20 beds, it could be called a hospital; a single-department hospital could be established, and clinics were not required to have sickbeds. Medical facilities other than hospitals included clinics, dental clinics, oriental medicine clinics, and midwife centers. Almost all of them were opened by private practitioners. At the time, clinics and dental clinics opened by doctors and dentists increased slightly, but oriental medicine clinics and midwife centers decreased.

<Table 2-9> shows the distribution of clinics and sickbeds by city and province. Clinics in larger cities such as Seoul or Busan had 2.2 and 3.6 beds, respectively, on average, but clinics in rural areas or smaller cities had more sickbeds. Clinics in Gangwon Province, which had the lowest population density (population density as of 1979: national average of 363 people/km^2; Gangwon Province: 109 people/km^2) in Korea, had 11.6 beds on average, which was the highest in the nation. Clinics in rural areas had more sickbeds than those in urban areas because clinics partly performed the role of hospitals.

Table 2-10 | Number of Beds of Private Practitioners

City/Province	No. of Clinics	No. of Beds	Beds/Clinics
Seoul	2,185	4,889	2.2
Busan	690	2,478	3.3
Gyeonggi	478	2,809	5.9
Gangweon	150	1,742	11.6
Chungbuk	119	866	7.3
Chungnam	300	1,551	5.2
Jeonbuk	227	1,699	7.5
Jeonnam	353	2,518	7.1
Gyeongbuk	617	2,920	4.7
Gyeongnam	291	1,644	5.4
Jeju	51	306	6.0
TOTAL	5,461	23,422	4.3

Source: Ministry of Health and Social Affairs, National Medical Facility Survey Report, 1977

The distribution of medical facilities per 100,000 people by region in 1977 shows that only Seoul and Busan surpass the national average at 15.4, with Chungbuk having the lowest number of clinics (see Table 2-11). The rate of clinics opened without a specialized department was 54.3%. Among clinics opened with a specialized department, surgery and OB/GYN clinics recorded the highest rate with 9.9% and 9.2%, respectively.

Table 2-11 | Number of Clinics per Population of 100,000 by City/Province

City/Province	No. of Clinics/Population of 100,000
Seoul	30.1
Busan	26.5
Gyeonggi	11.4
Gangweon	8.3
Chungbuk	7.9
Chungnam	10.1
Jeonbuk	9.3
Jeonnam	8.8
Gyeongbuk	12.6
Gyeongnam	8.9
Jeju	12.1
National Average	15.4

Source: Ministry of Health and Social Affairs, National Medical Facilities Survey Report, 1977

Meanwhile, surgery-related clinics, including OB/GYN, psychiatric clinics, and neurological clinics, had a higher average for sickbeds, which showed that they dealt with more inpatients than other clinics. By city and province, Busan had the highest number of specialized clinics, and each province had a higher rate of surgery-related clinics. Gangwon, Chungbuk, and Jeju Provinces had the lowest number of OB/GYN services, one of the four basic clinics.

As of late July 1978, Korea had a total of 10,600 medical facilities, but most of them were small clinics and hospitals; general hospitals accounted for a small portion with 234 (see Table 2-12). Likewise, only 22,636 beds, or slightly less than half of the 50,000 total sickbeds of Korea at the time, were in hospitals and general hospitals. By comparison, private practitioners, i.e., small clinics, had 26,796, or more than half of the total number (see Table 2-13).

Table 2-12 | Number of Medical Care Facilities in Korea

Type of Facilities	No. of Facilities
Western Medicine	
General Hospital*	54
Hospital*	180
Special Hospital*	19
Clinic	6,270
Subtotal	6,523
Dental Hospital	4
Dental Clinic	1,720
Subtotal	1,724
Herb Medicine	
Hospital for Herb Medicine	9
Herb Doctor's Clinic	2,344
Subtotal	2,353
TOTAL	10,600

Source: Ministry of Health and Social Affairs, Present Status of Medical Administration, p. 124~125

* Journal of the Korean Hospital Association vol. 7, No. 4~5, May 1978

Table 2-13 | Number of Hospital Beds in Korea

Type of Facilities	No. of Facilities	No. of Beds
General Hospital*	54	13,977
Hospital*	180	8,659
Subtotal	234	22,636
Dental Hospital**	4	89
Hospital for Herb Medicine**	9	307
Total	247	23,032

Source:* Journal of the Korean Hospital Association, vol. 7, No. 4~5, May 1978 (Special hospitals excluded)
** Ministry of Health and Social Affairs, Present Status of Medical Administration, p.124~125, Oct. 1978

As shown in <Table 2-14> below, over half of hospitals and general hospitals had less than 49 beds.

Table 2-14 | Size of Hospital and General Hospital

Size in Terms of No. of Beds	No. of General Hospitals	No. of Hospitals	Total
Less than 49	-	120	120 (51.3%)
50~99	-	39	39 (16.7%)
100~199	22	21	43 (18.4%)
200~299	15	-	15 (6.4%)
300~399	8	-	8 (3.4%)
400~499	4	-	4 (1.7%)
More than 500	5	-	5 (2.1%)
Total	54	180	234 (100.0%)

Source: Journal of the Korean Hospital Association, vol. 7, No. 4~5, May 1978 (Long-stay hospitals were excluded.)

Meanwhile, most of the hospitals among these medical facilities were operated by individuals. Dividing the owners of hospitals and general hospitals into private and public sector, we can see that 71.9% of the facilities, or more than half, were owned by the private sector (see Table 2-15).

Table 2-15 | Number of Hospitals and Hospital Beds by Sector

Category	Public Sector	Private Sector	Total
No. of Hospitals			
General Hospital	19 (35.2)	35 (64.8)	54
Hospital	41 (22.8)	139 (77.2)	180
Special Hospital	11 (57.9)	8 (42.1)	19
Total	71 (28.1%)	182 (71.9%)	253
No. of Hospital Beds			
General Hospital	5,027 (36.0)	8,950 (64.0)	13,977
Hospital	2,337 (27.0)	6,322 (73.0)	8,659
Special Hospital	3,074 (68.4)	1,421 (31.6)	4,495
Total	10,438 (38.5)	16,693 (61.5)	27,131

Source: Journal of the Korean Hospital Association, vol. 7, No. 4~5, May 1978

* The National Leprosy Center was excluded.

* Special Hospital means mental hospital and hospital for crippled patients and TB/leprosy sanatoriums.

<Table 2-16> shows that 80% of hospitals and 90% of sickbeds were centralized in urban areas; rural areas had scarce medical resources at the time.

Table 2-16 | Location of Hospital and Hospital Beds

Category	Urban	Rural	Total
No. of Hospitals			
General Hospital	52 (96.3)	2 (3.7)	54
Hospital	140 (77.8)	40 (22.2)	180
Special Hospital	10 (52.6)	9 (47.4)	19
Total	202 (79.8)	51 (20.2)	253
No. of Hospital Beds			
General Hospital	13,697 (98.0)	280 (2.0)	13,977
Hospital	7,155 (82.6)	1,504 (13.4)	8,659
Special Hospital	3,507 (78.0)	988 (22.0)	4,495
Total	24,359 (89.8)	2,772 (10.2)	27,131

SOURCE: Journal of the Korean Hospital Association, vol. 7, No. 4~5, May 1978

* The National Leprosy Center was excluded.

* Special Hospital means mental hospital and hospital for crippled patients and TB/leprosy sanatoriums.

Looking at the increasing trends in general hospitals and clinics, we can see that clinics increased only by 15% for a decade, but the number of general hospitals grew 350% during the same period. This suggests that medical service at general hospitals skyrocketed at the time (see Table 2-17).

Table 2-17 | Facilities' Increasing Trend

Medical Facility	1968	1973	1977	Total Change '68~'77 (%)
General Hospital	12	17	54	+350.0
Clinic	5,211	5,993	6,008	+ 15.3

Source: Yearbook of Public Health and Social Statistics 1978, Ministry of Health and Social Affairs

c. Hospital Utilization Trend

Bigger population and better economic conditions raise medical demands significantly, as the two factors result in the potential demand for clinics. In comparing these trends with hospital utilization for 15 years between 1962 and 1977, medical demand went up by 2.6 times, whereas the population grew only by 37.5%. In other words, the number of inpatients using hospitals went up by 4.4 times, and outpatients grew by 2.7 times (see Table 2-18).

Table 2-18 | Hospital Utilization Trend

Category	1962	1967	1972	1977	Total Change '62~'77 (%)	Index '62=100
Population in thousand	26,513	30,131	33,505	36,450	+ 37.5	137.5
No. of Hospital Beds	9,637	14,948	16,373	25,465	+164.2	264.2
No. of Hospital Beds/1,000 persons	0.363	0.494	0.489	0.699	+ 92.6	192.6
No. of Hospitalized Patients/year	107,020	188,498	239,785	468,016	+337.3	437.3
Hospitalized Patients/1,000 persons/ year	4,037	6,526	7,157	12,840	+218.1	318.1
Accumulated Hospital Stay in Days	1,948,835	3,455,797	3,068,495	5,498,206	+182.1	282.1
Average Length of Hospital Stay	18	18	13	12	- 33.3	66.7
Bed Occupancy Rate (%)	55.4	63.3	51.3	59.2	+ 6.9	106.9
Bed Turnover Rate	11.2	12.8	14.4	18.0	+ 60.7	160.7
Total No. of Hospital OPD Visits	4,407,610	5,815,231	5,583,156	11,812,836	+168.0	268.0

Source: Ministry of Health and Social Affairs; Yearbook of Public Health and Social Statistics, 1978

d. International Comparison in terms of Medical Manpower and Facilities

Developed nations in 1979 had a doctor per less than a thousand people, and a sickbed per 100-150, but the per bed and doctor population in Korea was the same as the level of underdeveloped nations, as shown in <Table 2-19>. In other words, a sickbed had to accommodate more than 1,500 people, and a doctor had to treat more than 2,000 people. While a doctor in developed nations managed 4 to 6 sickbeds, a Korean doctor tended to only to 1.5 sickbeds; this shows that investment in sickbeds was insufficient compared to the nurturing of doctors, and that medical activities were mainly carried out by visiting hospitals.

Table 2-19 | Comparison of the Health Sector Index by Country

Country	Population per Physician	Population per Hosp. Bed	Hosp. Beds per Physician	Hosp. Beds per Hospital
AFRICA				
Egypt	1,516	461	3.1	52.1
Gabon	5,208	98	52.0	113.5
Kenya	16,292	759	20.8	?
Liberia	12,576	509	16.5	19.8
Morocco	13,345	693	19.7	171.9
Nigeria	25,463	1,378	18.0	?
NORTH AMERICA				
Costa Rica	1,413	256	5.6	156.6
Cuba	1,153	228	5.6	12.8
Canada	613	106	5.8	149.9
Guatemala	4,338	412	10.5	126.1
Mexico	1,385	785	1.6	41.1
Panama	1,339	248	4.7	95.3
Puerto Rico	855	219	4.0	89.6
United States	622	145	4.3	194.8
SOUTH AMERICA				
Argentina	479	176	2.7	46.7
Brazil	2,025	266	7.9	86.4
Chile	1,836	291	6.3	136.3
Colombia	2,184	525	4.2	58.5
Ecuador	2,928	478	6.5	6.28

Country	Population per Physician	Population per Hosp. Bed	Hosp. Beds per Physician	Hosp. Beds per Hospital
Guyana	3,584	190	18.8	92.7
Peru	1,802	497	3.6	66.9
Uruguay	911	193	4.6	155.7
Venezuela	866	327	2.6	99.5
ASIA				
Hong Kong	1,642	252	6.5	161.6
India	4,162	1,571	2.4	20.7
Israel	351	169	2.0	209.4
Japan	868	78	10.9	35.7
Korea	2,571	1,651	1.5	74.9
Kuwait	800	241	3.6	172.7
Malaysia	4,774	276	17.8	157.0
Mongolia	518	103	5.0	33.1
Philippines	2,632	822	3.1	56.9
Saudi Arabia	4,995	897	4.6	128.8
Singapore	1,399	269	5.2	479.2
Thailand	?	774	11.0	83.6
EUROPE				
Denmark	624	103	6.0	161.2
France	?	95	7.2	?
Germany (west)	530	88	6.1	202.5
Germany (east)	557	92	6.0	315.4
Italy	502	95	5.3	262.8
Norway	623	74	8.5	63.6
Sweden	645	66	9.8	170.8
Switzerland	620	88	6.9	162.7
England&Wales	787	110	7.2	181.6
OCEANIA				
Australia	721	81	8.9	69.9
New Zealand	846	93	9.3	?
USSR	363	86	4.2	131.2

Source: United Nations Statistical Yearbook, 1975

Korea had small hospitals with less than 49 beds, whereas advanced nations had large hospitals with more than 150 beds (see Table 2-20). Korea essentially showed a different trend from that of advanced nations, in terms of economic scale.

Table 2-20 | Size of Hospitals and General Hospitals

Size in terms of No. of Beds	No. of General Hospitals	No. of Hospitals	Total
Less than 49	-	120	120 (51.3%)
50~99	-	39	39 (16.7%)
100~199	22	21	43 (18.4%)
200~299	15	-	15 (6.4%)
300~399	8	-	8 (3.4%)
400~499	4	-	4 (1.7%)
More than 500	5	-	5 (2.1%)
Total	54	180	234 (100.0%)

Source: Journal of the Korean Hospital Association, vol. 7, No. 4~5, May 1978 (Long-stay hospitals were excluded.)

e. Introduction of the Public Health Insurance System

Since social attention in Korea during the early 1960s was on economic development policies for national reconstruction, the nation did not have time to pay attention to social security policies including public healthcare, among others.

The early medical insurance law legislated in 1963 stipulated voluntary application for temporary and day employees. Afterwards, as the medical insurance law was amended, and preparation for medical insurance programs and securing finances were completed, medical insurance for employees (who work for a business establishment with more than 500 employees), government employees, and soldiers was mandatorily covered beginning in 1977 (medical insurance for the entire nation was completed after July 1989). Thus, separate policies were needed to provide public health services to low-income Koreans. In response, the government implemented a medical security system for the mentally and physically disabled and low-income earners, beginning in 1977. Medical service was free for Livelihood Security Recipients; outpatient service was free for the low-income brackets, but they still had to pay 70% of the inpatient service fee (in installments), with 30% paid by the government.

With the introduction of medical insurance and the medical security system, demand increased significantly. Compared to before (1966 to 1975) and after (1976 to 1985) the introduction, the increase in population was slow, with the number of doctors, medical

organizations, and sickbeds increasing by 1.7, 1.4, and 1.5 times, respectively. By standardizing the periods before and after the introduction of medical security system, as compared to the population growth rate, the growth rate of doctors was the most remarkable, with 2.4 times followed by beds (2.1 times) and medical facilities (2.0 times).[5]

f. Hospital Beds Demand and Supply

About 80% of the medical services was provided by the private sector, and was concentrated in the major cities. The public sector was playing a supplementary role in smaller cities and rural areas. A large part of the medical demand was not fulfilled, the rural areas had insufficient medical facilities, and the capacity to pay for medical bills by the poor in rural and urban areas was fairly low. In particular, medical facilities for special diseases such as mental illnesses, physical disability, tuberculosis, etc., were absolutely necessary during this time (see Table 2-21).

Table 2-21 | Number of Special Condition Patients and Sickbeds (1981)

Classification	No. of Patients	To be Hospitalized	Beds Required	Existing Beds	Beds to be Added
Mental Illnesses	380,000	65,000	28,000	4,000	24,000
Tuberculosis	840,000	15,000	7,500	2,100	5,400
Mentally or Physically Disabled	900,000	9,000	9,000	0	9,000

Source: Public Health Care System Improvement Measures, Administration Office of the Prime Minister, November 1981

The biggest reason for the poor public health care system was scarce government expenditure. Subsequently, the operation results of the existing public hospitals were not satisfactory, and this in turn resulted in distrust of public hospitals by Koreans. At the time, public hospitals were facing difficulties in operation due to low expertise in operation and independence, and in securing human resources. Although the government operated annual small-scale programs, including sickbed expansions and equipment replacements, bureaucratic operation, low expertise, and poor service distribution and delivery system of public hospitals deterred fundamental changes.

Looking at the aspects of medical demands, we can see that the inpatient utilization rate and outpatient utilization rate increased 21.1% and 58.1%, respectively, during the early medical insurance implementation stage between 1978 and 1979 (Government Statistics, 1981). Compared with the overseas, Japan saw a 6.7% increase in the annual average inpatient service utilization rate between 1961 and 1972, when its medical insurance system

5 Mun Ok Ryun (1992). Health Care Security Policy Research, p.22, Shing Gwang Publishing.

was institutionalized. For this reason, the Korean government expected the medical demand to grow, significantly driven by the steady increase in national income, growing older segment of the population, and growth of medical insurance recipients.

The government set up the medical facility expansion plan (Fifth Plan) since it had expected the shortage of medical facilities to worsen, due to the growing demands for medical care (see Table 2-22). According to the prediction of the government, the medical supply would not be enough to satisfy the increased demand caused by the rising national medical service utilization rate, even if a total of 32,600 beds had been added for public and private hospitals for five years until 1986. This was because the Korean government expected profits from hospitals to shrink further due to the increasing number of medical insurance recipients, and that its investment for private hospitals would slow down more than previously planned. But the government actually raised the number of private hospital, in accordance with the increasing number of patients by the early 2000s).

Table 2-22 | Estimation of Demand for Beds

(Unit: thousand beds)

Classification		1982	1983	1984	1985	1986
Demand		78.5	84.5	91.1	98.2	105.8
Supply		71.0	77.3	84.3	91.6	99.4
Expansion	Public Hospitals (6.7)	0.7	2.4	2.0	1.1	0.5
	Private Hospitals (25.9)	3.4	4.0	5.0	6.2	7.3
Shortage		-7.4	-7.3	-6.8	-6.6	-6.4

Note: Source: Public Health Care System Improvement Measures, Administration Office of the Prime Minister, November 1981

g. National Medical Expenditure

Medical expenditures (based on daily hospitalization charge rates) between 1972 and 1980 increased by nine times, whereas the consumer price index rose 3.7 times for the same period. The ratio of national medical costs to the GNP of Korea in 1978 was 3.0%, which was comparatively lower than advanced nations' rates (8.7% for the US and 4.5% for Japan).

1.3 General State of Public Hospitals such as Municipal and Provincial Hospitals

During the social chaos that ensued after the independence of Korea from Japan in 1945 and the Korean War in 1950, the lone national university hospital and most municipal and

provincial hospitals were destroyed. Furthermore, their medical staff were scattered during these times, and these institutions, as a result, were almost paralyzed. With the Korean War Armistice in 1953, the Korean government started a gradual organization of public medical facilities, and hoped to reconstruct public hospitals through the financial support of the UN and loans from overseas. The National Medical Center was established and operated under European operating methods, with the assistance of three Baltic States-Sweden, Norway, and Denmark. Doctors from these countries worked at the national hospital, for medical service and training, committing their services for an extended period of time.

With the number of private hospitals rapidly increasing since the 1970s, and with more financially affluent Koreans beginning to use them, the role of municipal provincial Hospitals was gradually reduced to facilities for low-income people and livelihood security recipients. Meanwhile, according to the District Public Corporation Law[6] in 1971, municipal and provincial Hospitals were operated as local public corporations (offices). There were two main reasons they were changed into public corporations. First, they were public establishments operated by local governments, but their current asset, profit and loss, were not clearly estimated, and their hospital management skills of hospital heads were poor; second, since hospital revenues were so low, they had to rely heavily on revenue from the general account of the government, and they lacked personnel rules for medical professionals, such as doctors and nurses, and other standards for their organization. Public hospitals were operated as district public corporations legally, but they always had a number of issues such as chronic loss, due to difficulty in securing doctors. This was due to the impossibly low wages of doctors, lack of sense of ownership due to their position as public servants, unrealistic medical fees, and more.

Public hospitals in 1980 were used by certain professions, such as the police and national meritorious people. These institutions included national university hospitals, municipal and provincial hospitals, health centers, veteran hospitals, railway hospitals (currently closed), and police hospitals. (see Table 2- 23).

6 The law stipulates that operation of local public corporations be established or operated by local governments themselves, or through the foundation of a corporation. It was legislated in 1969 and wholly revised in 1980, to apply to government programs such as water, industrial water, orbit, housing, and healthcare programs and local corporations. Similar to the Enterprise Budget and Accounts Law, it states the principles of intrapreneurship, accrual basis accounting, etc.

Table 2-23 | Current State of Public Hospitals (1980)

( )[7]: Composition Ratio

Facility Type	No. of Beds	Annual Treatment Performance (1980)		Budget for 1981 (KRW, hundred million)
		Inpatients	Outpatients	
Total	14,670	2,533	13,571	1,491
	(100%)	(100)	(100)	(100)
National University Hospitals	3,378	992	1,147	657
	(23%)	(39)	(8)	(44)
Municipal and Provincial Hospitals	4,830	595	1,940	188
	(33%)	(24)	(14)	(13)
Health Centers and Offices	-	-	9,578	350
			(71)	(23)
National Hospitals	470	162	226	132
	(3%)	(6)	(2)	(9)
Special Hospitals*	5,237	592	36	70
	(36%)	(23)	(0)	(5)
Veteran, Railways, Police Hospitals	755	192	644	94
	(5%)	(8)	(5)	(6)

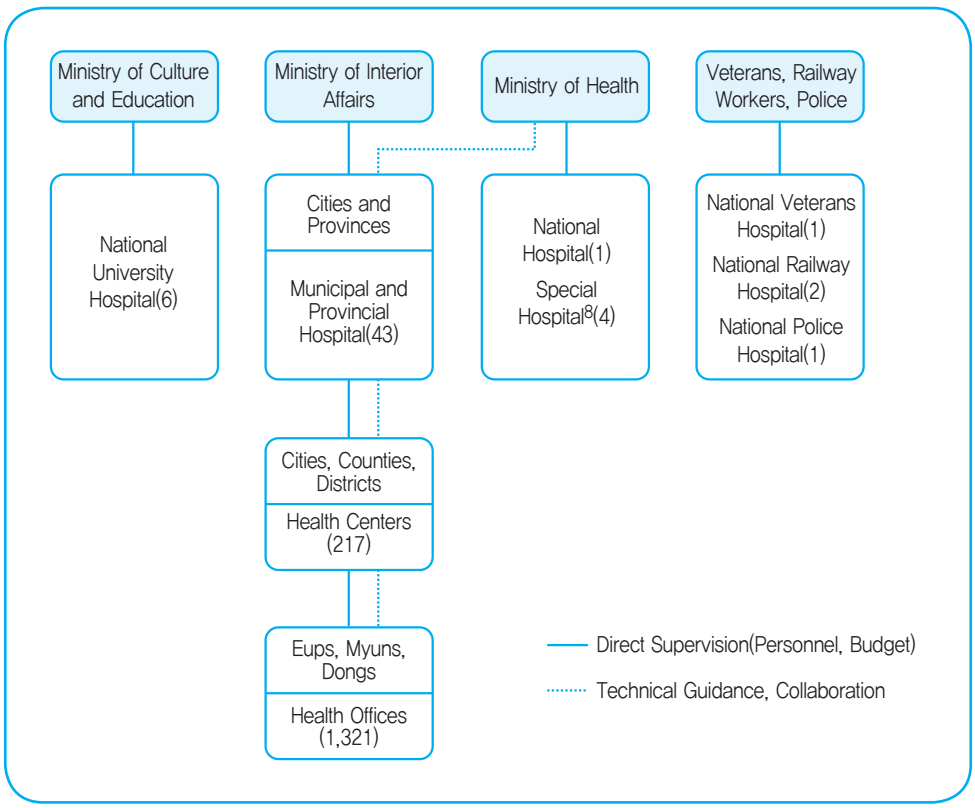
Note: * There are Special Hospitals among municipal and provincial Hospitals, which have not been included.

As of 1980, 43 municipal, provincial, and county hospitals had been opened, with 4,471 registered beds in all. Most of the hospitals were operated by local administrative institutions or central government, and six were special hospitals that mainly administered care to those with mental illnesses, infectious diseases, and children's diseases. The remaining 37 targeted general patients. Each had only 77 beds on the average.

In the 1980s, the stagnant growth of public hospitals started to cause difficulties in operation. Public hospitals were tied to a schematized administrative system, and were controlled by two different authorities: personnel and budget management was supervised by the Ministry of Interior Affairs, while medical program-related technical guidance was given by the Ministry of Health (see Figure 2-2). Furthermore, they needed organization management because they were both hospitals and government bodies, but lacked independence and expertise in budget, personnel, audit, and operation, equipment were older than private facilities, they also were avoided by most patients.

7 5,237 beds including 4,000 beds for leprosy

Figure 2-2 | Administrative Organization of Public Hospitals (1981)



Among municipal and provincial hospitals, 12 were general hospitals and 21 were small hospitals that only had two or three departments. Each had only six specialists on average. Moreover, their wages for doctors were based on those of civil servants, and were considerably lower compared to private hospitals. As a result, it was very difficult for public hospitals to secure doctors as needed. Their hiring rate was very low at 47.9% for specialists, 66.7% for pharmacists, and 81.3% for medical technicians. Furthermore, since the average working period of specialists was only less than six months, the high turnover rate was another issue public hospitals had to face at that time. This was mainly because most municipal and provincial hospitals were located in smaller cities and rural areas, and doctors had fewer opportunities for promotion, research activities, etc. Their living environment was also comparatively poor.

8 2 TB Hospitals, 1 Mental Hospital, 1 Leprosy Hospital

Table 2-24 | Current State of Municipal and Provincial Hospitals (1981)

Classification	Total	Seoul, Busan	Other Cities	Counties	Remarks
Hospitals	43	7	24	12	County Hospitals: Ullung County Hospital and Uljin County Hospital
Beds	4,830	2,133	2,226	471	

Source: Public Health Care System Improvement Measures, Administration Office of the Prime Minister, December 1981 (Data from the Presidential Library)

At least 31 of municipal or provincial hospitals were operated as offices under the umbrella of the Ministry of Interior Affairs, eight were directly operated by city or provincial governments, and four were entrusted to the private sector. The hospitals entrusted to private establishments desperately needed improvements due to their deteriorating public utilization, as well as new investment.

With the ordinary profit and loss rate of municipal and provincial hospitals reaching-41.9% and their financial reliance rate pegged at 30.9%, their operation results were extremely lower than national university hospitals (see Table 2-25). As an example, 12 municipal and provincial hospitals such as Seoul Seodaemun Hospital (currently known as Seoul Municipal Seobuk Hospital) and Ejunbu Hospital (currently known as Gyeonggi Provincial Hospital, Uijungbu) could not even pay the wages of their workers with their revenue. Not surprisingly, their financial state worsened as they accommodated 35.2% of medical aid recipients ("medical security patients"), including livelihood security recipients and low-income earners. As a result, they often had to charge general patients who did not have medical insurance at insured prices for the sake of public interest, unlike private hospitals. (see Table 2-27). In addition, the lack of doctors and the lower standards of these hospitals translated into seriously low bed utilization and day surgery rates (see Table 2-26).

Table 2-25 | Financial State of Municipal and Provincial Hospitals (1981)

Classification	Municipal and Provincial Hospitals				National University Hospitals
	General	Special	Entrusted	Total	
Ordinary Profit and Loss	-41.3	-75.5	-1.3	-41.9	1.9
Financial Reliance	25.9%	80.2%	-	30.9%	12.5%

Source: Public Health Care System Improvement Measures, Administration Office of the Prime Minister, November 1981 (Data from the Presidential Library)

Table 2-26 | Bed Utilization and Surgery of Municipal and Provincial Hospitals (1981)

Classification	Municipal and Provincial Hospitals				National University Hospitals
	General	Special	Entrusted	Total	
Bed Utilization Rate (%)	40.9	12.0	97.3	37.7	88.0
Day Surgery Frequency (Per 100 Beds)	0.7	-	2.6	0.8	2.5

Source: Public Health Care System Improvement Measures, Administration Office of the Prime Minister, November 1981 (Data from the Presidential Library)

Table 2-27 | Patient Type of Municipal and Provincial Hospitals (1981)

Classification	Total	General Patients	Insured Patients	Medical Security Patients
Municipal and Provincial Hospitals	100%	46.0%	18.8%	35.2%
National University Hospitals	100%	52.8%	41.5%	5.7%

Source: Public Health Care System Improvement Measures, Administration Office of the Prime Minister, November 1981 (Data from the Presidential Library)

1.4 Introduction of Public Loans from Developed Nations

To expand medical facilities in Korea, the government implemented three programs beginning in 1977. The first program was the expansion of public medical facilities through the modernization of municipal and provincial hospitals, construction of more health centers and mental illness facilities, and equipment reinforcement of national and public hospitals. The second program was the construction of hospitals in areas with poor medical care due to the excessive centralization of medical facilities in urban areas, or new industrial complexes according to the Economic Development 5-Year Plan (1978~1981). The third program was support for hospitals established by the private sector. Government financing or private investment alone was not enough to promote these facility expansion programs, and introduction of loans from overseas, such as Germany and Japan was inevitable. These public loans were introduced in accordance with related laws, such as the Foreign Investment Introduction Law.

The public medical facility expansion program was originally planned for promotion from 1977 to 1981, but was delayed until the mid-1980s. A total of 39 municipal and provincial hospitals were targets of the expansion program expansion of 33 hospitals to accommodate 80 sickbeds and construction of six new central hospitals but central hospitals were not constructed. At least 60% of the expansion expenditure came from the central

government, and 40% was from local governments; a number of facility constructions were delayed due to failure to secure budget from local governments. According to data at the time, government expenditure in 1981 was KRW 11.866 billion for 33 hospitals (see Table 2-28 below).

Table 2-28 | Modernization Program of Municipal and Provincial Hospitals (1980)

Program Scale (Proposal) (1977~1981)	Results		Planned for 1982
	1977~1980	Planned for 1981	
33 Hospitals (KRW 11.866 Billion)	21 (9.643 Billion)	4 (2.223 Billion)	4 (4.8 Billion)

Source: Current Program Promotion, December 31, State Work Management Department, Ministry of Health

Based on the government's 1979 national hospital construction plan, 1,760 sickbeds for 15 hospitals were planned for construction in general hospitals within industrial complexes and areas with poor medical care. According to the 1984 data, 12 industrial complex hospitals and 12 hospitals in areas without hospitals had been established, or were already under construction; among them, however, nine industrial complex hospitals and three hospitals in areas without hospitals were normally operated. In particular, Korea University Guro Hospital in Guro, Seoul is still being operated.

For the private hospital construction support program, 4,080 sickbeds were planned to be secured for 57 hospitals between 1980 and 1981, based on the government's number of required beds for 56 medical zones nationwide in 1980. The plan was one of the Korean government's policies to expand 150 beds to 165 beds per 100,000 people. The program was designed to induce the expansion of beds by supporting the construction of affiliated hospitals in existing private general hospitals, private university hospitals, or allied hospitals of local private practitioners (medical corporations). These hospitals were asked to set up in areas with high hospital utilization rates by considering traffic or population density, and expenditures for hospital construction was subsidized by a special loan with long-term, low interest rates, while equipment purchases were supported through public loans. A total of 4,080 beds for 43 hospitals were supported by 1984, but only 17 hospitals were normally operated.

2. Major Contents of Policies and Expected Benefits

2.1 Major Contents of the "Public Health Care System Improvement"

In 1981, the government wanted to expand Korea's medical service provision capacity to respond to the rising demand for healthcare policies. In particular, it suggested more investment in public medical facilities that were inferior compared to private ones,

appropriate local distribution of human resources, and maximum utilization of existing public facilities through operational improvements. Second, it wanted to raise efficiency through the firm establishment of a rational healthcare delivery system. This included the linkage of public facilities, distribution of their functions, and efficient distribution of their medical resources. Third was the reduction of national medical costs. To achieve this, the government wanted to try suppressing the rise of medical prices by maintaining proper medical costs and expanding the provision of public medical care.

To realize these policies, municipal and provincial hospitals in particular needed fundamental changes. To secure further detailed and practical measures to bring about these changes, the government operated the "Municipal and Provincial Hospital Operation Improvement Task Force," managed by the Administration Office of the Prime Minister from May to December 1981, and completed the "Public Health Care System Improvement Measures" through public hearings. The detailed contents of the improvement measures involved understanding the current state of facilities and suggesting improvement measures for national university hospitals, municipal and provincial hospitals, and health centers. The contents, considered key components of public healthcare at the time, can be summarized as follows:

2.1.1. Improvement of National University Hospitals

There were eight national university hospitals in Korea at the time, and their main functions were to train of students and residents, to carry out clinical research, and provide medical care for patients (see Table 2-29). Meanwhile, more patients came to prefer university hospitals, due to their increasing income through Korea's economic development, and the introduction of medical insurance. Subsequently, the work of university hospitals increasingly grew. National university hospitals (with the exception of National Seoul University Hospital), however, were concurrently hospitals and administrative bodies supervised by the Ministry of Culture and Education, and had various issues due to bureaucratic inflexibility. Securing competent human resources was difficult for them, due to lower wages from non-independence of personnel and their positions as public servants; their work performance was also inefficient due to a limited operational budget. Although called university hospitals, they were operated by general administrative civil workers (average of 40 individuals per hospital). Worse, the recruitment process was so complicated that timely employment was not easy. In addition, training and research done by professors were insufficient, since they had to look after more and more patients. As a result, this brought down the number of patients for research and opportunity for students to practice, due to an excessive number of trainees.

Table 2-29 | Current State of National University Hospitals

	No. of Beds	Bed Utilization (%)	No. of Clinical Professors	Budget Scale (KRW Hundred Million)	Financial Independence (%)
Seoul University Hospital	1,130	84	158	286.8	103
Busan University Hospital	460	80	40	46.6	87.3
Gyeongbuk University Hospital	563	87	56	48.8	99.0
Jeonnam University Hospital	525	93	48	50.9	100.2
Jeonbuk University Hospital	286	90	33	25.6	94.4
Chungnam University Hospital	259	90	33	43.7	72.4

Note: Significant difference in scale of facility, human resources, and budget between Seoul University Hospital, a special corporation, and other university hospitals

Under this situation, technical support was insufficient for primary and secondary medical institutions, such as municipal and provincial hospitals in areas where national university hospitals were located. As a result, national university hospitals were not able to serve as the key care center for the community.

In response, the "Public Health Care System Improvement Measures" was introduced to change national university hospitals to special corporations like the National Seoul University Hospital, so that they could operate rationally and independently. Moreover, measures were explored to strengthen cooperation between municipal and provincial hospitals through the appointment them as student training hospitals, and dispatch clinical professors and residents to induce the decentralization of patients from university hospitals to municipal and provincial facilities.

2.1.2 Improvement of Health Centers

By the 1970s, 217 health centers and 1,321 health offices were established, and family planning staff was dispatched to small rural districts (called Lees and Myuns). Note, however, that the percentage of healthcare in government expenditure was still small, and access to hospitals was difficult for residents in rural areas and for low-income earners in urban areas, due to low investment in public hospitals. For example, 504 Myuns had no doctor available at the time, which brought down the doctor employment rate to around

66%. At least 18%, or 39 out of 217, health center heads were general administrative civil workers with no qualifications as a medical doctor. Accordingly, medical human resources were expanded through the active utilization of public health doctors; the medical care of health centers was further reinforced through facility and equipment improvements designed to meet the medical demands of urban low-income earners and rural residents. The employment of doctors as heads of health centers was also emphasized, and health centers were asked to improve their various prevention programs.

2.1.3 Improvement of Municipal and Provincial Hospitals

a. Basic Policies

First, Seoul City was designated to continue operating three special hospitals-Seodaemun Hospital, Mental Hospital, and Children's Hospital-among 43 municipal and provincial hospitals across Korea, considering their characteristics in operation. Jeonnam Brain Hospital and Mokpo TB Hospital, operated by local government authorities, had national features, and were converted into national hospitals "National Naju Mental Hospital" and "National Mokpo TB Hospital" beginning in 1983.

Second, two private sector-entrusted hospitals, Inchon Municipal Hospital and Suwon Provincial Hospital, were sold to the private sector. The income from these sales were invested in other areas that the government deemed necessary. Third, Ullung County Hospital in Ullung-Do was designated to be operated as an affiliate of Donghae Hospital (currently called Pohang Hospital), and special support for doctors was provided, since it was located on a remote island. Uljin County Hospital was integrated with the county health center, but kept its name.

Fourth, the remaining 34 hospitals that needed to be kept as secondary and public medical centers were converted into local public corporations, to be operated as individual corporations. University hospitals, however, supported these facilities in terms of human resources and medical skills. Various forms of measures were examined considering the local conditions and features of the hospital (see Table 2-30).

Table 2-30 | Municipal and Provincial Hospital Improvement Measures

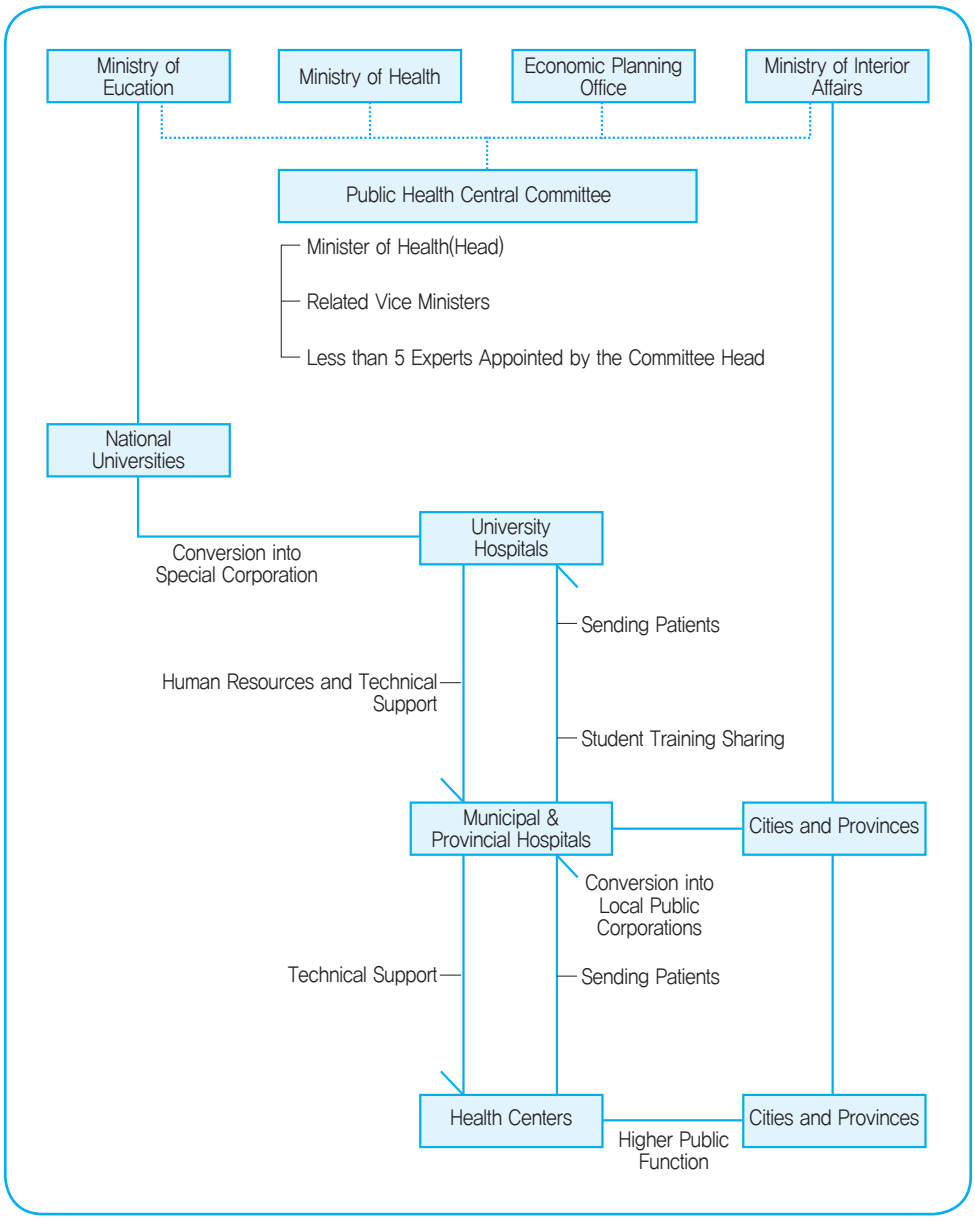
Classification	State in 1980	Improvement Measures
Special Hospitals (5)	1) 3 Hospitals (Seodamun Hospital, Mental Hospital, and Children's Hospital) Operated by Seoul City 2) 2 Hospitals (Jeonam Brain Hospital, Mokpo TB Hospital) Operated by the Local Government	1) Maintenance of the Current System 2) Conversion into National Hospital

Classification	State in 1980	Improvement Measures
Private Sector-Entrusted Hospitals (2)	1) Located in Large Cities with Many Private Facilities (Inchon Municipal and Suwon Provincial Hospitals)	- Sold to the Private Sector - Reinvestment in Other Areas
County Hospitals (2)	1) Ullung County Hospital (1 Doctor with 20 Beds) 2) Uljin County Hosital	1) Affiliation by Donghae Hospital (Currently known as Pohang Hospital) and Special Support for Doctor 2) Converted Health Care Center
Others (34)	Facilities that needed to keep operating as secondary and public hospitals	- Conversion into Individual District Public Corporation - Support of Human Resources from National University Hospitals

b. Improvement of the Administrative System

To maximize the utilization of public hospitals, the "Public Hospital Central Committee," an irregular body within the Ministry of Health, was organized to supervise and coordinate affairs related to healthcare policies. This body was also designated to direct the improvements of the administrative system, in order to help the ministry supervise university hospitals, as well and municipal and provincial hospitals, after their conversion into special or local public corporations (see Figure 2-3).

Figure 2-3 | Public Hospital Administrative System Improvement Plan



c. Conversion of Municipal and Provincial Hospitals into District Public Corporations

Municipal and provincial hospitals had been operated directly by city mayors or provincial governors, as public organizations of municipal or provincial offices. But they were converted into local public corporations after the establishment of corporate bodies, according to the District Public Corporation Law, for more efficient operation and

independence. The composition of the board of directors as a decision-making organization was sought at each hospital, so that they could take full responsibility for hospital operations. Additionally, city mayors and provincial governors had directly controlled the general affairs of hospitals, with many city or provincial organizations such as planning offices, internal affairs offices, health care offices, etc., in supervisory roles prior to these improvement measures. Afterwards, important matters were approved by city mayors or provincial governors, and supervision was conducted only by the Health Care Office.

Among the 34 municipal and provincial hospitals to be converted into local public corporations, six hospitals (one in Seoul and five in other areas: Busan Municipal Hospital; Gangwon Provincial Hospital; Chunchon, Chungnam Provincial Hospital, Gongju; Jeonnam Provincial Hospital, Suncheon; and Gyungbuk Provincial Hospital, Pohang) were selected as pilot, cases and operated as district public corporations beginning in July 1982.

Table 2-31 | Current State of National University Hospitals (1980)

Location	No. of Hospitals	No. of Beds	No. of Human Resources	Hospital Name
Total	31	2,966	2,394	
Seoul	1	300	279	Gangnam
Busan	1	253	161	Busan
Daegu	1	114	64	Daegu
Gyunggi	4	290	231	Uijungbu, Ansung, Icheon, Gumchon
Gangwon	6	491	410	Chunchon, Wonju, Gangrung, Wonju, Sokcho, Yeongwol, Samcheok
Chungbuk	2	230	188	Cheongju, Choongju
Chungnam	4	318	211	Cheonan, Gongju, Hongseong, Seosan
Jeonbuk	2	160	163	Gunsan, Namwon
Jeonnam	3	240	191	Suncheon, Gangjin, Mokpo
Gyeongbuk	3	210	202	Pohang, Gimcheon, Andong
Gyeongnam	2	200	165	Masan, Jinju
Jeju	2	160	129	Jeju, Seoguipo

Note: Standards for Exception of Special Hospitals, County Hospitals and Private-Commissioned Hospitals

The detailed improvement contents of each item, including organization, supervision, personnel management, budgeting, and facility investment are described in <Table 2-32>.

Table 2-32 | Major Improvement Contents for Conversion into District Public Corporations

Items	Before	After
Organization	- City or Provincial Offices - Direct Operation by City Mayors or Provincial Governors	- Establishment of Corporate Bodies - Board of Directors Fully Responsible for Operation
Supervision	- Direct Supervision by Cities or Provincess : Budget-Planning Office : Personnel-Internal Affairs Office : Programs-Health Care Office - Equipment Management by Internal Affairs Office	- Approval by Local Government Heads for Key Matters Only - Unified Supervision by Health Care Offices - Independent Operation
Personnel Management	- By Local Government Heads - Hospital Employees: Civil Workers	- Hospital Head: Appointed by Local Government Heads (Nominated by the Board) - 3-Year Work, Possible Reappointment - Board of Directors : Consists of Hospital President, Vice Presidents, and Directors : Directors appointed by the president (approved by government heads) - Hospital Employees: Appointed by the President (non-civil workers)
Budget	- Imperfect Public Corporation Accounting - Loss Made up for by Local Government Expenditure	- Perfect Corporate Accounting Application
Facility Investment	- Central Government and Local Government Expenditures	- Same as Before (Overseas Loans, Government Support)

d. Reinforcement of Connection with University Hospitals

The Mother and Child Hospital Agreement between university hospitals and municipal or provincial hospitals had been enacted by a few hospitals. Through this agreement, university hospitals and mother hospitals had managed their residents dispatched to child hospitals in municipal or provincial facilities.

According to the new connection reinforcement measure, university hospitals paid the wages of the residents they sent to their child hospitals, as before; if the child hospitals asked for the dispatch of a professor, however, a regular dispatch (at least for a year) was

possible, and the professor could be sent anytime to provide guidance in surgeries that needed high skills. Wages for the dispatched professor were paid by the child hospital. Meanwhile, doctors at the child hospital could be promoted as professors at the mother hospital, depending on their qualification to work for both hospitals simultaneously. In terms of utilizing equipment and facilities, if the child hospital did not retain any test or equipment, it could use those in its mother hospital. Medical students of mother university hospitals got trained at its child hospital, in which case the cost of training and accommodation was paid by the child hospital.

This policy reflected the cases of advanced nations at the time-university hospitals were supporting most of the doctors needed for municipal or provincial hospitals in Japan, and some doctors of public hospitals were provided from university hospitals in the US, Germany, and France.

2.1.4 Operation of the Public Health Care Central Committee

Since public hospitals were managed by four agencies-the Ministries of Health, Education, and Interior Affairs and Economic Planning Office-it was very difficult for public healthcare policies to have the same directions. To deal with the issue, the "Public Health Care Central Committee" was established. The Minister of Health was designated the committee head, and related Vice Ministers and less than five experts served as members to arbitrate opinions among related bodies, set plans for investment in public hospitals and the supply of medical human resources, adjust the establishment of medical education facilities and their quota, and supervise the operation of public hospitals and evaluation of their operation. This improvement measure was promoted by the government's "Public Health Care Central Committee Law" in 1983.

2.2 Expected Benefits

Through the public healthcare improvement measures in 1981, the government expected five desirable effects. First, the organized promotion of public healthcare policies was expected to avoid duplicated investments in public hospitals, and concentration on certain areas and to assist in the supply of medical human resources and proper distribution among local areas. Second, the policies were expected to improve the functions of municipal and provincial hospitals and health centers through the expanded supply of healthcare by public facilities. Third was to strengthen the will of employees to work for these facilities by enhancing independence in operation and the quality of medical care at these facilities, through support in the form of human resources, facilities, and equipment of university hospitals, and trust in public facilities was expected to be enhanced through these improvements. Fourth was a higher capacity to train medicine students. Training that could satisfy the medical demands of the community was considered in response to the expansion

of training facilities at public hospitals and the diversification of diseases. Fifth, better quality of public hospitals was expected to curb private medical costs.

Specifically, the expected benefits from the measures for municipal and provincial hospitals can be summarized in four aspects. First, they were public hospitals in terms of their organization, but flexible operation considering their features as hospitals, securing medical human resources more easily, favorable operation performance, and the elimination of obstacles as bureaucratic administrative organizations were projected to enable responsible operation. Second, in terms of operation, management of the hospitals by experts or intrapreneurs was expected. The third benefit was expected in terms of equipment and facilities. Efficient investment by the central and local governments in areas with no hospitals, or areas having difficulty attracting private hospitals, was expected through investments to improve the operation of public hospitals, and outdated facilities and equipment. The fourth benefit was in terms of health care service. The improvement of healthcare service was projected, since they could maintain facilities, human resources, and equipment at the same level as private facilities.

Meanwhile, the establishment of the "Public Health Care Central Committee" as a decision-making organization for public hospitals was an epoch-making policy at the time, since it came up with organized and efficient public healthcare policies, by offering integrated rights and responsibilities related to public healthcare to the Ministry of Health. The committee was expected to realize comprehensive effects including the elimination of inefficiency in operating healthcare policies due to duplicated investments, local centralization, and insufficient inter-ministerial cooperation, proper supply of human resources, and local distribution.

3. Policy Promotion Process

The activities to be completed for the promotion of the established polices, government bodies to perform these activities, and deadlines are presented in the table below. The activities to be completed for the promotion of healthcare policies by the proper government organizations in certain times are presented below. National university hospital-related contents had to be executed by the Ministry of Culture and Education, municipal and provincial hospital-related contents, the Ministry of Interior Affairs and Seoul City. Health Center-related contents were expected to be completed by the Ministry of Health and Ministry of National Defense.

Table 2-33 | Major Contents and Deadlines for the 1st Policy

Classification	Major Contents to be Done	Responsible Ministry	Deadline
University Hospitals	- Legislation on National University Hospital Special Corporation Establishment - Elimination of National University Hospital Special Accounting - Revision of the National University Establishment Act - Appointment of Municipal and Provincial Hospital for Student Training	- Ministry of Culture and Education - do- - do- - Ministry of Interior Affairs, Ministry of Culture and Education, Ministry of Health	- Within'82 - do- - do- - Within Feb. '82
Municipal and Provincial Hospitals	- Legislation of Local Government Ordinance for Conversion into District Public Corporations - Institutionalization of Agreement Conclusion with the University Hospital and Support Measures - Expansion of Professor Quota of National University Hospitals and Appointment of Specialists of Public Hospitals as Concurrent Professor of University Hospital (After Qualification Examination)	- Ministry of Interior Affairs, Seoul City - Ministry of Interior Affairs, Ministry of Culture&Education - Ministry of Culture&Education	- Within Dec. '81 - Within Dec. '81 - Within Feb. '82
Health Centers	- Public Health Utilization Plan Establishment	- Ministry of Health, Ministry of National Defense	- Within Dec. '81

Source: Public Health Care System Improvement Measures, Administration Office of the Prime Minister (Nov. 1981), Data from the Presidential Library

Existing laws were utilized for the promotion of these policies. The District Public Corporation Law was legislated in 1969 to stipulate the direct establishment or operation of public corporations by local governments, and applied to healthcare programs following the 1980 amendment. The law stipulated the conversion of municipal and provincial hospitals into local public corporations. Likewise, the Local Government Ordinance was legislated for direct management, operation, and support for public district general hospitals.

Despite the unification of the supervision system by the Ministry of Health, however, policies were still promoted by several ministries. As such, unexpected situations, wherein

policy contents and actual promotion methods were inconsistent, were noted due to the absence of detailed promotion plans. This was because the suggestion of alternative policies to overcome the interests of the ministries supervising public hospitals was insufficient. There were limits to the promotion of policy programs, e.g., the "Public Health Care Committee Law," since they had not been actually legislated.

Social agreement as to why municipal and provincial hospitals should exist in the first place was very low. For instance, Suwon Provincial Hospital was located in the main street of the large city, and privatization of the hospital was attempted, but was abandoned following rejection by local residents and working groups. Moreover, there were deadlines for the completion of each program, but meeting these deadlines was quite difficult. For example, 31 hospitals were converted into local public corporations completed by July 1985-which was much later than the prescribed deadlines-and the completion of the remaining three was finalized in late 1988 (Pocheon Hospital in January 1987, Inchon Hospital in July 1985, Suwon Hospital in November 1988). The conversion of national university hospitals was delayed for a longer period (completed in 1995). These delays signified that a number of realistically expected issues were not properly investigated in setting deadlines, and support from expert groups or task forces was insufficient.

4. Policy Evaluation

Although several issues were noted in 1981, certain goals were achieved through the conversion of municipal and provincial hospitals into local public corporations. In 1984, a study using survey and analysis was conducted to find out how the operations at public hospitals such as Uijungbu Hospital, Icheon Hospital, Ansung Hospital, and Gumchon Hospital, changed after the conversion. According to the study, managements and employees of the hospitals were working responsibly as if they were the owners of the public facilities, avoiding past complacent attitudes. Their service quality was also rated higher, treating patients with more affection and kindness. In addition, thanks to environmental changes around these hospitals, including perceptual changes to healthcare and improvements in the level of healthcare itself, the facilities and equipment at these hospitals were consistently updated. Subsequently, patients came to have different perceptions of public hospitals. Specifically, the greater independence in operation, thanks to their conversion into public corporations, resulted in an efficient organization and human resources management, when compared to the earlier unilateral hospital operation and supervision system. Consequently, the efficiency of hospital operations improved to some extent. On the other hand, the lack of specialists continued as a problem, since it was still very arduous to raise their wages to a level comparative to private hospitals, in spite of their efforts. For example, wages for residents at public hospitals were raised by 12 to 16% after the conversion, but they were still lower than the level of private hospitals (KRW 3~4.5 million per month). The turnover rate at public hospitals also continued to be high. Even the wages for nurses were lower than their counterparts in private hospitals. The financial state of public hospitals was

gradually improving, thanks to the increase in the number of patients and in medical fees for general patients. Their financial independence was also improving, but it was not still enough to cover their operation costs. The reinforcement of basic facilities and equipment was impossible due to their poor finances, and they needed provisional financial support until their income and expenditure could improve, with the operation of intrapreneurship by each hospital expected. After the conversion, there were more participation and discussion to some degree in managing and arbitrating different work than before. There were some opinions in the survey that novel and progressive decisions were made after the conversion, unlike before, when legal restrictions resulted in passive decisions. Residents' satisfaction with the service at public hospitals was actually lower than that before conversion; in particular, residents with higher income showed lower satisfaction. More residents cited easy access as the reason they chose public hospitals rather than the quality of service, and they thought the environment of hospitals improved remarkably, thanks to the service improvement measures following conversion. Still, they said there were no significant differences in healthcare, facilities, and equipment even after the conversion, and most of them were still dissatisfied with public hospitals, despite a decrease in waiting time. According to the respondents, public hospitals were helpful in the improvement of healthcare in areas with no sufficient general hospitals. In terms of patient composition, while the number of general patients increased, public medical security patients increased by a larger amount (around 38%), with the rates of medical insurance patients and public medical security patients at about 50%. The results signified that low-income earners mainly visited public hospitals. In terms of the healthcare delivery system, the connection system between public hospitals and university hospitals seemed to be established to some extent, as the transfer of patients from public to university hospitals increased 27% when compared to rates before the conversion (14.3%).

Furthermore, some healthcare experts believe that the conversion program had a generally positive impact on public district general hospitals. According to the research in 1995,[9] Uijungbu, Icheon, and Ansung Provincial Hospitals, among six provincial hospitals in Gyunggi Province, were directly operated by the Gyunggi Province; Suwon, Gumchon, and Pocheon Provincial Hospitals were entrusted to the private sector. An increasing number of residents avoided public hospitals, due to outdated facilities and equipment, a lack of specialists, and inflexible operations. In contrast, private hospitals were equipped with more advanced equipment and facilities. Public hospitals had lost the leading role they had in healthcare. After the conversion, however, public hospitals saw positive changes such as the rise in the number of sickbeds, including changes in the financial states for operation, care of inpatients, bed utilization rates, the number of doctors, financial independence, and decline in labor costs in expenditure, thanks to steady investment from the government.

Although the reinforcement of human resources, including the supply of specialists through a strengthened connection with national university hospitals, was clearly stated as

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the policy goal, public hospitals in smaller cities and rural counties continued to experience difficulties in hiring doctors in time to offer medical care, since a detailed promotion planning and investments were not realized. Meanwhile, public hospitals after the conversion had to be operated by intrapreneurship, based on corporate accounting, but their budgeting was still done according to government standards and had to be approved by local authorities. In addition, since most of the public hospitals prioritized public interest and spent more than they earned, their financial independence could not be readily secured.

Public hospitals converted into public corporations were designed to be supervised by city or provincial governments, in accordance with the District Public Corporation Law and District Public Hospital Establishment Ordinance. But supervision on patient care and supplemental activities as key responsibilities of hospitals, except general administrative activities, was formally implemented. The Ministry of Health had to supervise public hospitals, but the Ministry of Interior Affairs took responsibilities for this task. Subsequently, government support was offered by both ministries, and healthcare law-related affairs (approval for bed expansion, etc.) were approved by the Minister of Health, whereas district public corporation law-related affairs (hospital head appointment, wages of executives and employees, etc.) had to be approved by the Minister of Interior Affairs. As in the case before their conversion, public hospitals were still supervised by two ministries, even after the conversion.

Expertise and experience were essential for the full-scale promotion of this policy, but there were few related experts within the government. Failure to secure a specialized organization for policy promotion was one of the government's key mistakes. As mentioned above, legal and administrative actions could be taken for actual promotion by the departments of ministries responsible for the actions, and a powerful organization was necessary for arbitrating the various positions of the ministries, since public hospitals were operated by various different government bodies. The conversion program was not completed until 1988, about seven years later than the deadline set earlier by the government. Likewise, the unified supervision of public district general hospitals by the Ministry of Health was established through the policy, but there was no consensus among ministries, and the Ministry of Interior Affairs supervised local public corporations before the full-scale operation of the local government system. Even after the full operation of the local government system, most of the program contents were executed not by the Health Care and Hygiene Department of the Ministry of Health, but by the Public Corporation Department of local governments. Local Government Councils legislated the "District Public Hospital Establishment Ordinance" to have their Internal Affairs Committee take on the responsibilities. As a result, the supervision of public district general hospitals was transferred to the Ministry of Health, after the promotion of the second policy in 2005.

The fundamental reason why the policy promotion was not easy, and why the promotion of some program contents seemed adrift, was that the functions and roles of public district general hospital were insufficiently delivered to Korean citizens. Had public hospitals

been recognized as an indispensable infrastructure for public interest, social consent these public facilities may have been achieved. Also, the establishment of organizations to promote the policy and legislation of related laws may have been more effective, which would have made the promotion of the policy far easier. Since there were no such processes, however, some of the public hospitals had to be entrusted or sold to the private sector, even after they had been converted into public corporations, simply because of the difficulties in operating them. For instance, Gunsan Hospital has been entrusted to, and operated by, Wongwang University Hospital since 1998. Chunchon Hospital was sold to Gangwon University in 2001, and Jeju Hospital was sold to Jeju University and rebuilt as a nursing hospital in a new site. The operation of Red Cross Hospitals further deteriorated, with Daegu Red Cross Hospital closing in 2010.

The first policy implemented by the late 1980s supported municipal and provincial hospitals, which were comparatively inferior to private facilities, in order to improve them to some extent. In the end, however, changes focusing on securing profitability rather than the public interest were implemented, and issues such as securing public interest and medical human resources and higher quality of healthcare were not addressed in a satisfactory way until 2000.

Chapter 3

Modernization of Public district general hospitals in the 2000s

Modernization of Public district general hospitals in the 2000s

1. Policy Introduction Background

1.1 Major Public Health Indices around 2000

In 2000, interest in public healthcare started to grow. Alongside Korea's economic development, by 2000 was the introduction of public medical insurance for the whole nation. Also, the significant growth of medical human resources and facilities remarkably improved national medical security and access. According to OECD data from 2000, public hospitals accounted for 18.5% of the total sickbeds in Korea, the lowest among OECD nations, such as the US (33.2%), Japan (35.8%), Germany (48.5%), and France (64.8%). Furthermore, healthcare infrastructure such as emergency care beds and isolated beds for contagious diseases, which generate low profit but must basically be maintained by any nation, was fairly insufficient in Korea.

Inefficiency due to market failure was increasingly highlighted. First, excessive healthcare supplies and utilization were causing a wasteful use of healthcare resources. For example, Koreans visited hospitals at twice the frequency as people from OECD nations (Korea: 12.3 times; US: 5.8 times; UK: 5.4 times; Germany: 6.5 times; France: 6.5 times, and; Italy: 6.0 times). The hospitalization of Koreans for acute diseases (11 days) was 1.6 times longer than the OECD average (7 days), and the rate of cesarean sections in Korea was 39.2%, compared to 23% in the US, 20% in Japan and the EU, and WHO's recommendation of 5-10%. Health resources were not distributed appropriately either. Around 30,000 beds for acute diseases were excessively supplied, whereas approximately 70,000 beds were needed for nursing care (2004). The average number of beds per 1,000 people in Korea was 7, but Jeju Province had only 4.9, and Gwangju had 9.1. The non-specialized functions of clinics and hospitals competing to attract patients, and their poor equipment, led to further waste of health care resources. Hospitals with less than 300 beds accounted for 83.1% of the total

hospitals and 54.1% of the total beds, and this was pointed out as the major cause of difficult operations in small and medium hospitals.

The aging population and the subsequent rise of chronic diseases were expected to increase national medical costs rapidly. Korea is experiencing the fastest aging population in the world, driven by increased life expectancy (77 in '01) and lower birth rates (1.16 in '04). The expected period between the aged society to the post-aged society in Korea was 26 years, compared to France's 154 years, US's 86 years, Italy's 74 years, and Japan's 36 years. The ratio of national health expenditure to GDP as of '03 (according to OECD Health Data '05) was 5.6% in Korea, which was lower than the US's 15%, UK's 7.7%, France's 10.1%, and Japan's 7.9%. But there were rising concerns of the currently low figure possibly growing rapidly, due to the nation's rapid aging trend, and the national growth potential being deterred (see Table 3-1).

Table 3-1 | Changes in the National Health Expenditure of Korea

Year	2001	2010	2020
National Health Expenditure	KRW 33 Trillion	KRW 74 Trillion	KRW 171 Trillion
Ratio to GDP	6.1%	8.1%	11.4%

Note: Source: Kim Chang Yup (2004). "Research on Public Hospital Expansion Measure Development"

1.2 Institutionalization of Concept of Public Health Care

1.2.1 Law on Public Health Care

Based on discussions and social consent in 2000, the "Law on Public Health Care" was legislated as the first attempt to institutionalize the concept of public healthcare. The legislation meant to establish legal grounds for the improvement of national healthcare, through the effective provision of quality public healthcare. In particular, Article 3 of the law stipulates that the central and local governments should try to satisfy equally the basic health care demands of the nation through the establishment and operation of public health care institutions, and provide financial assistance. The law was legislated in January 2000 as Law No. 6159, and it came into effect in July of the same year. The Public Health Care Department of the Ministry of Health and Welfare was declared as the government body that would deal with the major contents of public healthcare. Later, some regulations of the law were revised, after being labeled insufficient. For instance, since the concept of public healthcare needed to change from the basis of owners of public hospitals to the basis of purpose of programs or public interest with regard to the operation of the hospitals, related regulations were amended in 2005.

1.2.2 Basic Public Health Care Law

The law was legislated to contribute to improvements in the nation's quality of life, and to establish a welfare society by providing quality public healthcare, thereby bringing about the balanced development of the healthcare sector and higher international competitiveness. According to the law, public healthcare refers to a multitude of activities executed by the central government, local governments, health care institutions, or healthcare professionals to recover, maintain, and improve the nation to a state of physical, mental, and social health. The law was legislated in January 2000 as Law No. 6150, and the Public Health Policy Department of the Ministry of Health and Welfare was chosen as the related main government body.

As for the major contents of the law, the Minister of Health and Welfare was designated to establish public healthcare development plans every five years, and the heads of local governments such as special cities, metropolitan cities, provinces, cities, counties, and districts were required to establish and implement local public healthcare plans, considering the situation of each area, in accordance with the public healthcare development plan established by the minister. The central and local governments were required to establish and implement programs for lifelong national health management, including national health improvement programs. The public health development plan was designated to embrace the basic goals and directions to be promoted, supply and manage measures for healthcare resources such as human resources, organizations, and finances, etc., establish basic affairs related to local healthcare, and provide health program plans for the elderly, in addition to the mentally and physically challenged, who have relatively more difficulty accessing healthcare. The central and local governments were appointed to make efforts to establish legal and institutional instruments, and secure stable finances for the protection and improvement of national health, and to investigate the policies necessary for securing the connection between public healthcare policies and related social welfare policies. According to the law, the entire nation was required to have basic rights to be protected by the government to maintain one's health, in addition to his/her family, the right to know about healthcare, and the right to decide the treatment method for one's disease, to act as a medical research target, and more. On the other hand, the nation assumed the duties to make efforts for the maintenance and improvement of a person's health, pay for a person's healthcare, and cooperate for the proper health care activities and guidance of healthcare professionals. The Public Health Care Policy Committee was chosen to review and modify major policies. The committee consisted of less than 20 members, including the president and vice president. The prime minister assumed the president's role, with the minister of health and welfare serving as vice president. The committee reviewed public healthcare development plans, supply and management measures for healthcare resources, role and expenditure distribution among the central and local governments, provide health care data management, and create data utilization systems.

1.3 Public Health Care Policies of the Participatory Government (2003~2008)

The Participatory Government[10] pledged to expand further the discussions by past governments concerning the public healthcare sector. The major components were medical institution-related policies, such as the reinforcement of health promotion and disease management, public healthcare service, national health insurance, emergency care system, desirable development of private hospitals, health industry support and promotion, national protection from medical malpractice, health care security for the physically and mentally challenged, and more efforts to address geriatric diseases. Specifically, the government aimed at the expansion of public healthcare by more than 30%, from 10% in 2003, for the reinforcement of public healthcare to manage various contagious diseases and provide the prevention services for the entire nation. Moreover, the government wanted to minimize inequality among different income brackets and geographical areas, and to secure the capacity to deal with national disasters or crises in the health care sector, through the expansion of public healthcare. With regard to public district general hospitals, assistance and management were transferred from the Ministry of Public Administration and Security to the Ministry of Health and Welfare, to clarify its goal of expanding public hospitals to the level found in the US and Japan.

The government presented ways to expand nursing beds through the construction of intermediate facilities, rehabilitation hospitals, and nursing hospitals for dementia, strokes, seriously injured patients, and long-term patients. The government also sought to encourage various public hospitals established by government bodies to help one another through the creation of networks, and the reorganization of the administrative system in public hospitals. Actually, the government made many government bodies work diligently for public healthcare through the composition of the Public Health Care Innovation Task Force.

1.4 Current State of Public district general hospitals (2003~2004)

1.4.1 General State

As a result of the 1st policy, municipal and provincial hospitals became district public corporations, and Red Cross hospitals came to serve as public district general hospital. Local governments are the founders of public district general hospital, with Red Cross Korea as the founder of Red Cross hospitals. A total of 32 hospitals were established by the Metropolitan Local Governments, 2 hospitals (Mokpo Hospital, Uljin Hospital), by Basic Local Governments, and 6 Red Cross Hospitals, by Red Cross, Korea.

Among public district general hospitals in 2003, 26 were general hospitals (76.5%), and eight were hospitals (23.5%). The total number of doctors was 687 (average of 20 per

10 The government led by President No, Moo Hyun, the 16th president of Korea, between 2003 and 2008 called for "Participatory Government" since the president proclaimed that the participation of the nation would play a key role in state operation.

hospital). The total number of beds was 8,720 (256 per hospital); among them, beds for acute diseases, except mental illnesses, were pegged at 7,606 (224 per hospital). Beds for mental conditions numbered 1,114 in 13 hospitals (86 per hospital). At least four hospitals were located in Seoul and Metropolitan cities (11.8%), with 26 in other cities (76.5%), and four in counties (11.8%). Most were located in cities. Meanwhile, private hospitals with more than 200 beds and their public counterparts (including National University Hospitals, National Public Hospitals, District Public General Hospitals) numbered 420; among them, 40 were district public general hospitals, making up around 9.5% of the total. The table below shows the local distribution of hospitals, mostly located in small- and medium-sized cities. (see Table 3-2, Figure 3-1)

Table 3-2 | Local Distribution of Public Hospitals and Private Hospitals with over 200 Beds

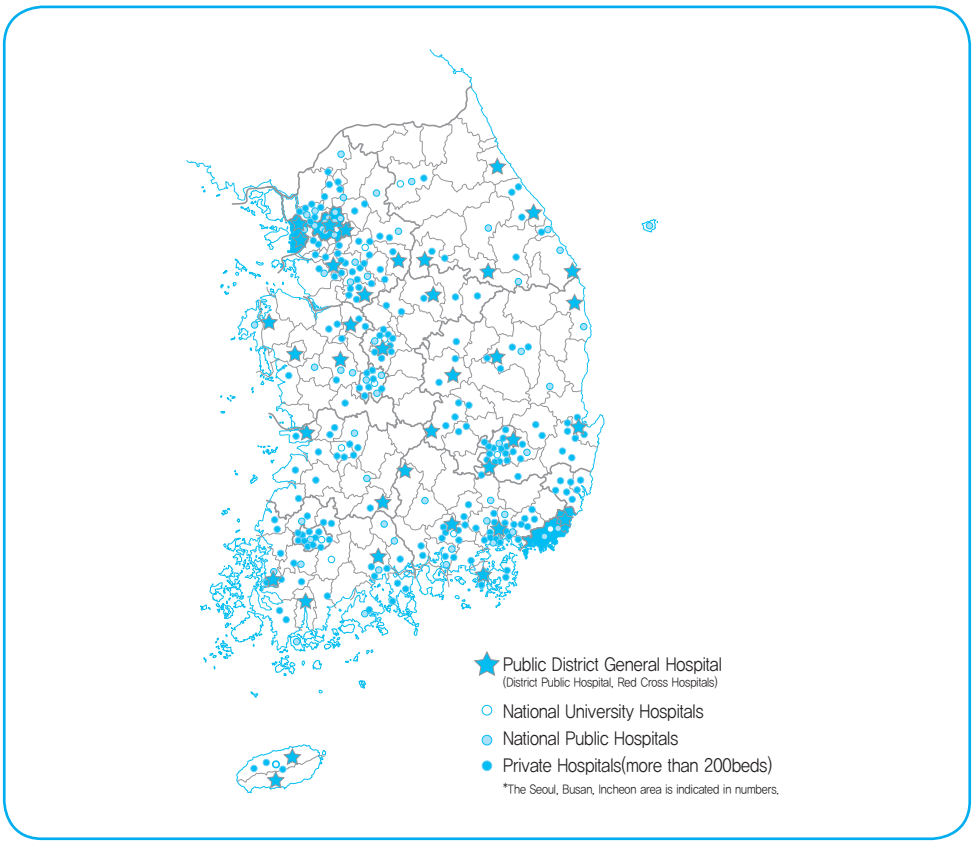
	District Public General Hospitals	National University Hospitals	National Public Hospitals (Special hospitals)	Private Hospitals (Over 200 Beds)	Total
Seoul	2	1	11	45	59
Busan	1	1	2	40	44
Daegu	2	1	1	15	19
Incheon	2		1	13	16
Gwangju		1	1	11	13
Daejeon		1	3	7	11
Ulsan				7	7
Gueonggi	6	1	10	42	59
Gangwon	5	1	5	8	19
Chungbuk	2	1	1	13	17
Chungnam	4		4	8	16
Jeonbuk	2	1	3	13	19
Jeonnam	3	1	8	21	33
Gyoengbuk	5		5	25	35
Gyeonnam	4	1	8	34	47
Jeju	2	1		3	6
Total	40	12	63	305	420

Note: 1. 2004 National Hospital Register, 2004, Korea Hospital Association

2. National Public Hospitals include public health centers, national mental hospitals, national rehabilitation hospitals, municipal and provincial nursing centers and veterans' hospitals, industrial accident management center, and police hospitals managed by other ministries.

3. Dental hospitals and herb medicine hospitals are excluded from data.

Figure 3-1 | Local Distribution of Public Hospitals and Private Hospitals with over 200 Beds



Five of the hospitals (14.7%) were in areas with over a million people, and most of them (67.6%) were in small and medium cities, with less than 300 million people. While the average ratio for the aged population (over 65) in Korea was 8.1%, the area where Gangjin Hospital was located showed the highest rate, with 21.1%, and the area where Suwon Hospital was located had the lowest ratio, with 4.9%. Around 64.7% (22) of the hospitals were located in areas having a higher ratio of the aged population than the national average.

At least nine hospitals (26.5%) were located in areas with comprehensive nursing hospitals, 22 (64.7%), in areas with general hospitals, and three (8.8%), in areas with hospitals. Andong City and Jeju City had the most beds for acute diseases, with 8.3 beds per 1,000 people, whereas Seosan City had the fewest, with 1.9 beds. The areas where 52.9% (18 in total) of the hospitals were located had more beds for acute diseases than the national average (4.0 beds). The average number of beds for acute diseases per 1,000 people out of the total beds except beds for mental conditions and beds of nursing hospitals, soldier hospitals, and special hospitals (TB, rehabilitation, and leprosy) was around 4.0.

Nursing hospitals (dementia hospitals, etc.)[11] were provided for 15 areas (44.1%), where public district general hospitals were located. Skilled nursing hospitals were provided for 16 areas (47.0%). At least 12 areas (35.3%) did not have any nursing hospital or skilled nursing facilities. Regional Emergency Centers and District (Specialized) Emergency Centers were provided for 18 areas (52.9%), whereas three areas (8.8%) did not even have district emergency units. Among public district general hospitals, (Seoul Municipal) Gangnam Hospital and Namwon Hospital were district emergency centers; the rest were district emergency units (Busan Hospital, Suwon Hospital, Icheon Hospital, Gumchon Hospital, Gangjin Hospital, Uljin Hospital, and Jeju Hospital were not even designated as emergency units).

Table 3-3 | General State of Each District Public Hospital

No.	Name of Hospital	Type	Year Established	No. of Doctors	No. of Beds		
					Total	Acute	Mental
1	District Public Corporation, Gangnam Hospital	GH	1977	129	556	556	
2	DPC, Busan Hospital	GH	1967	44	579	544	35
3	DPC, Daegu Hospital	GH	1988	38	437	337	100
4	DPC, Inchon Hospital	GH	1985	25	434	404	30
5	DPC, Gyunggi Suwon Hospital	Hospital	1961	17	152	152	
6	DPC, Gyunggi Uijungbu Hospital	GH	1986	17	253	183	70
7	DPC, Gyunggi Icheon Hospital	Hospital	1978	14	121	121	
8	DPC, Gyunggi Gumchon Hospital	GH	1987	15	171	171	
9	DPC,Gyunggi Pocheon Hospital	GH	1987	15	175	175	
10	DPC, Gyunggi Ansung Hospital	GH	1983	15	178	178	
11	DPC, Gangwon Wonju Hospital	GH	1982	20	265	265	
12	DPC, Gangwon Gangrung Hospital	GH	1983	13	159	159	
13	DPC, Gangwon Sokcho Hospital	GH	1987	9	143	143	
14	DPC, Gangwon Samcheok Hospital	GH	1981	8	147	147	
15	DPC, Gangwon Yeongwol Hospital	GH	1982	15	156	156	
16	DPC, Chungbuk Cheongju Hospital	GH	1909	15	425	221	204

11 There could be more facilities, since hospitals were registered as nursing facilities, according to the Healthcare Law by the Health Insurance Review and Assessment Service.

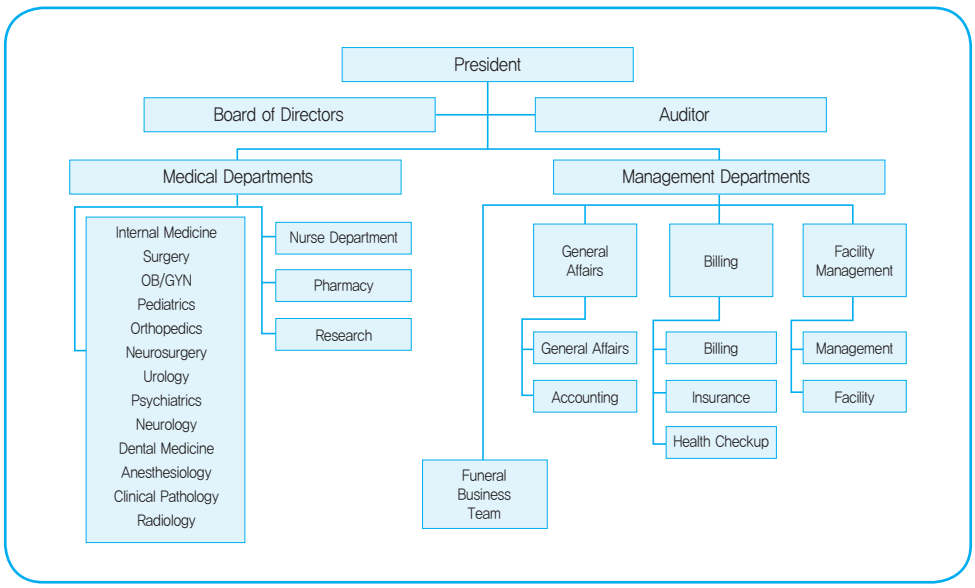
No.	Name of Hospital	Type	Year Established	No. of Doctors	No. of Beds		
					Total	Acute	Mental
17	DPC, Chungbuk Cheongju Hospital	GH	1987	13	226	226	
18	DPC, Chungnam Cheonan Hospital	GH	1988	12	176	116	60
19	DPC, Chungnam Gongju Hospital	GH	1983	11	233	233	
20	DPC, Chungnam Seosan Hospital	GH	1989	12	203	203	
21	DPC, Chungnam Hongseong Hospital	GH	1983	26	438	258	180
22	DPC, Jeonbuk Gunsan Hospital	GH	1983	27	417	411	6
23	DPC, Jeonbuk Namwon Hospital	GH	1983	33	418	324	94
24	DPC, Jonnam Mokpo Hospital	GH	1992	11	136	130	6
25	DPC, Jonnam Suncheon Hospital	Hospital	2001	10	141	141	
26	DPC, Jonnam Gangjin Hospital	Hospital	2001	3	160	160	
27	DPC, Gyeongbuk Pohang Hospital	GH	1978	19	380	190	190
28	DPC, Gyeongbuk Gimcheon Hospital	Hospital	1900	15	189	189	
29	DPC, Gyeongbuk Andong Hospita	GH	2000	18	215	215	
30	DPC, Gyeongbuk Uljin Hospital	Hospital	2003	8	113	113	
31	DPC, Gyeongnam Masan Hospital	GH	1914	16	244	244	
32	DPC, Gyeongnam Jinju Hospital	Hospital	2001	15	200	164	36
33	DPC, Jeju Hospital	Hospital	2002	6	284	181	103
34	DPC, Jeju Seoguipo Hospital	GH	1994	23	196	196	
Total		-	-	687	8,720	7,606	1,114

Source: Health Insurance Review and Assessment Service. Nursing Institution State Data (as of 2003)/Ministry of Health and Welfare. 2003 Mental Health Institution Survey

1.4.2 Current State of Organization and Human Resources

In the general organization of public district general hospitals, the president of the hospital assumes the position of chairman of the board; under the president are the medical care and management departments (see Figure 3-2). The organization of Red Cross Hospitals is very similar, but they have no board of directors and auditors, since they are affiliated bodies of Red Cross Korea.

Figure 3-2 | General Organization of Public district general hospital



A special organization can be divided into an "entrusted operation" and an "integrated corporation operation." Gyunggi Icheon Hospital, Jeonbuk Gunsan Hospital, and Gyeongnam Masan Hospital, which were experiencing exacerbated losses in 1998, were entrusted to Korea University Hospital, Wongwang University Hospital, and Gyungsang University Hospital, respectively, according to decisions by each corresponding local government. Three years later, the entrustment contract between Icheon Hospital and Korea University ended, and the hospital was returned to the original system; Gunsan and Masan Hospitals are still entrusted. In 2003, Gyeongbuk Uljin Hospital was established and entrusted shortly thereafter to Gyeongbuk University Hospital. Currently, Gunsan Hospital is entrusted to Wongwang University Hospital by the Jeonbuk Provincial Government, Masan Hospital to Gyungsang University Hospital by the Gyeongnam Provincial Government, and Uljin Hospital to Gyeongbuk University Hospital by the Gyeongbuk Provincial Government.

Second is the operation of several hospitals by an integrated corporation. Gyunggi Province changed its public hospitals into local hospitals, and then closed the individual corporations of six hospitals (Suwon Hospital, Uijungbu Hospital, Icheon Hospital, Paju Hospital, Pocheon Hospital, and Ansung Hospital) and established a new corporation to operate them by converting them into an affiliated hospital, under a single corporation (Gyunggi Provincial Hospital, Suwon) on July 1, 2005.

Human resources per 100 beds at district public corporations were compared to other hospitals that had similar average bed numbers to public hospitals. The number of doctors was found to be similar; nurses, pharmacists, and technicians were fewer, but there were more administration, management, and facility-related employees (see Table 3-3) at

public hospitals. At least 49% of residents of 34 public hospitals across the nation worked for the current hospital for less than two years, illustrating a high turnover rate at the public hospitals, which had to play a key role in the stable supply of healthcare service. Dissatisfaction with low wages was cited by 21 hospitals as the biggest reason for the high turnover rate, and poor living and education environments was cited by six hospitals. Moreover, most of the doctors who had left the public hospitals opened new clinics in nearby areas, which triggered a reduction in the number of existing patients. Unlike doctors, over 74% of nurses worked at the same hospital for more than three years (35% worked for more than 10 years); the number of years of service for technicians, pharmacists, and office workers was even higher, with 83% working for more than three years and 46% for over 10 years. This suggested a greater burden in terms of labor costs, since there are more long-term employees.

Table 3-4 | Human Resources per 100 Beds of Public district general hospital

(Unit: person)

Classification	Doctors**	Nurses	Pharmacists	Technicians	Administration and Facility Workers
Public district general hospital	9.4	31.9	0.8	8.3	22.4
Compared hospitals*	9.5	36.4	1.1	11.7	15.7

Source: Public Health Care Program Task Force, Current State of District Hospitals and Improvement Measures, Sept. 2005; KHIDI. 2003 Hospital Operation Analysis, Dec. 2004

* Hospitals having 166~299 beds, average bed number of local public hospitals

** Residents were not included.

1.4.3 Function as Social Health Care Safe Net

Function as social healthcare safe net means the burden of subsequent costs. First, public district general hospital and Red Cross Hospitals are located in large cities (7), small and medium cities (28), and rural areas (5), with the hospitals contributing to the balanced local distribution of healthcare facilities. The ratio of medical security patients to public hospitals was 26.2% (2004), which was 16.4% higher than other hospitals with the same number of beds as the average public hospital; they provide medical care to the socially underprivileged, such as homeless people, foreign workers, single parents, et al. (See Table 3-4). This shows that public hospitals are contributing to the equal supply of healthcare for low-income earners and people who do not have easy access to hospitals.

Table 3-5 | Rate of Medical Security Patients

(Unit: %)

Classification	2000	2001	2002	2003	2004
Public district general hospital	23.4	25.8	25.0	24.0	26.2
Compared Hospitals*	15.8	17.8	14.8	14.0	16.4

* Hospitals with 166-299 beds corresponding to the average bed number of public district general hospital, 224 beds

Source: KHIDI. '00-'04 Hospital Operation Analysis

Public district general hospital are providing services unwanted by private hospitals, such as acute disease treatments with low profit margins (ICUs, ERs, isolated units, etc.), and the operation of nursing beds for mental diseases and elderly with low incomes (see Table 3-5). Whereas private hospitals went on strike and rejected the treatment of patients at the early stages of illnesses and prescriptions in 2000, public district general hospitals looked after these patients and filled the gap left by private hospitals. During the outbreak of SARS (Severe Acute Respiratory Syndrome) in 2003, public district general hospitals accommodated suspected SARS patients, but private hospitals refused to treat them. Moreover, they provide free service to victims of domestic violence and sexual assaults.

Table 3-6 | Provision of Service Avoided by Private Hospitals

(Unit: places, %)

Classification	ICU	ER	Isolated Unit	Nursing Unit
Number of Hospitals	36	40	37	32
Ratio	90	100	92.5	80

Source: KHIDI (2006). District Public Hospital Operation Evaluation

Comparing the average cost for medical security patients in public district general hospitals with the cost in other similar-sized hospitals (having 166~299 beds corresponding to 224, the average beds at public hospitals), the cost of hospitalization in public hospitals was 62.8% of that of comparative hospitals (see Table 3-6), and the cost of outpatient services in public hospitals was 79.0% of that of the comparative facilities. The hospitalization cost for medical security mental patients was 87% of that of private hospitals. The medical security system of Korea is based on the "fee-for-service" system, focusing on treatment. This means that profit can hardly be expected from the provision of public services, such as health improvement, disease prevention, and health for the community. Public district general hospitals are paying for the provision of most public services.

Table 3-7 | Average Cost* of Medical Security Hospitalization and Outpatient Service

(Unit: KRW, %)

Classification		Over 300	160~299	Less than 160	Average
Inpatient	Public Hospitals	75,501	74,595	78,379	76,158 (62.8%)
	Compared Hospitals**	145,101	121,644	97,154	121,230 (100%)
Outpatient	Public Hospitals	36,051	28,688	29,221	31,320 (79.0%)
	Compared Hospitals	51,575	46,375	20,874	39.608 (100%)

* Cost per Person per Day

** Hospitals having 166~299 beds corresponding to the average bed number of public district general hospital, 224 beds

Source: KHIDI (2004). '03 Hospital Operation Analysis

1.4.4 Deficit Operation

Public district general hospitals have low revenues from medical services, due to their high percentage of service for low-income earners as medical security patients, and low rates for non-medical security patients, and excessive tests. The ratio of labor costs to revenue from medical services (labor costs to medical services revenue: 46~101%) of public hospitals is higher compared to private ones, but efforts from public hospitals to implement innovative operation methods, including human resources management, are hardly ever made. For this reason, almost all public hospitals have a long-term deficit; as a result, they have no capacity to re-invest in independent development (see Table 3-7). As of 2003, the total of capital and capital surplus of 34 public hospitals was KRW 649.476 billion, but accumulated deficit was 258.207, and 40% of their starting capital was lost. At least 12 public hospitals (35% of 34) lost more than 50% of their capital, and four lost over 100%.

Table 3-8 | Annual Deficit Changes

(Unit: KRW hundred million)

Year	2001	2002	2003	2004	2005
Deficit Amount	410	790	369	487	416
Deficit Hospital Number	26	30	27	30	29

Source: District Public Hospital Association Data (2005)

1.4.5 Current State of Facilities and Equipment

Since public hospitals neither secured any more sites, nor set up any comprehensive plans for the use of facilities and sites, but expanded functions only in limited spaces,[12] the independence and inter-connection of functions were neglected. As a result, the inefficiency use of their spaces worsened, parking spaces shrunk, and their healing environment[13] became damaged. Comparing small and medium private hospitals in local areas, the facility competitiveness of public hospitals for each function was lower, although they had bigger sites and plots of land.

Buildings in public hospitals sites were located and connected in a disorganized manner, by simple adding and expanding during site operations, and it was often difficult to find one's way through them. Their sites were used as parking lots, and they lacked green space and community-friendly space composition. Most of their facilities were more than 20 years old, mostly looking bleak, and were not easy to use. This brought down the credibility of hospitals, and even the morale of their employees. The average site area of the hospitals is 21,583m^2; Namwon Hospital and Busan Hospital were the biggest with 116,109m^2 and 100,355m^2, respectively, and Tongyoung Red Cross Hospital and Guchang Red Cross Hospital were the smallest with less than 3,300m^2 (see Table 3-8).

Table 3-9 | Site Areas of Public district general hospital

Classification	Name	Number	%
Over 9,900m^2	Namwon, Busan, Jeju, Gunsan, Cheongju, Inchon (Red Cross)	6	15.0
Smaller than 9,900m^2	Seoul, Pocheon, Hongseong, Suncheon, Pohang, Uljin	6	15.0
Smaller than 6,600m^2	Daegu, Inchon, Cheongju, Andong, Suwon, Icheon, Gumchon, Wonju, Gangrung, Sokcho, Yeongwol, Gongju, Seosan, Gangjin, Gimcheon, Masan, Jinju, Seoguipo, Seoul (Red Cross)	19	47.5
Smaller than 3,300m^2	Cheonan, Mokpo, Uijungbu, Ansung, Samcheok, Daegu (Red Cross), Sangju (Red Cross), Tongyoung (Red Cross), Guchang (Red Cross)	9	22.5
Total	Average: 6,529 Pyung	40	100.0

12 Addition of special units such as geriatric, lung, and mental units, funeral center, checkup center, dorm, more medical departments, and function rooms such as physiotherapy room, MRI, CT, etc.

13 Healing environment refers to the general environment to aid in the treatment of patients including air, temperature, less noise, privacy, lighting, nature, visual stability, etc.

During the 1970s-1980s, the size of a patient room was very small, measuring approximately 5.7m × 5.7m (32.5m^2). Correspondingly, the area per bed[14] was also very small. The width of corridors was less than 2.7m, and only one stretcher could pass; although not impossible, it was very difficult to get two stretchers to pass through them (see Table 3-9).

Table 3-10 | Area Comparison per Bed

(Unit: m^2)

Public	Average	Namewon	Hongseong	Uljin	Busan	Uijungbu	Yeongwol	Gongju	Gangjin
Area per Bed	55.2	91.9	92.2	92.9	66.8	43.3	43.0	37.0	38.0
Private &Japanese	**Ilsan Industrial Complex**	**Samsung**	**Seoul Uni Bundang**	**Jonnam Uni Hwasun**	**Ilsan Baek**	**Jeju Uni**	**Municipal Toyonaka, Japan**	**NTT, Japan**	**Kyushu Uni**
Area per Bed	89.3	138.5	103.1	119.7	84.6	99.2	108.4	135.9	103.5

Inappropriate medical gas facilities, air-conditioning, and ventilation, as well as insufficient lighting plans, paint, and finishing brought down the satisfaction of hospitalized patients. Although they serve as secondary medical facilities mainly for inpatient service, their improvement programs focused on outpatient spaces; the inpatient units were very old, and the environmental difference between new rooms after facility expansion or renovation, and existing facilities was fairly high, triggering dissatisfaction among patients.

The acute condition equipment retention rates of 40 public district general hospital varied significantly, ranging from 24.7% to 95.9%, for an average of 56.6%. Dividing into internal medicine, surgery, and emergency parts, we can see that internal medicine retained 46.4% of the necessary equipment, which was comparatively lower than surgery's 59.4%, and emergency service's 87.0%. By department, the retention rates of the pediatrics, urology, and psychiatry departments were especially low. There were many public hospitals with pediatrics and urology departments, but with doctors preferring to open their own clinic. Retaining doctors to operate departments were difficult, and securing the necessary equipment was subsequently low. Psychiatry, for example, is a department that needs highly specialized skills. There were few public hospitals with this department, and their equipment retention rate was low. Their acute condition equipment retention rates in terms of opened departments were 45.2-95.9%, with an average of 64.2%. Meanwhile,

14 Most of the patient rooms were around 43~50m^2 between the 1970s and 1980s; beginning the late 1990s, however, waiting space, convenience facilities, pleasant hospitalization environment, and barrier-free environment have been secured in keeping with the trend of patient-centered facility and corridors. Common spaces have been made wider, and areas per room reached 82.5~132m^2.

the equipment retention rates at Red Cross Hospitals were fairly lower than public district general hospitals, deterring them from playing the role of public district general hospitals.

1.5 Public Healthcare Expansion Comprehensive Measures in 2005

1.5.1 Overview

In the 2004 state policy report, the reorganization of the healthcare system through the expansion of public healthcare was adopted as the major frame of government healthcare policies. As such, the investigation for detailed measures was directed. Subsequently, around KRW 4 trillion in government investment for the public healthcare system for the next five years (2005~2009) was declared. Afterwards, the task force composed of related ministries for the "Public Health Care Expansion Comprehensive Measures" presented its proposal over the course of 10 meetings. The proposal was tentatively decided in May 2005. Opinions were then collected from related officials and experts through public hearings, before they went through the ruling party meeting, public healthcare policy committee, and related officials meeting, with opinions from the Korea Doctors Association, national university hospitals, health care union, et al. In December 2005, led by Korea's prime minister, the "Public Health Care Expansion Comprehensive Measures" was finally introduced.

1.5.2 Major Contents

Through the comprehensive public healthcare expansion measures, three issues of in Korean public healthcare system were highlighted: inefficiency due to market failure, rapid national medical cost increases due to the rising aging population and its chronic diseases, and poor foundation for the supply of essential healthcare. To deal with these issues, four major strategies and policy tasks were presented: reorganization and higher efficiency of the public healthcare system, expansion of roles of public hospitals and investment for the aging society, prevention-centered national disease management system creation, and the expansion of the essential healthcare safe net. The promotion of public district general hospitals was one of the first strategy task items aimed at the reorganization and higher efficiency of the public healthcare system. The major contents of each strategy task are as follows:

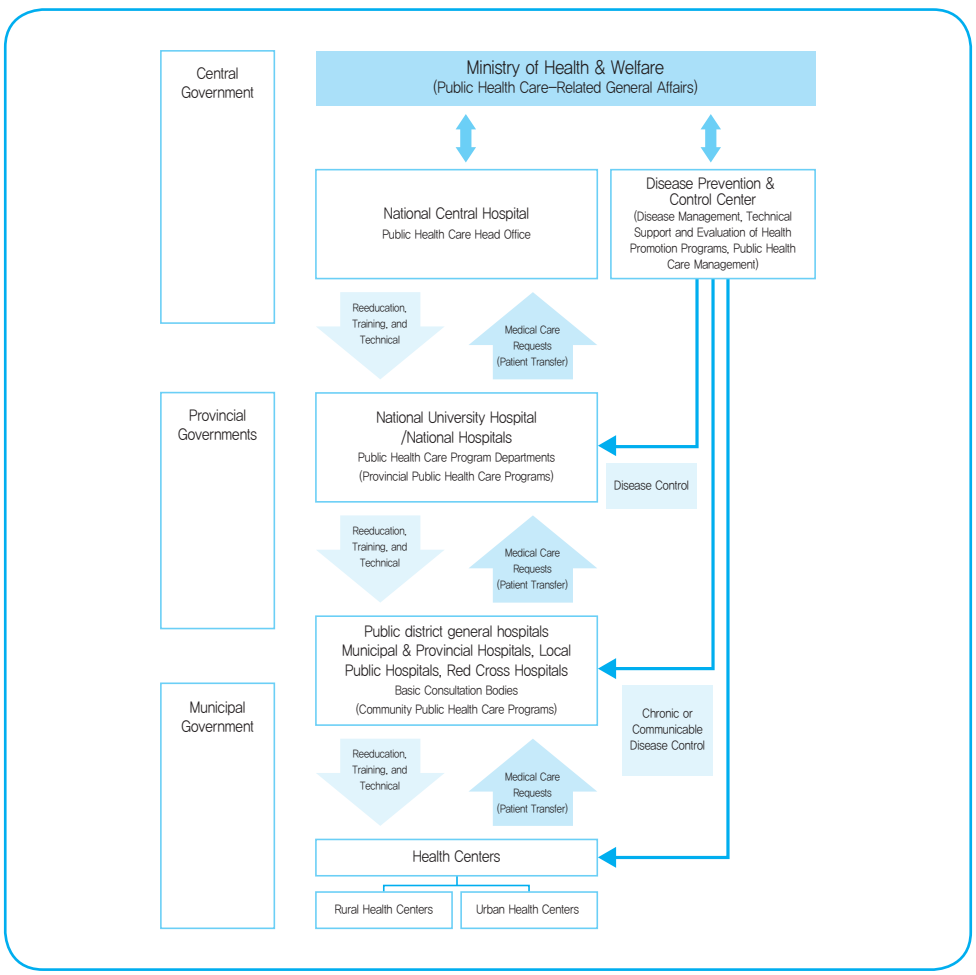
a. Public Healthcare System Reorganization and Higher Competitiveness

The establishment of the "Public Health Care Committee" within the Ministry of Health and Welfare sought to provide consultation on related policies, evaluate and manage public hospitals, and provide technical support. On the other hand, the establishment of the "National Central Hospital Committee," organized by national hospitals, national cancer centers, national rehabilitation centers, National Seoul Hospital, Seoul University (Dental) Hospitals, and others, sought to promote national policies, such as national strategic disease management.

The transfer of supervision of national university hospitals to the Ministry of Health and Welfare was intended to promote and support them as central or regional public general hospitals.

Through the steps above, the public healthcare delivery system was firmly established as central (National Central Hospital); regional (national university hospitals); district general (public district general hospital); and sub-district (health centers). Please see Figure 5.

Figure 3-3 | Public Health Care Delivery System



The investigation and promotion of measures to strengthen the competitiveness of public district general hospitals included facility and equipment modernization, securing competent human resources, and innovation support, all designed to upgrade these facilities to public district general hospitals.

b. Expansion of Roles of Public Healthcare and Investment for the Low Birth and Aging Population

The promotion of a rational supply of beds, including the conversion of some acute condition beds of private hospitals that were excessively supplied, expansion of municipal and provincial dementia hospitals, elderly health centers, and children's hospitals aimed to deal with low birth rates and the aging population.

c. Firm Establishment of the Prevention-Centered Disease Management System

The prevention-centered national disease management system was established through the expansion of health promotion and disease prevention programs for local residents, students, and employees of small and medium businesses. Research and prevention programs was reinforced to deal with frequent diseases, serious diseases, etc., which can incur high national medical costs.

d. Essential Public Healthcare Safe Net Expansion

Effective countermeasures for the national healthcare crisis were prepared for new or revived contagious diseases, including SARS and AI. Biological terrorism was addressed by securing vaccines or isolated units. More non-marketable public materials such as emergency care, blood supply, and rehabilitation care was also planned.

1.5.3 Financial Resources

The government decided to invest KRW 4.3 trillion for five years to achieve its goals. Even if investment was not executed as planned due to undecided detailed program plans, the annual spending limit of the budget had to be efficient; if necessary, the mid-term financial plan could be changed to secure additional budget.

The expenditures of the central government (accounting and funding), local government, and hospital had to be distributed appropriately, and the higher efficiency of financial execution had to be based on a higher responsibility and capacity of the subject program. Investment plans could be altered by annual financial conditions, program feasibility, performance evaluation, etc. Support to public hospitals was set to be managed by regularly reviewing the financial condition of the subject local government, and the features of its program.

Finances were supplied through the expansion of the general account, and the utilization of the National Health Promotion Fund and Rural Area Special Tax. In the general accounting for 2005, the rate of healthcare budget was 0.17%, and the expanded budget for public healthcare was only around KRW 60 billion (based on the programs by the Ministry of Health and Welfare). While the budget for CDC (Centers for Disease Control and Prevention) was around KRW 5 trillion, that of the Korean counterpart was only around KRW 50-70 billion. Although Korea's budget increased to around KRW 100 billion with the addition of the Health Promotion Fund, the input from the general account is still quite low.

Among OECD nations, the private medical costs of Korea are quite high at 55.6% of the total medical costs, next to the US's 55.8% and compared to the UK's 19.1%, Germany's 25.0%, and France's 24.2%. The increase in general account was inevitable for the Public Healthcare Expansion Comprehensive Measures.

Second, the National Health Promotion Fund established by the Cigarette Tax, in accordance with the National Health Promotion Ordinance, was actively utilized for the comprehensive measures. Third, the utilization of the Rural Area Special Tax (Rural Area Special Tax Special Account) was established for the construction, expansion, and equipment replacement at hospitals, promotion of public district general hospitals, and expansion of emergency care infrastructure in rural areas.

1.5.4 Goals of Policy Introduction and Expected Benefits

As the key part of the 2005 comprehensive measures, the "Reorganization and Higher Efficiency of the Public Healthcare System" was divided into four detailed tasks: firm establishment of public healthcare, reorganization of the public healthcare system, higher connection among public hospitals, and higher quality of public healthcare service. The promotion and modernization of the existing public hospitals, such as municipal and provincial hospitals and Red Cross Hospitals, into public district general hospitals were stated as part of the measure for the reorganization of the public healthcare system.

District hospitals and health centers were evaluated as the poorest facilities among Korea's public hospitals. Note, however, that health centers, as the primary medical facility in the local area, had improved significantly thanks to their modernization program beginning in 1994. Facilities, equipment, and human resources of local national university hospitals also improved to a certain level. Accordingly, the establishment and implementation of appropriate policies to promote public district general hospitals as fully functioning general hospitals were expected to realize the modernization and efficient operation of the public healthcare delivery system as central (National Central Hospital Committee)-regional (national university hospitals)-district (public district general hospital)-sub-district (health centers).

2. Policy Contents

2.1 Overview

The measures to promote public and Red Cross hospitals as public district general hospitals was aimed at providing financial support for the modernization of their facilities and equipment. This was so that they could grow into hospitals that can retain competitiveness and perform functions different from private hospitals. The measures also sought to establish new operation evaluation standards, so that public hospitals could uphold public interest and realize higher efficiency and innovation of operation through consultation.

The measure was divided into two tasks: innovation of existing public hospitals and the additional construction of public hospitals. In order to innovate existing public hospitals, seven detailed tasks were assigned, as described in Table 3-10. The annual plans for each task were divided into the short-term plan (2005-2009), and mid and long-term plans (after 2009).

2.2 Innovation of the Existing Public district general hospital

This task was aimed at the revitalization and higher competitiveness of public district general hospitals, which had old facilities and equipment, and chronic operational issues through the expansion of support. This was done so that they could provide public healthcare services different from private facilities. This project was divided into the following seven detailed tasks:

Table 3-11 | Annual Promotion Plans

Task Name	Detailed Tasks	2005	2006	2007	2008	2009	After 2009
Existing Public Hospital Innovation	• Public district general hospital Pilot Project Implementation						
	• Equipment&Facility Modernization Support						
	• Human Resources Exchange (with National University Hospitals) Measures Establishment &Implementation						
	• Service Competition Stimulation among Public Hospitals						
	• Regular Evaluation and Operation Transparency Enhancement						
	• Public Aspect Reinforcement Unlike Private Hospitals						
	• Transfer of Supervision of Public Hospitals						
Additional Hospital Construction	• Additional Public district general hospital Appointment and Construction						

2.2.1 Long-Term Development Plan and Public district general hospital Pilot Project Implementation

First, a model for the public district general hospitals was established by considering the existing conditions in Korea; based on this model, medical demand and supply levels, and features of the areas where each hospital was located, long-term plans were established, including the reestablishment of roles, expansion of equipment, facilities, and human resources, and operation improvement measures. According to the long-term plan, the hospital could be modernized and, if necessary, relocated to a more suitable site for expansion or new construction. In addition, support for the expansion of long-term nursing beds and reinforcement of equipment and facilities were also decided.

2.2.2 Facility and Equipment Modernization

This task sought to support improvements in the architectural environment of public hospitals that had old inpatient and outpatient facilities, in addition to scarce convenience facilities. In particular, the number of hospitals beds had to be raised to economic scale considering the local medical demands. Also, beds for long-term care and rehabilitation had to be prioritized. The modernization of diagnosis and test equipment was decided to boost the medical demands and competitiveness of each public hospital.

2.2.3 Securing Outstanding Medical Professionals through Exchange with National University Hospitals

Since most public hospitals were located in small and medium cities, securing competent medical staff was not easy. Thus, measures to secure medical human resources, such as the dispatch of professors from national university hospitals to public hospitals, and the introduction of a minimum number of residents in public hospitals, was required to be established and implemented, along with education for hospital staff to nurture competitiveness.

2.2.4 Service Competition Stimulation among Public Hospitals

Sabbatical years and transfers to other public hospitals were introduced for employees who have worked for the hospital for a certain length of time, or shown remarkable work performance, in order to boost morale and motivate them to continue working for the hospital. Annual evaluation on the general operation of public hospitals could be executed, and preferred support for facility renovation and equipment replacement could be given to distinctive hospitals, based on the results.

2.2.5 Regular Operation Evaluation and Higher Operational Transparency

Detailed standards on the public aspects and efficiency were established for hospital operation evaluations, and supply of budgets based on the results could be considered. If a hospital did not achieve its established goal within a stated period, the executives of the hospital could also be replaced. Hospital operation experts could apply as president of the public hospitals through public hiring, and hospital operation could be open, in terms of sharing of operation burdens by management and unions.

2.2.6 Higher Public Aspects Differentiated from Private Hospitals

Facilities and equipment for comprehensive service provisions, including emergency, rehabilitation, and long-term care, which were avoided by private hospitals due to low profitability, had to be expanded. Specifically, more rehabilitation hospitals connected with health centers and regional rehabilitation centers, long-term care units, palliative units, and isolated units could be operated along with district-level public healthcare programs. Each public hospital could provide quality medical services, according to the medical standards rather than quantitative services. Meanwhile, the public healthcare program's dedicated offices (tentatively called "District Health Care Centers") could be established and operated for the expansion of healthcare programs, including health screening, home care, and free treatment (see table below).

(Roles of District Health Care Centers)

▶ Public Health Care Connection Team

- ○ Speedy and Easy Requests, and Transport of Patients Among Public Hospitals
- ○ Hospitalization Planning, Considering the Inter-Public Hospital Connection, such as Public Nursing Centers, Rehabilitation Centers, Mental Centers, etc.
- ○ Promotion of Connection with the Health Center Home Visiting Programs for Steady Care
- ○ Support for the Dispatch of "Caregivers" for the Elderly, who are Sick in Bed in Connection with the Home Visiting Care Program

▶ Health Promotion Team

- ○ Health Promotion and General Disease Management Programs, including Diseases Triggered by Bad Habits for Schools and Businesses Within the Community

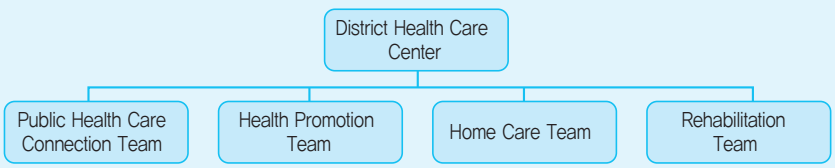
▶ Home Care Team

○ Home Care Services for Rehabilitation and Long-Term Patients

▶ Rehabilitation Team

○ Outpatient, Inpatient, Palliative, and Back-to-Society Programs for Rehabilitation and Long-Term Patients

〈District Health Care Center Organization (Proposal)〉



2.2.7 Transfer of Supervision of Public district general hospital

To prevent the insufficient roles of public hospitals due to the existing operation evaluation system of public corporations and to lay the foundation for developing the hospitals into public district general hospitals in the public health care delivery system, their public corporation system is changed to a special system to enhance their public aspects, and evaluation standards for them are reestablished. To achieve this, the supervision and evaluation of public district general hospital are transferred from the Ministry of Public Administration and Security to the Ministry of Health and Welfare. The legal grounds for the "District Public Corporation Law" are deleted, and the "Law on District Public Hospital Establishment and Operation" is newly legislated.

2.3 Public district general hospital Appointment and Additional Establishment (2009)

As the second task, the new establishment of public district general hospitals in areas that do not have any is implemented after 2009 considering the local features such as medical supply and demand of the area and opinions of experts and through a feasibility study.

3. Detailed Policy Contents

3.1 Detailed Contents of the Equipment and Facility Modernization Program

The program that has currently been implemented for the promotion of public district general hospitals can be largely divided into three objectives: the relocation and new construction program, model program, and equipment and facility reinforcement program. The relocation and new building construction program seeks to subsidize the expenditures

required for the relocation of public district general hospital, or expansion of units, to secure the sufficient beds necessary to function as public district general hospitals. Except public hospitals whose main building is less than 10 years old, five out of the public hospitals that needed relocation or new construction were supported in their relocation, or given subsidies to execute new construction by 2009. Second, the model program was designed to subsidize the facility, equipment purchase or replacement costs required for the expansion of beds at public hospitals to a competitive, profitable level, so that they could grow into public district general hospitals providing comprehensive and consistent public healthcare services to the community. Every year, two public hospitals have been selected for support, but hospitals that have been supported by the first program or BTL programs are excluded. Additional construction and facility and equipment modernization (general renovation) of long-term care beds have been supported by the program. The facility and equipment reinforcement program was aimed at subsidizing the expenditure for the renovation or repair of small facilities (including change of intended usage), or replacement or purchase of medical equipment. The support has been provided within the limit of KRW 800 million of government expenditure, for the facilities and equipment required by each hospital. Facility reinforcement has been supported for small building expansion projects, or renovations other than those for the model program, and equipment reinforcement, in the case of expenditure of replacement or purchase of equipment.

3.2 Detailed Contents of the Public Hospital Operation Evaluation Program

3.2.1 Issues of the Existing "District Public Hospital Operation Evaluation"

The Minister of Public Administration and Security carried out the "operation evaluation" of public district general hospitals, in accordance with the District Public Corporation Law, including the achievement of operation goals, efficiency of operation, public aspects, and customer service. Nonetheless, the existing evaluation lacked components that could induce the progress of evaluated public hospitals, in addition to proper evaluation tools for healthcare service. The rate of operation profit parts was set high (61 points out of 100), including the rate of non-quantitative points (25% of the total points) in the evaluation. But the objectivity and credibility of evaluation results have been limited. Since the Korea Association of Regional Public Hospitals, a congregation of the public hospitals to be evaluated, performed the evaluation, it could be regarded as a kind of self-assessment and was mainly done based on documents, which brought down the objectivity of the evaluation results. Public hospitals were ranked based on the evaluation results, and hospitals with lower rankings had to be restructured, which included the dismissal of employees. This increasingly reduced the functions of the low-ranking hospitals. In other words, the evaluation results were connected to punitive restructuring against the low-ranking hospitals, instead of taking countermeasures for improvement, creating a vicious circle that has caused the further deterioration of public hospitals.

3.2.2 Goals of New Operation Evaluation Introduction

The introduction of new operation evaluations sought to help public district general hospitals supply high-quality healthcare and allow them to perform their functions through the promotion of more efficient hospital operations. Likewise, by utilizing the results of these evaluations, the weak points of each public hospital could be clearly identified, and the central and local governments could support them in dealing with the relevant issues.

The evaluation is conducted once a year. Thorough checkups are completed for local public hospitals whose operations are extremely poor, and whose improvement is needed; public program subsidies are given to hospitals with outstanding results as incentives (KRW 1.1 billion in '06, KRW 1.1 billion in '07, KRW 0.8 billion in '08).

3.2.3 Detailed Contents of Operation Evaluation

a. Evaluation Standards

Evaluation items are divided into "regular" and "pilot" items. Regular items are items regarded as essential for the operation evaluation of public district general hospitals, ensuring the practicality of evaluation standards and rationality of their research methods. The pilot items are items regarded as essential for the evaluation, but lack the practicality of evaluation standards and rationality of research method, and therefore need to be decided through the pilot evaluation process.

Evaluation items are divided into five domains: "quality health care," "rational operation," "healthcare service for public interest," "democratic participation," and "support from local government." In the first evaluation, conducted in 2006, the quality healthcare domain consisted of 11 evaluation sub-domains; rational operation, four sub-domains; health care service for public interest; five sub-domains, democratic participation, four sub-domains; and support from the local government, four sub-domains. Multiple sub-domains were then selected based on the opinions of experts, and five domains were finally decided through modest modification and complementation between 2009 and 2011, as the stage of the evaluation progressed (see Table 3-11).

b. Evaluation Methods

There are four methods for this evaluation: document evaluation, field evaluation, survey, and computer data analysis.

To perform the document evaluation, the public hospital to be evaluated sends relevant documents to the evaluation committee on a scheduled date; the committee, consisting of related experts, requests document-screening agents to judge the appropriateness of the documents. If they are judged as appropriate, document evaluation is performed. Most items are from the "support from the local government" domain and a few items from the "rational operation" domain are included in this evaluation.

Field evaluation is done in one of two ways: field study and patient interview. For the field study, the evaluation committee member visits the hospital to observe and record in the evaluation table. For the patient interview, the committee member has to select patients who are deemed to need healthcare services, or those who can evaluate the services based on relevant information; no hospital employee is allowed in the interview room. Most items from the "quality healthcare" and "healthcare service for public interest" domains, and a few items from the "rational operation," "democratic participation," and "support from the local government" domains are included in this evaluation.

For the evaluation through survey, patients who have used the hospital and employees of the hospital are surveyed on the phone or online by a specialized survey organization. This evaluation seeks to find out patient satisfaction with the health services of the subject hospital, and employee satisfaction with the operation of the subject hospital, employees opinions on the improvement of leadership, and democratic participation and operation.

For computerized data analysis, inpatient specifications from the previous year, outpatient specifications for the past six months claimed with the Korea Health Insurance Review and Assessment Service, and patient allotments submitted by the hospital are examined for the production of various indices through healthcare performance and charges of the hospital. The purpose of these data is to determine the appropriateness of healthcare of the subject hospital.

Table 3-12 | Evaluation Domains and Annual Changes in Evaluation Sub-domains

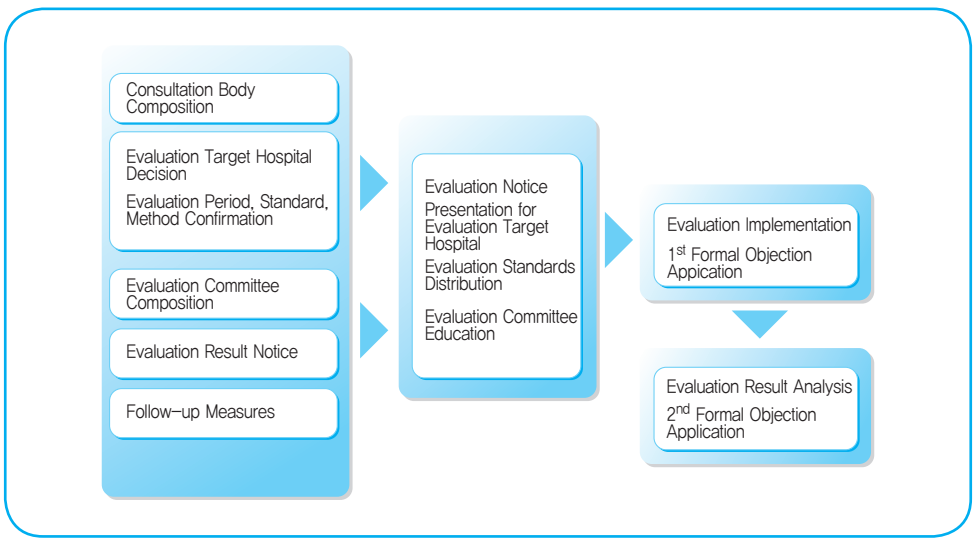
Evaluation Domains	Sub-domains				
	2006	2007	2008	2009	2010
Ⅰ. Quality Health Care	1.1 Patient Satisfaction	1.1 Patient Satisfaction	1.1 Patient Satisfaction	1.1 Patient Satisfaction	1.1 Patient Satisfaction
	1.2 Medical Staff Management	1.2 Medical Staff Management	1.2 Medical Staff Management	1.2 Patient Right and Convenience	-
	1.3 Quality Improvement System	1.3 Quality Improvement and Patient Safety	1.3 Quality Improvement and Patient Safety	1.3 Human Resource Management	-
	1.4 Medical Recording	1.4 Medical Recording	1.4 Medical Recording	1.4 Infectious Disease	-
	1.5 Medical Information	1.5 Medical Information	1.5 Medical Information	1.5 Facility Environment Management	-
	1.6 Patient Ward	1.6 Patient Ward	1.6 Patient Ward	1.6 Quality Improvement and Patient Safety	-
	-	1.7 Infection Management	1.7 Infection Management	1.7 Patient Care	-

Evaluation Domains	Sub-domains				
	2006	2007	2008	2009	2010
Ⅰ. Quality Health Care	-	1.8 Food Supply Hygiene	1.8 Food Supply Hygiene	1.8 Medical Information/ Recording	-
	1.7 Health Care Appropriateness 〈Pilot〉	1.9 Health Care Appropriateness 〈Pilot〉	1.9 Health Care Appropriateness 〈Pilot〉	1.9 Health Care Appropriateness 〈Pilot〉	1.2 Health Care Appropriateness 〈Pilot〉
	1.8 Health Care Facility	1.10 Facility Environment Management	1.10 Facility Environment Management	-	-
	1.9 Medical Equipment	1.11 Medical Devices	-	-	-
Ⅱ. Rational Operation	2.1 Planning	2.1 Planning	2.1 Planning	2.1 Planning	2.1 Planning
	2.2 Leadership &Coordination	2.2 Responsible Operation	2.2 Responsible Operation	2.2 Operation Management	2.2 Operation Management
	2.3 Organization	-	-	-	-
	2.4 Financial Performance	2.3 Financial Independence	2.3 Financial Independence	2.3 Operation Performance	2.3 Operation Performance
Ⅲ. Health Care Service for Public Interest	3.1 Health Care Safe Net Functions for People Getting Scarce Health Care	3.1 Social Contribution	3.1 Social Contribution	3.1 Social Contribution	3.1 Social Contribution
	3.2 Contagious Disease Prevention	-	-	-	-
	3.3 Emergency Care	-	-	-	-
	3.4 Government Health Care Policy Participation	-	-	-	-
	3.5 Comprehensive Health Care Service	3.2 Comprehensive Health Care Service	3.2 Comprehensive Health Care Service	3.2 Comprehensive Health Care Service	3.2 Comprehensive Health Care Service
Ⅳ. Democratic Participation	4.1 Collaborative Relationship	4.1 Operation Participation	4.1 Operation Participation	4.1 Operation Participation	4.1 Operation Participation
	4.2 Opinion Receipt	-	-	-	-
	4.3 Information Sharing	4.2 Participation Inducement	4.2 Participation Inducemen	4.2 Participation Inducement	4.2 Participation Inducement
	4.4 Opening	-	-	-	-
Ⅴ. Support from the Local Government 〈Pilot〉	5.1 Planning	5.1 Planning &Feedback	5.1 Planning &Feedback	5.1 Support of the Local Government	5.1 Support of the Local Government
	5.2 Structure	-	-	-	-
	5.3 Non-Financial Process	5.2 Non-Financial Process	5.2 Non-Financial Process		
	5.3 Financial Process	5.3 Financial Process	5.3 Financial Process		

3.2.4 Operation Evaluation Process

The evaluation of operation at public hospitals is conducted in the following order: evaluation committee composition-presentation for hospital to be evaluated-evaluation implementation-evaluation result collection and analysis-evaluation result opening and formal objection (see Figure 3-3).

Figure 3-4 | Public Hospital Operation Evaluation Process



a. Evaluation Committee Composition and Education: Introduction of the Regular Committee System

The committee has to consist of members with the expertise and experience necessary to ensure objectivity and specialized knowledge, as they visit subject hospitals on their own, and evaluate based on established items. Unlike the adoption in previous years of an irregular committee system, the regular system (around 50% of regular committee members) was adopted in 2009 to secure objectivity, specialized focus of the evaluation, and credibility of the evaluation results. Nurses and administrative persons and researchers of KHIDI (Korea Health Industry Development Institute) work as regular committee members. The irregular committee members are persons satisfying the requirements below in terms of working experiences in public district general hospitals, and they have to be approved by relevant associations and declare their intention to be members. People can be appointed as committee member after training for a specified period. People who have experience in evaluating existing hospitals or doctors, or medical recorders of national university hospitals, are prioritized for appointment to secure the feasibility of evaluation standards, objectivity, and accuracy of the evaluation results.

Requirements for Public Hospital Operation Evaluation Committee Members

- Doctors: Resident Doctors or Higher with More than Two Years' Working Experience in a Public District General Hospital
- Nurses: Head Nurses or Higher with More than Five Years' Working Experience in Public District General Hospital (or QI Nurses with More than Five Years' Working Experience in Public District General Hospital)
- Public Health Care Program Operators: Persons with More than Five Years' Working Experience in Public District General Hospitals and More than Two Years' Working Experience in the Operation of Public Health Care Programs
- Medical Recorders: Medical Recorders with More than Three Years' Working Experience in Public District General Hospitals
- Administrators: Persons with More than Three Years' Working Experience in the Administration of Public District General Hospitals or Persons in Charge of Public District General Hospitals in Local Governments
- Civic Group Persons: Members Retaining Basic Knowledge of Public Health Care

The committee is divided into two teams. A team consists of a total of six persons: a doctor, a nurse, a public health care program operator, a medical recorder, an administrator, and a person from a civic group. The committee members should be designated so that the district and scale of the hospital to be evaluated, in addition to their interest in the hospital they are working for currently, have no impact on the evaluation results. The major education components for the members are the purposes, contents, standards, and methods of district public hospital evaluation, responsibility and right of the evaluation members, job allotment among evaluation domains and members, and scheduling method with the hospital. Education is executed through lectures and group discussions for one night and two days, as explained below.

AM 09:00~09:30 (30)	Greetings, Member Introduction, and Explanation on the Hospital's Current State
09:30~09:45(15)	Evaluation Order by Department and Member Scheduling
09:45~10:00(15)	Hospital Data Examination and Data Request
10:00~12:30(150)	Evaluation by Department and General Interview
PM 13:30~14:00(30)	Interim Checkup (by Team Head)
14:00~16:30(150)	Evaluation by Department and General Interview
16:30~17:00(30)	Aggregation of Opinions of Evaluation Teams
17:00~17:30(30)	Final Reporting
17:30~18:00(30)	Additional Evaluation (If Necessary)

b. Presentation for the Evaluation Target Hospital

Through this presentation, general affairs related to the evaluation including the evaluation process, formal objection to the evaluation results, evaluation on the committee members, actions for the evaluation results, etc., are explained, in order to help the hospital understand and prepare for the evaluation. General affairs can also be queried and answered online to promote a smooth preparation prior to evaluation.

c. Evaluation Implementation

Evaluation is mainly conducted through field observation and survey, or computer data analysis, depending on the question item. The "Appropriate Health Care" sub-domain is evaluated using data on inpatient and outpatient charges claimed with the Korea Health Insurance Review and Assessment Service, and its reimbursement.

d. Evaluation Result Analysis and Result Aggregation

KHIDI examines research integrity through the evaluation report submitted by the committee, and conducts the first evaluation result analysis. If there are any unsatisfactory components, due to the insufficient preparation of the evaluated hospital or improper evaluation of the committee members, it is reconfirmed by the committee members. Additional data is then required by the subject hospital, and is reevaluated . The result analysis is carried out in accordance with the existing comprehensive measures for the evaluation results; KHIDI aggregates and analyzes the evaluation results, the analysis results go through an inspection process to ensure their appropriateness. The consultation body then judges the evaluation results, based on the final evaluation report.

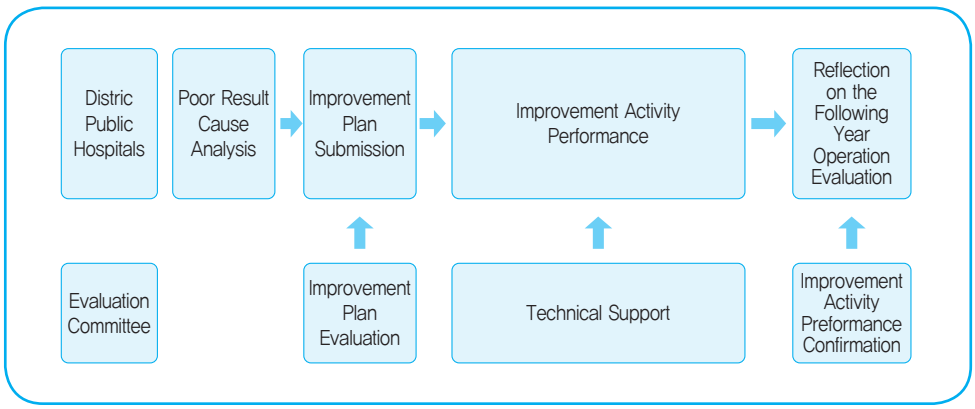
e. Opening of Evaluation Results and Formal Objection

Evaluation results are presented at the end of the year. The evaluated hospitals can raise issues regarding the evaluation process (application method of standards, evaluation methods, etc.) and present their opinions on the evaluation committee members. If any clear mistake is found, the evaluation result analysis can be reversed, and reevaluation is completed, after further discussions with the subject hospital.

f. Feedback after Evaluation

The process for feedback after evaluation is described below. The evaluation results are reflected on improvements made in the subject hospital's operations. Hospitals with a poor evaluation are required to investigate the cause of their poor results, and submit an improvement plan to the evaluation committee within one month following the first presentation of evaluation results. The evaluation committee considers the improvement plan, and notifies the subject hospital of the final results. If the improvement plan is judged as inappropriate, technical support is provided for the establishment of an appropriate improvement plan for the hospital. In other words, the hospitals have to implement specific tasks according to their improvement plan. The evaluation committee then provides technical support for the successful implementation of the tasks, and examines what goals have been achieved during the following year's evaluation.

Figure 3-5 | Feedback after Operation Evaluation



4. Policy Promotion Process

4.1 Legislation and Guideline Development

4.1.1 Legislation including the Law on District Public Hospital Establishment and Operation

In accordance with the "Law on District Public Hospital Establishment and Operation" legislated in July 2005, the government was able to direct financial resources for public district general hospitals. This law is applied to local public hospitals and Red Cross Hospitals. According to this law, local governments were designated to be the founders of public district general hospitals; if necessary, they could integrate more than two hospitals, or have affiliated hospitals, so that they could dispense healthcare, as suitable for their own specific situations. The board of directors at these hospitals consisted of not more 11 members, including the president of the hospital, and five members recommended by customer-related civic groups for their optimal operation. The Minister of Health and Welfare, or head of the local government body, could direct the evaluation of efficiency, and public aspects of the public hospital. If necessary for the promotion of public healthcare policies, partial expenditures for public healthcare programs, including facility and equipment expansion, and securing competent medical human resources, etc., could be supported by the government budget. The detailed contents are as follows:

Article 17 (Government Subsidy) ① The government can partially subsidize the expenditures for public healthcare programs such as facility and equipment expansion and securing the human resources at public district general hospitals within its budget, if necessary for the promotion of its national public healthcare policies.

② Local governments can donate for the expenditure of establishment or offer a subsidy for the operation of public district general hospitals.

③ Individuals, corporations, or groups can donate their money or properties for the programs of public district general hospitals.

Meanwhile, to establish an organization to promote public district general hospitals, the "Public Health Care Expansion Program Task Force Establishment and Operation Regulations" (No. 155 Directive of the Ministry of Health and Welfare) was legislated in February 2005. The directive defined 11 jobs to be carried out by the task force for the ministry: establishment of public health care expansion-related plans; implementation management; support and evaluation of district healthcare planning of local governments; checkup; support; education; evaluation of operation of public hospitals; model development for public hospital programs; financial support for equipment; facility reinforcement; and technical support for public hospitals. The task force was organized and operated by KHIDI.

4.1.2 Research and Guideline Development

To promote evidence-based public hospital modernization programs, support was given to conduct preliminary research on healthcare services, operation, specialization, etc., in regards to public district general hospitals by public healthcare experts. An KHIDI empirical study, as typical preliminary research, presented the actual changing aspect of local public and Red Cross hospitals. Prior to the study, models for public district general hospitals were established based on the "Public Health Care Expansion Comprehensive Measures," presented by the central government. Based on these models, the internal capacities of 40 public hospitals at the time were classified into four types. Finally, measures (steady development, intensive improvement, and innovation) were presented to strengthen the public aspects and efficiency in the operation of the four types of hospitals for higher internal capacities.

Furthermore, guidelines for the annual government budget to underdeveloped public district general hospitals were developed and distributed to local government authorities and public hospital officials through presentations. The guidelines were an effort for the transparent distribution of program expenditures through fair examination. For instance, the "Government Support Program Guidelines for Public District General Hospital in 2006" had a deeper impact than the government support programs promoted by the Ministry of Public Administration and Security in the past.

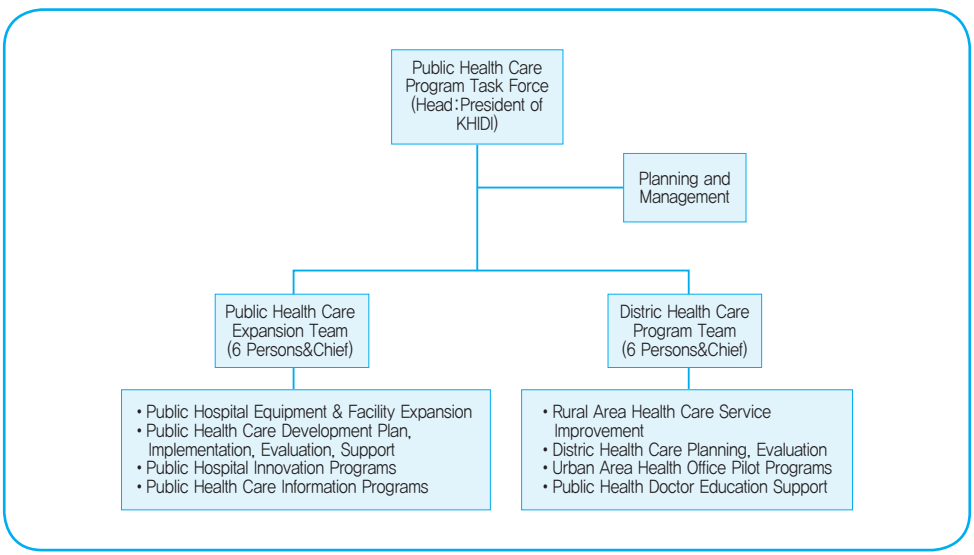
4.2 Program Support Organization and Decision-Making System

4.2.1 Program Support Organization and Human Resources

The "Public Health Care Expansion Program Task Force" was established as a support organization for a 2005 KHIDI program. The program employed a multitude of public healthcare experts at the time, in accordance with the "Public Health Care Expansion Program Task Force Establishment and Operation Regulations," (No. 155 Directive of the Ministry of Health and Welfare) legislated in February 2005. At the time, KHIDI was operating the "Rural Area Health Care Service Technical Task Force," which had consulted and supported the Ministry of Health and Welfare's healthcare service improvement programs in rural areas since 1994. The task force was integrated into the "Public Health Care Program Task Force," in consideration of the government's prioritization of public healthcare, and the "Rural Area Health Care Service Technical Task Force" (Regulation No. 84 Directive of the Ministry of Health and Welfare) was abolished.

The task force consisted of two teams: the Public Health Care Expansion Team and the District Health Care Program Team. The former operates public hospital modernization programs, public healthcare plan evaluations, public healthcare programs, and public hospital model programs. The latter manages rural area healthcare service improvement programs, district healthcare plan evaluations, urban area health office pilot programs, etc. (See Figure 3-6).

Figure 3-6 | The Organization of Public Health Care Program Task



The four main jobs of the Public Health Care Expansion Team and detailed contents are described in <Table 3-13>.

Table 3-13 | Major Duties of the Public Health Care Expansion Team and Contents

Items	Major Contents
Public Health Care Development Planning and Implementation Support	▶ Consultation and Technical Support for Long-Term Planning ▶ Long-Term Plan Evaluation Standards Development and Evaluation ▶ Facility Refurbishment and Equipment Reinforcement Programs Review, Consultation, and Implementation Management as Construction Guide ▶ National Central Hospital Facility and Equipment Installation Planning Support
Public Health Care (Implementation) Plan Evaluation	▶ Document Examination and Field Observation for Public Health Care (Implementation) Plan ▶ Public Health Care Plan Evaluation Standards Development, Public Health Care Planning Guideline Development, Monitoring, and Consultation and Technical Support for the Planning and Promotion Process
Public Hospital Innovation	▶ National Central Hospital Establishment Support ▶ Public district general hospital Model Programs
Public Health-Care Information	▶ Public Health Care Information Mid-&Long-Term Development Planning Support ▶ Public Health Care Information Standardization and Legal Improvement Support ▶ Public Health Care Information Program Support ▶ District Public Health Information Program Support

Human resources with sufficient experience and specialization in public healthcare programs were necessary to form an organization to promote this program . The government decided to utilize the experiences and expertise of KHIDI, which had been operating the "Rural Area Health Care Service Improvement Program" since 1994. A government-funded institution under the umbrella of the Ministry of Health and Welfare, KHIDI (Korea Health Industry Development Institute) retains a multitude of healthcare experts (doctors, nurses, pharmacists, health care administrators, hospital construction experts, computer experts, etc.), serving as a think-tank since 1992 for the ministry. In particular, the institution has operated a number of healthcare-related programs, and accumulated a database related to public district general hospitals; it was expected to minimize possible errors in the implementation of new programs and fully utilize existing research results. According to December 2005 data, the executive, planning and management positions of the Public Health Care Program Task Force were assumed by KHIDI personnel, and researchers possessing various qualifications in medicine, healthcare, nursing, economics, management, architecture, industrial engineering, in addition to and public health doctors, were hired as permanent employees for the new task force. Education and consultation by

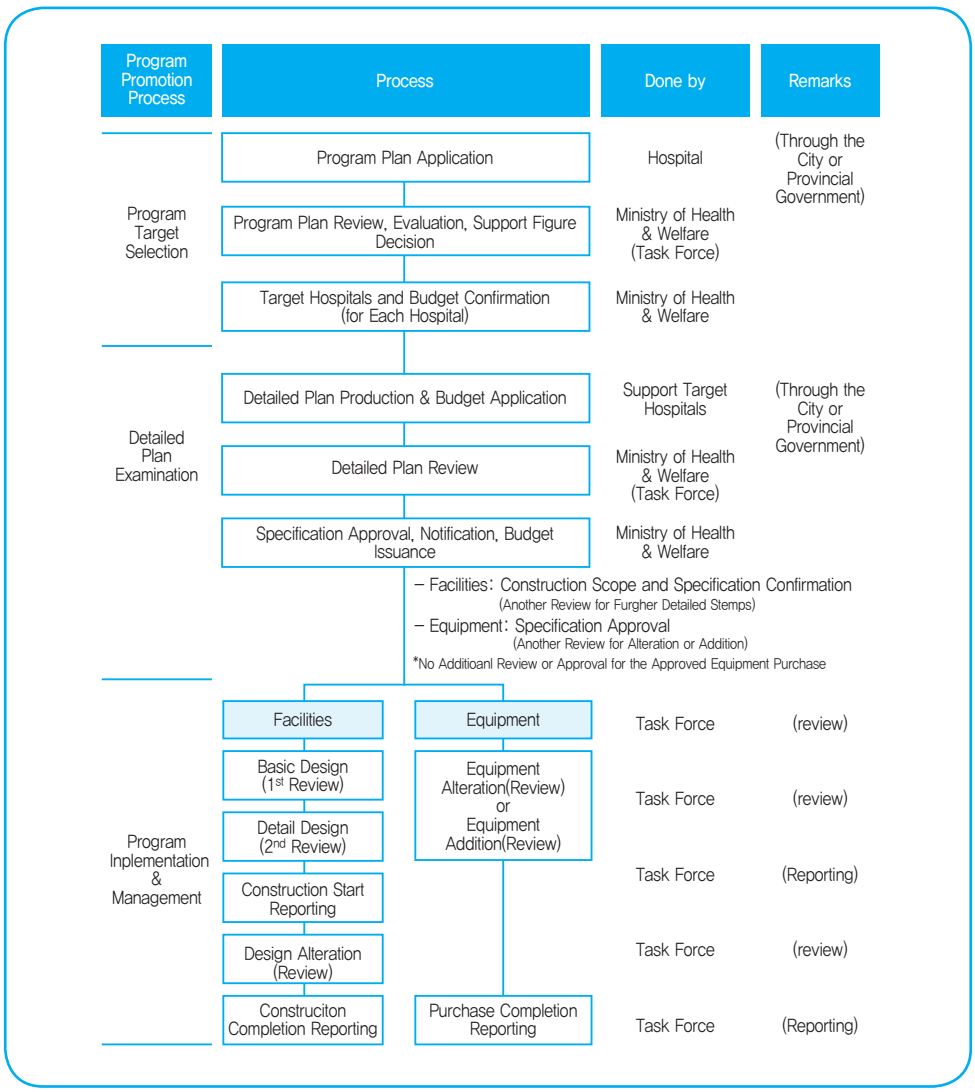
KHIDI personnel were conducted for new employees, which allowed them to promote the programs immediately.

4.2.2 Decision-Making System

The annual selection of target hospitals for the modernization program had to be executed through a competitive process, due to limited government finances. Thus, fair competition and examination were imperative. To achieve this, "program planning" reports were submitted by the hospitals and reviewed, as described above.

The modernization program was divided into three programs: the relocation and new construction program, the public district general hospital model program, and the facility and equipment reinforcement program. The relocation and new construction program was done via BTL (Build-Transfer-Lease) through private investment, according to government policy in 2006. The task force gave top priority to the facility and equipment reinforcement program at the time. An evaluation committee was organized by external experts (in architecture, management, healthcare, among others) and related government officials for the evaluation of the model program, which was done in two stages: first, document examination and second, field examination. First, documents submitted by hospitals were examined according to standards including urgency, appropriateness, and necessity, from which hospital support was ultimately selected. Second, a field examination was conducted by the evaluation committee and the task force on hospitals that earned higher marks in the first evaluation. Next, the support figure adjustment committee was organized within the evaluation committee, to decide support targets and budget allocation. The final evaluation results and support target selection were reported to the Ministry of Health and Welfare, which in turn notified the corresponding local governments. The budgets were then issued for the selected program. The facilities examination was conducted by the task force in the following order: design examination, construction start reporting, design alteration examination, and construction completion reporting. Likewise, the examination of equipment was done in order of equipment alteration or addition examination, and purchase completion reporting (see Figure 3-7).

Figure 3-7 | Process Map for the Public Hospital Modernization Program



4.3 Input of Financial Resources

4.3.1 Prerequisites

Originally, financial resources for the "Public Healthcare Expansion Comprehensive Measures" was to be supplied by the central government's general account, health promotion fund, rural area special tax, etc. Note, however, that government finances using the general account of the central government were mainly supplied for the public district general hospital promotion program. Meanwhile, the modernization of Cheongju Hospital, adopted as the relocation and new construction program for 2006, was executed on a BTL basis with

private investment, considering the situation in Korea at the time. This was according to the policy of the Korean government, which wanted higher efficiency in the utilization of government finances and transfusion of creativity and efficiency of private sector into the public sector. Afterwards, the modernization of Seoquipo Hospital and Gongju Hospital has been completed by BTL, utilizing private investment first. This is a new type of government financial input in Korea.

4.3.2 Financial Resources from the Government's General Account (Government-Financed Programs)

From 2005 to 2010, KRW 274.305 billion in government finances was provided as support for the program, not including private investment. KRW 71 billion on the average was provided for each public hospital. KRW 17.138-86.395 billion was given to public district general hospitals, amounting to 230.277 billion (see Table 3-13). KRW 44.028 billion was provided only for the equipment and facility reinforcement programs at Red Cross Hospitals.

Table 3-14 | Annual Government Financial Support for Public district general hospital ('05~'10)

(Unit: KRW million)

Year	Supported Amounts for Each Program (from Government Finances)							
	New Construction	Model[1]	Facility Reinforcement	Equipment Reinforcement	Dental Center for the Disabled	Renovation[2]	Special Health Service[3]	Total
'05	11,800 3 Hospitals	14,106 4 Hospitals	3,200 4 Hospitals	9,999 18 Hospitals	-	-	-	39,105
'06	9,300 '05 Consecutive Support	1,950 1 Hospital	2,180 4 Hospitals	13,667 24 Hospitals	-	-	-	27,097
'07	812 '05 Consecutive Support	3,917 1 Hospital	4,505 11 Hospitals	7,189 15 Hospitals	715 4 Hospitals	-	-	17,138
'08	6,008 2 Hospitals	-	6,749.5 9 Hospitals	5,675 16 Hospitals	-	2,992 2 Hospitals	7,775.5 9 Hospitals	29,200
'09	7,365 '05 Consecutive Support	4,600 2 Hospitals	61,102.8 27 Hospitals	9,397 27 Hospitals	-	3,930 '08 Consecutive Support	-	86,395

Year	Supported Amounts for Each Program (from Government Finances)							
	New Construction	Model[1]	Facility Reinforcement	Equipment Reinforcement	Dental Center for the Disabled	Renovation[2]	Special Health Service[3]	Total
'10	15,000	-	6,000	7,000	-	3,342	-	31,342
	'08 Consecutive Support + 2 Hospitals Addition	-	6 Hospitals	13 Hospitals	-	'08 Consecutive Support	-	
Total	50,285	24,573	83,737	52,927	715	10,264	7,775.5	230,277

Note: 1) Model Program: Unit Expansion Program
2) Renovation Program: Complete Remodeling
3) Special Health Care Service Center Program: Rehabilitation Care, Palliative Care, Artificial Kidney Center, and Chronic Disease Management Program

* Except BTL Program (Large-Scale New Construction Programs have been done by BTL since '.)

Table 3-15 | Annual Government Financial Support for Red Cross Hospitals ('03~'10)

(Unit: KRW million)

Year	Supported Amounts for Each Program (from Government Finances)							
	New Construction	Model[1]	Facility Reinforcement	Equipment Reinforcement	Dental Center for the Disabled	Renovation[2]	Special Health Service[3]	Total
2003	-	-	-	2,000	-	-	-	2,000
			-	6 Hospitals				
2004	-	-	489	2,511	-	-	-	3,000
			2 Hospitals	3 Hospitals				
2005	-	-	2,100	900	-	-	-	3,000
			4 Hospitals	3 Hospitals				
2006	-	-	679	2,380	-	-	-	3,059
			3 Hospitals	6 Hospitals				
2007	-	-	2,110	949	-	-	-	3,059
			2 Hospitals	6 Hospitals				
2008	-	-	2,300	1,100	-	-	-	3,400
			3 Hospitals	4 Hospitals				
2009	-	-	17,310	1,000	-	-	-	18,310
			5 Hospitals	3 Hospitals				
2010	-	-	2,000	6,200	-	-	-	8,200
			2 Hospitals	5 Hospitals				
Total	-	-	26,988	17,040	-	-	-	44,028

4.3.3 Input of Private Finances

In 2005, the Korean government recommended promoting the relocation and new construction of public hospitals that incur large-scale expenditures via BTL, rather than through its finances. BTL is a system where social infrastructure such as roads, railways, schools, public hospitals, etc., which had been traditionally financed by the government, are established and operated by private funds or organizations. BTL was introduced to supplement government finances, and improve the quality of public services, using the creativity and efficiency of the private sector. A BTL program seeks to build a facility through private investment or organization, transfer the ownership of the facility to the government with the private organization managing the facility, and lease the facility to the government, which will pay the private organization for the lease to secure the invested amount.

The BTL system was utilized for the modernization program of public district general hospitals. KRW 35 billion in private investment was allocated for the expansion of Gangjin Hospital in 2005, with KRW 57.1 billion for the relocation and new construction of Cheongju Hospital in 2006, KRW 40 billion for the new construction of Seoquipo Hospital in 2009, and KRW 54 billion for the relocation and new construction of Gongju Hospital. A total of KRW 186.1 billion in private investment was injected into the program as of 2011.

5. Policy Evaluation

5.1 Prerequisites

The policy proposed and promoted 15 years after the first policy was implemented for only about six years, and its detailed promotion results have not been identified. Additionally, full-scale performance estimation and evaluation have yet to be completed. Small-scale programs (expansion, renovation, equipment reinforcement, etc.) have been completed, but large-scale projects, such as relocation and new construction, are still in progress. Finances have not been provided in a lump sum, but in annual amounts within the decided range.

Thus, the second policy, or the public district general hospital promotion program, should be evaluated as to whether its originally established concept and plans have been properly promoted, and if it has achieved its goals to a reasonable level. The contents and accomplishments through program promotion for the second policy can be analyzed from three aspects: public district general hospital model establishment and long-term development direction provision, infrastructure modernization, including facilities and equipment, and appropriate hospital operation through operation evaluation and subsequent support. Note, however, that insufficient support effects, and securing outstanding medical human resources due to diversified financial investment, still need to be analyzed and completed.

5.2 Major Accomplishments

5.2.1 Public district general hospital Model and Long-Term Development Plan Establishment

The establishment of a model for public district general hospitals is one of the greatest accomplishments of this promotional program. The model was developed considering the functions, roles, and future aspects to consider within the national healthcare system, including their current situation. Also considered was the appropriateness to develop hospitals not simply as supporting facilities to private hospitals, but as active stewards for national health. Since the exceptional situation of Korea, wherein economic development and its healthcare system modernization had been simultaneously promoted after going through years of colonization and civil war, the model can be applied to hospital modernization programs in developing countries, with a history similar to Korea.

After the establishment of the district general public hospital model, the internal capacity type and local environment type for each hospital were designed through research and analysis; based on this, long-term development goals for each hospital were suggested to be utilized in its operation.

a. Establishment of Public district general hospital Model

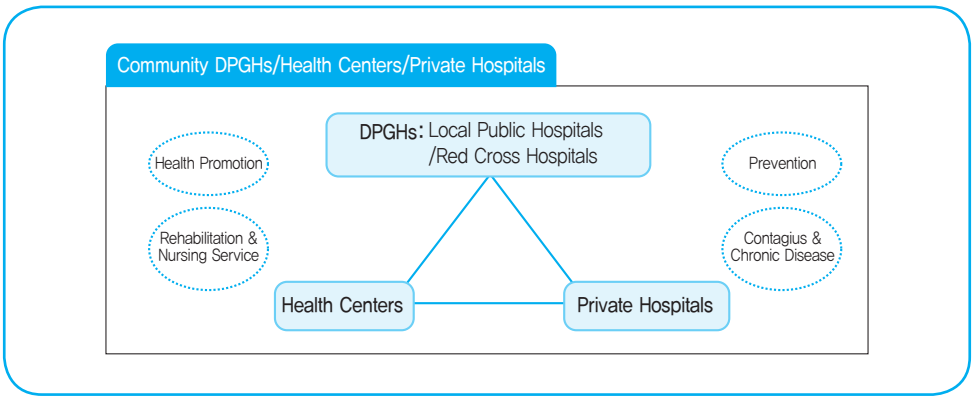
(1) Essential Secondary Treatment for Acute Conditions

Public district general hospitals can treat over 50% of acute conditions of ADRG,[15] and their treatment must be completed effectively, based on over 150 beds. According to ADRG, public district general hospitals providing secondary healthcare must retain 16 departments: internal medicine, surgery, OB/GYN, pediatrics, psychiatry, orthopedics, neurology, neurological surgery, urology, rehabilitation, anesthesiology, radiology, clinical pathology, dental medicine, and ophthalmology and ENT (optional). Likewise, they have to retain 20 residents at least for the 16 essential departments and at least 150 beds for the internal and surgical treatment of acute conditions.

(2) Comprehensive Health Care Service

15 ADRG (Adjacent Diagnosis-Related Group): After the 23 large classifications of inpatients by diagnosis, classification of each disease group by the internal medicine department and surgery department depending on the necessity of operation

Figure 3-8 | Establishment of Roles of DPGHs, Health Centers, and Private Hospitals for the Provision of Comprehensive Health Care Service



One of the key roles of public district general hospitals is the provision of comprehensive, consistent healthcare service whose supply to the community is difficult for private hospitals in order to deal with the insufficient healthcare service caused by market failure. Public district general hospitals can create a comprehensive healthcare service provision system to function as a health care safety net for rehabilitation, nursing, infectious disease management, public healthcare programs, and services for the socially underprivileged, connected with the resources of the community as health centers, considering the internal resources of the hospitals and local conditions.

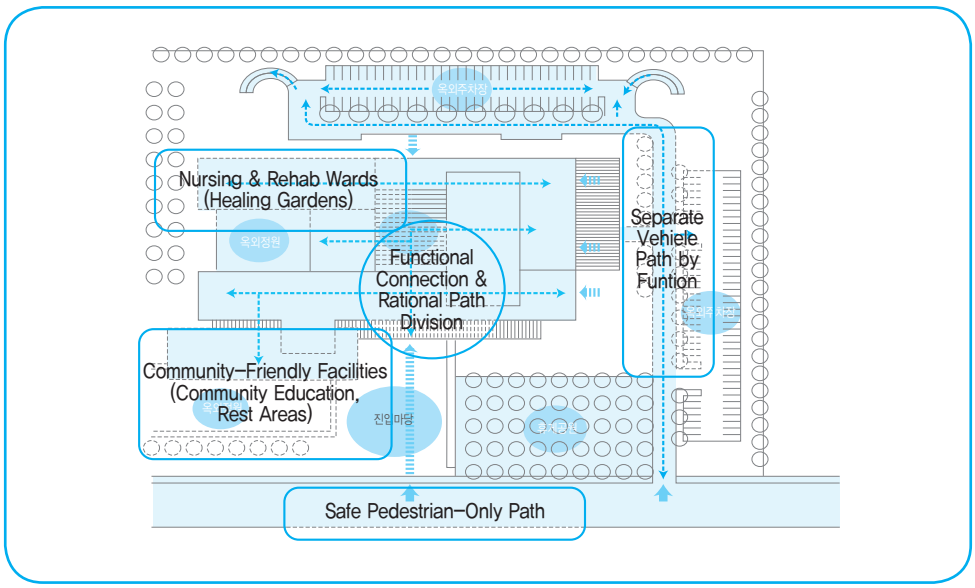
The hospitals need 1-2 rehabilitation specialists with 40±10 beds for the provision of rehabilitation and nursing services, 1-2 related specialists for neurology, and 100±50 beds (1~2 beds). For the provision of comprehensive services, including health education, chronic disease management, mental health, and home care, these facilities must install a public healthcare program-dedicated department, and treat nationally communicable diseases and diarrhea among different groups of people, as well as monitor the occurrence of infectious diseases in the community.

(3) Sites and Facilities

Public district general hospitals are medical facilities with more than 250 beds: more than 150 beds for acute conditions, 40-80 beds for nursing and rehabilitation, etc. (see Table 3-15). If the minimum architectural area per bed is over 82.5m^2, the total facility area (with 300 beds) should be 24,750m^2. If the facility area is planned to be less than 50-100% of the floor area ratio to enhance the mid and long-term site utilization efficiency and to secure green spaces for the healing environment, the appropriate site area is 24,750~49,500m^2. Public district general hospitals have various functions, and this has to be considered fully before positioning their facilities. They have to secure safe accesses through divided paths for pedestrians and vehicles, various paths and divided parking spaces adjacent to more than

two roads, community-friendly spaces including parks at their entrances, communication and independence of functions through connection and division among facilities, and outdoor gardens and rooftop parks for inpatients and outpatients (see Figure 3-8).

Figure 3-9 | Facility Arrangement Map of Public District General Hospitals



(4) Efficient Operation

The major tasks for efficient operations at public district general hospitals are to induce participation of management experts through the public hiring of the president, long-term development planning for each hospital considering the local conditions, replacement of management failing to achieve established goals, further strengthened roles for board of directors such as hospital operation planning and budget and settlement review, human resources nurturing through employee reeducation, and operation evaluation of public aspects and efficiency of the hospital, among others.

They must manage their annual operation goals based on their mid and long-term plans, carry out rational organization management policies through a firmly-established leadership in personnel and internal evaluation, dispense competitive compensation, engage in employee education, encourage management information production and utilization, promote materials management, implement cost reduction, and maximize the utilization of resources by strengthening their efficiency and productivity.

Table 3-16 | Facility Scale of Public district general hospital

Classification	Items	Scale / Installation	Remarks
Inpatient Service	Total Beds	300 ± 100	
	Acute Condition Beds	200 ± 50	4 Wards (50 beds)
	Nursing and Rehabilitation Beds	100 ± 50	2 Wards (50 beds)
	ICU	16 ± 4	8% of Acute Condition Beds
Outpatient Service	Medical Departments	16 Departments	
	Health Promotion&Checkup Centers	Yes	
	Special Clinics	Yes	Mental/ Rehabilitation Daytime Ward, etc.
	ER	10 beds	District Emergency Unit
Central Medical Departments	Operation Rooms	20 beds	District Emergency Center
	Physiotherapy Room	4 ± 1	
	Artificial Kidney Room	Yes	Physical/Exercise/ Occupational Therapies
	Clinical Pathology	Yes	
Other Service	Pharmacy, Hygiene, Food Supply, Funeral Service	Yes	
	Laundry	Yes or Commissioned	
Management Departments	Management, Medical Recording, Computer, Education	Yes	
Others	Parking, Supplemental Facilities, Welfare Facilities, Dormitory	Yes or Leased	

(5) Participatory Operation

As public institutions, public district general hospitals require democratic, transparent operation with local residents and employees participating in key decisions. The participation of local residents in hospital operations should be promoted by appointing the representative of local residents as a director of the board, in order to reflect their opinions, open operation-related affairs and programs to the community, offer to local residents the opportunity to

evaluate various programs, etc. Transparent operation and cooperative relationship between labor and management should also be promoted by opening up operation-related hospital information and participation of employee representatives as members of all hospital committees. In addition, they should actively promote community support programs, and accept various community participation, such as the volunteering services of local residents, to strengthen community bonds.

b. Long-Term Development Plan and Provision

To classify the general internal capacities of public hospitals prior to the establishment of a long-term development plan, acute condition services, efficient operation, and the most influential aspects in the general operation of the hospitals were selected as major indices to be analyzed. Based on the results, the internal capacities of the hospitals were aggregated and classified (see Table 3-16).

Table 3-17 | Comprehensive Internal Capacity Classification

Class	Standards	Hospitals			Features
		Name	No.	%	
AB-ab	Acute Condition Secondary Service Satisfaction - Efficient Operation Satisfaction	Seoul, Daegu, Hongseong, Gunsan, Namwon, Andong	6	15.0	Positive Acute Condition Secondary Service (ADRG-Based) and Operation
AB-cd	Acute Condition Secondary Service Satisfaction - Efficient Operation Dissatisfaction	Busan, Incheon, Cheongju, Chungju, Gongju, Seosan, Pohang, Gimcheon, Masan, Seguipo, Seoul Red Cross, Sangju Red Cross	15	37.5	Positive Acute Condition Secondary Service and Negative Operation
CD-ab	Acute Condition Secondary Service Dissatisfaction - Efficient Operation Satisfaction	None Applied	-	-	Negative Acute Condition Secondary Service and Positive Operation
CD-cd	Acute Condition Secondary Service Dissatisfaction - Efficient Operation Dissatisfaction	Icheon, Suwon, Pocheon, Ansung, Uijeongbu, Paju, Wonju, Gangrung, Sokcho, Samcheok, Youngwol, Cheonan, Suncheon, Gangjin, Mokpo, Uljin, Jinju, Jeju Incheon Red Cross, Daegu Red Cross, Tongyeong Red Cross, Geochang Red Cross	19	47.5	Improvement Required for Acute Condition Secondary Service and Operation

Meanwhile, healthcare environments, the local population, and the number of beds were analyzed and classified into four types-many people-few hospitals, many people-many hospitals, few people-few hospitals, and few people-many hospitals (see Table 3-17)-to help establish plans for each hospital environment.

Table 3-18 | Local Environment Types of Public Hospitals

Types	Standards	Hospitals			Features
		Name	No.	%	
Many People-Few Hospitals	Large Population and Few Beds per 1,000 People	Incheon, Incheon Red Cross	2	5.0	Active Health Care Service Required
Many People-Many Hospitals	Large Population and Many Beds per 1,000 People	Seoul, Daegu, Uijungbu, Cheongju, Cheonan, Seoul Red Cross, Masan, Busan, Suwon, Wonju, Pohang, Jeju, Daeju Red Cross, Suncheon, Mokpo, Jinju	16	40.0	Selection and Concentration of Health Care Service Required
Few People-Few Hospitals	Small Population and Few Beds per 1,000 people	Icheon, Pocheon, Anseong, Paju, Gunsan, Cheongju, Seosan, Gimcheon, Yeongwol, Samcheok, Gongju, Hongseong, Namwon, Gangjin, Uljin, Seoguipo, Sangju Red Cross, Sokcho, Tongyeong Red Cross, Geochang Red Cross	20	50.0	Support Required for the Provision of Extensive Health Care Service
Few People-Many Hospitals	Small Population and Many Beds per 1,000 People	Gangrung, Andong	2	5.0	Specialized Strategy Required for Specific Health Service

Based on the aforesaid internal capacity and local environment classifications, "internal capacity strengthening directions" for each hospital were recommended (see Table 3-18). Mid and long-term development plans and measures to strengthen the public features and operation efficiency of each public hospital were established and presented, considering the internal capacity strengthening goals, basic strategy for each local environment, population size and bed numbers per 1,000 people, local acute conditions bed supply, medical emergency care supply, and nursing bed supply. The example of Gimcheon Hospital is described in <Table 3-19>. Based on the mid and long-term development plans, each hospital could then promote their programs, with some parts to be modified, if necessary.

Table 3-19 | Internal Capacity Strengthening Directions for Each Type of Public District General Hospital

Type	Standards	Hospital Name	Features	Strengthening Directions
Steady Improvement-Required Type	Acute Condition Secondary Service Satisfaction-Efficient Operation Satisfaction	Seoul[1], Daegu, Hongung, Gunsan, Namwon, Andong [2]	Positive Health Care Service and Operation	· Since their acute condition care service and operation system are positive, they need support for further steady improvement.
Intensive Improvement-Required Type	Acute Condition Secondary Service Satisfaction-Efficient Operation Dissatisfaction	Busan, Inchon, Cheongju, Cheongju, Gongju, Seosan, Pohang, Gimcheon, Masan, Seoguipo, Seoul Red Cross, Sangju Red Cross	Positive Health Care Service but Negative Operation	· Their service is positive, but operation systems need intensive improvement. · They commonly need support for the steady strengthening of the quality of acute condition care service. · They commonly need operation system innovation to address their inefficient operation, and some of them need more beds.
Innovation-Required Type	Acute Condition Secondary Service Dissatisfaction-Efficient Operation Dissatisfaction	Icheon, Suwon, Pocheon, Ansung, Uijungbu, Paju, Wonju, Gangrung, Sokcho, Samcheok, Yeongwol, Cheonan, Suncheon, Gangjin, Mokpo, Uljin, Jeju, Incheon Red Cross, Daegu Red Cross, Tongyeong Red Cross, Geochang Red Cross	Negative Health Care Service and Operation	· Both health care service and operation are negative, and they need improvement. · They commonly need innovation measures for better acute condition care. · They commonly need operation system innovation to address their inefficient operation, and some of them need more beds. · Sokcho, Jeju, and Daegu Red Cross Hospitals need rehabilitation care-centered specialization.

Note: 1) Seoul City planned to establish the Seoul Public Hospital Development Plans to grow Seoul Hospital into a central public hospital for the capital region. It is operating the special public hospitals it established such as North Elderly Hospital.

2) Andong Hospital is located in an area with excessive acute condition bed number, but its ADRG occurrence is fairly high with 62.5%; emergency service use is also high with 72.1%, and acute condition care service should be strengthened further.

Table 3-20 | Mid and long-term Development Plans for Gimcheon Hospital

Classification	Detailed Classification	Contents
Current State	Services and Specialists	· ADRG Occurrence Rate: 65.9% (Average of Public district general hospitals: 58.5%) · 13 Specialists for 9 Departments (Average of DPGH: 17) · 12.6 Specialists per 100 Beds (Average of DPGH: 9.7) · 41% of Public Health Doctors Among Specialists (Average of DPGH: 33.2%)
	Facilities	· For Acute Conditions: 175 Beds (built in 1982); Small Area, Old Building, but High Satisfaction Level · For Comprehensive Service: Lack of Nursing and Rehabilitation Facilities · In Progress: Expansion of 90 Beds for Nursing Ward and Renovation of Main Building
	Equipment	· Positive General Equipment Retention Rate · Lack of Internal Medicine and Rehabilitation Care quipment
	Comprehensive Health Care Service	· Non-Existence of Rehabilitation and related departments such as Neurology, etc. · Planning: Home care and nursing service for the nderprivileged
	Operation	· Non-Existence of Planning and Management System · Insufficient Investment in Employee Reeducation · Non-Existence of Operation Strategy Meeting-Low Utilization of Operation Information for Rational Decision-Making ·Generally Low Employee Satisfaction
External Competitiveness	Medical Demand	· Low Possibility of Medical Demand Growth of Gimcheon City (140 thousand) · High Aged Population Rate at 15.3% (National Average in 2000: 8.9%)
	Medical Supply	· 3.3 Acute Condition Beds per 1,000 People, 1.9 Beds Except Chronic Condition Beds (National Average: 5.9 Beds) · Few Local Competitors for the General Treatment of Acute Conditions
Key Strategies		· Collaboration Strengthening with Other Public Facilities such as Gyeongbuk National University Hospital and Health Centers · Expansion of Nursing Ward and Beds through the Completion of the Main Building · Operation Planning and Organization Management Improvement · Connection Strengthening with the Community
Strengthening Measures	Services& Specialists	· Securing Additional Specialists for Major Departments · Expansion of Conditions and Opportunities for Self-Development for Maintaining Competent Specialists
	Facilities	· For Acute Conditions: Main Building Renovation in Progress · For Comprehensive Service: Expansion of 90 Beds in Progress · Others: More Healing Environments and Community-Friendly Facility Required

Classification	Detailed Classification	Contents
Strengthening Measures	Equipment	· Equipment Committee Function Strengthening · Internal Medicine and Physiotherapy Equipment Reinforcement
	Comprehensive Health Care Service	· Installation of Rehabilitation and Neurology Departments for the Activation of Rehabilitation and Nursing Services
	Operation	Planning and Management System Establishment · Employee Reeducation Investment Expansion · Operation Information-Using Strategy Meeting Operation · Low Employee Satisfaction Causes and Countermeasures Investigation · Establishment of Participation-Inducing Structure in Intra-Hospital Committees

5.2.2 Infrastructure Modernization

The infrastructure modernization program of public hospitals, including their facilities and equipment, has been the most visible accomplishment. The program is still in progress, and additional successful cases are expected. Total government funds invested in the modernization program from 2005 to 2010 were estimated to be KRW 283.4 billion, which were mainly used for the improvement of healthcare environments, such as facilities and equipment. Specifically, four hospitals were supported for facility expansion and new construction, 40 hospitals for facility remodeling, nine hospitals for MRIs, and 13 hospitals for CTs. Second, 704 beds were newly installed, and public healthcare service programs, such as free checkups and care, were implemented with the financial support of the government, such as mental condition care, rehabilitation care, and palliative care to further strengthen the public aspects of the hospitals. KRW 186.1 billion in private investment was also attracted for BTL programs.

The most successful cases involving the financial support of the government are Gimcheon Hospital in Gimcheon City, Gyeongbuk Province, and Seosan Hospital in Seosan City, Chungnam Province. Successful cases involving BTL programs include Cheongju Hospital in Cheongju City, Chungbuk Province.

Before the modernization program, Gimcheon Hospital had only 53,000 inpatients and 143,000 outpatients per annum, with 91.2% financial independence. When the program was completed in 2010, however, the hospital saw significant changes, such as inpatients increasing 30% to 69,000 and outpatients rising 22% to 174,000, with perfect financial independence (see Table 3-20 and Figure 3-9). Moreover, its patient satisfaction grew by over 10%, being favored by the community as its public general hospital. On the other hand, Seosan Hospital had provided healthcare services for 68,000 inpatients and 146,000 outpatients annually before its modernization. But these rates went up 16% and 8%, respectively, after the provision of financial support, along with higher patient satisfaction and deficit-free operation.

Table 3-21 | Gimcheon Hospital Before and After the Modernization Program

Gimcheon Hospital	Before the Program 2005	After Commencement 2006	After Completion 2010
Annual Inpatients	53,411	56,073	69,351
Annual Outpatients	143,004	145,298	174,575
Facility Modernization	Expansion of Main Building and Beds (118) and Completion of Repair of New Building in Dec '09 (5,600.5m^2 Expanded, 1,825.0m^2 Repaired, KRW 12.6 Billion Supported)		
Equipment Modernization	48 Kinds of Equipment including DR (KRW 2.25 Billion Supported)		
Inpatient Satisfaction Level	-	82.4	90.9
Outpatient Satisfaction Level	-	72.2	85.7
Financial Independence (%)	91.2%	88.9%	103.3%

Figure 3-10 | Before (Left) and After (Right) the Improvement of Gimcheon Hospital

5.2.3 Operation Improvement through the Evaluation Program

The improvement of operations at public district general hospitals through the evaluation program can be analyzed by their annual scores. Their average score in 2006, the first year the program was implemented, was only 61.3, but had grown to 68.8 by 2010. Noticeably, the "quality health care service" and "health care service for public interest," items in evaluating the service quality of the hospitals, scored 71.7 and 58.0 points (out of 100), respectively, which increased to 82.8 and 75.3, respectively, by 2010 (see Table 3-21). Accordingly, rational operation and democratic participation rates also went up, albeit slightly.

Table 3-22 | Annual Average Scores in the Operation Evaluation of Public Hospitals (Out of 100)

Classification	Average Score				
	2006	2007	2008	2009	2010
Total	61.3	67.4	69.9	70.3	68.8
Quality Health Service	71.7	75.8	80.7	83.8	82.8
Rational Operation	49.4	58.5	54.9	55.5	57.2
Public Health Care Service	58.0	66.7	74.6	70.4	75.3
Democratic Participation	62.5	70.2	74.9	74.6	73.0

Meanwhile, the operation evaluation revealed that the satisfaction levels of local patients and employees of the hospitals grew higher, when compared to 2006, the first year of the program. Patient satisfaction was 74.9 points in 2006, growing to 82.3 by 2010. Employee satisfaction was disappointingly low with 53.2 in 2006, but went up to 70.8 by 2010. Satisfaction with leadership was also fairly low with 54.2 in 2006, growing to 71.8 by 2010 (see Figures 3-11, 3-12, and 3-13).

Figure 3-11 | Annual Average Patient Satisfaction Scores ('06~'10)

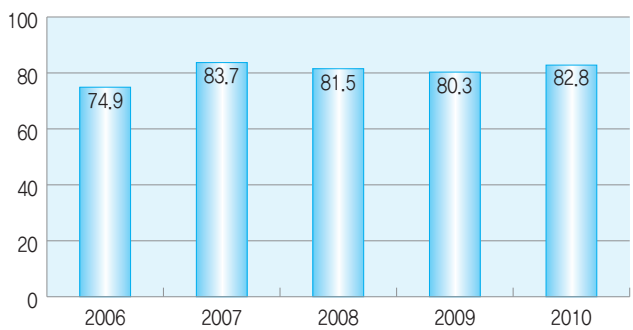


Figure 3-12 | Annual Average Employee Satisfaction Scores ('06~'10)

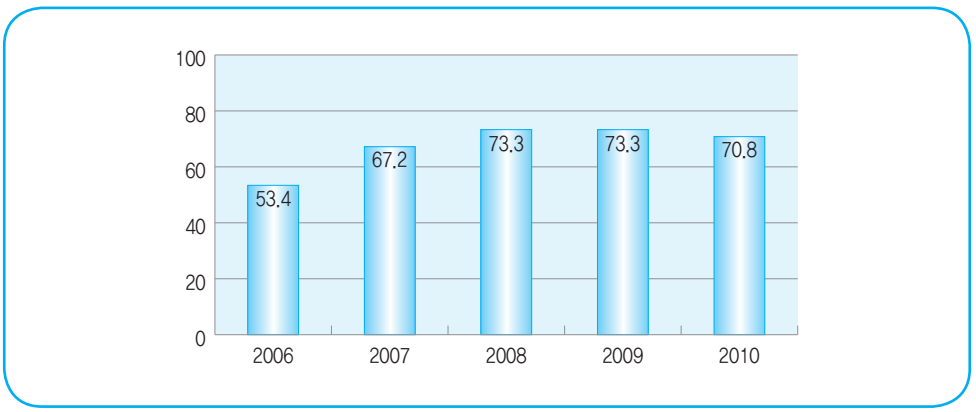
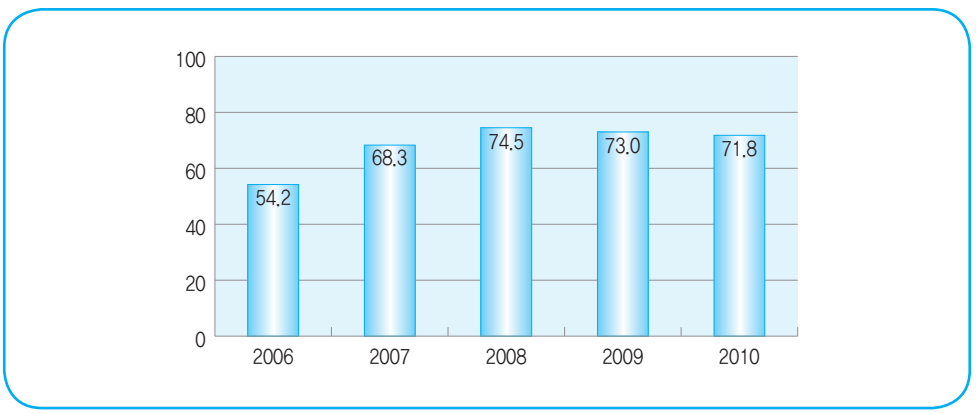
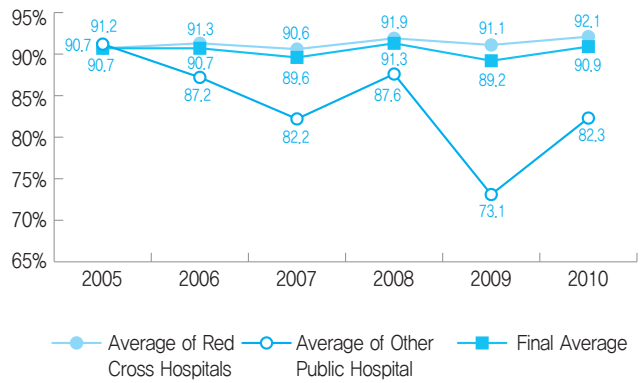


Figure 3-13 | Annual Average Leadership Satisfaction Scores ('06~'10)



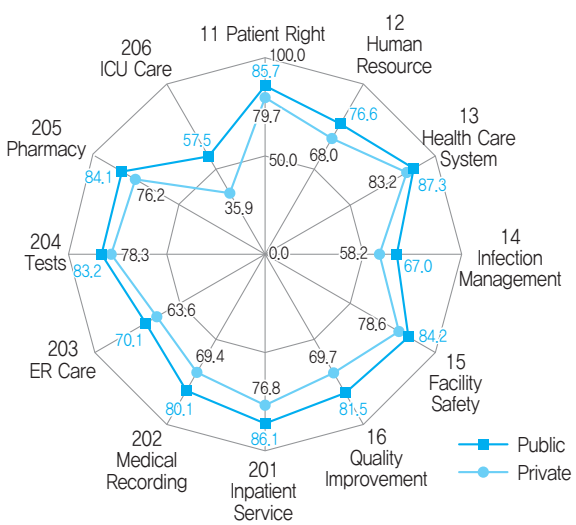
The district public hospital promotion program was aimed at reestablishing the roles of public hospitals within the public healthcare system to provide healthcare services that were appropriate for the 21st century. Higher financial independence was not the original focus of the program, but these rates increased as well. The average financial independence rate of local public hospitals was 90.66% in 2005, but increased to 92.13% by 2010. Note, however, that Red Cross Hospitals declined despite the program, which suggests the need for additional support and operation innovation.

Figure 3-14 | Changes in the Financial Independence Rates of Public Hospitals



The provision of healthcare service for public interest, which was avoided by private hospitals, was further expanded when compared to before the modernization of public hospitals. The hospitals actively participated in taking measures for the prevention and treatment of infectious diseases such as H1Nl Flu amid the market failure, and they were evaluated to perform better than private hospitals with similar size in general aspects. These treatments included ICU care, ER care, infectious disease management, and more. (according to the medical facility evaluation, 2006; see Figure 3-14).

Figure 3-15 | Comparison of Scores of Similar-Sized Public Hospitals and Private Hospitals in the Evaluation of Operation



5.3 Reflection of Policy and Supplementation

Around KRW 283.4 billion in support was provided by the government for about six years. The budgetary allocation was distributed proportionately in terms of equality, rather than selective and intensive investment. There are some areas where distributive investment brought down the effects of government support on individual hospitals. An important issue revealed through program management was that a hospital was sometimes relocated to a site where transportation and access were worse than that of the former site. Moreover, securing competent presidents and medical staff for public hospitals through human resources exchange programs with national university hospitals was planned as part of the policy. However, this has not been successfully implemented, due to the lack of detailed execution plans and limitation in cooperation among public hospitals. As a result, improvements in the operation of the hospitals, in regards to human resources management and debt settlement has been insufficient.

After the examination of the results in late 2010, the government presented additional measures. The major contents of these measures are the modernization of facilities and equipment of public hospitals through selection and concentration, and differential government support, depending on their financial independence. In addition, further improvements of operation evaluation, strengthening feedback , in addition to significant expansion of public healthcare services such as emergency care, infectious disease management, and free nursing, have been implemented.

Chapter 4

Implications

1. Reflection of Public District General Hospital Promotion Policies and Supplementation
2. Current State of Public District General Hospitals in Developing Nations
3. Considerations for Public Hospital Modernization Program Promotion in Developing Nations

Implications

1. Reflection of Public District General Hospital Promotion Policies and Supplementation

With regard to the two rounds of public district general hospital promotion policies implemented by the Korean government, the aspects to be reflected and complemented are as follows:

First involves the "unification of the policy promotion subject." In the first policy promotion, the unification of the diversified supervision of municipal hospitals and provincial hospitals (former names of public district general hospitals) by several ministries was attempted. However, this initiative was not successful due to the ministries' varied interests, and insufficient cooperation. In fact, unification was not realized until 24 years later.

Second, the first policy failed to properly present the visions of public district general hospitals as an important national institution. There were some issues in promoting the policy, since not only government officials, but also employees of municipal and provincial hospitals, had misunderstood the policy's intent and rejected its promotion. Fortunately, learning from past mistakes, visions and strategies for "public district general hospitals" were first established in the second policy promotion, which helped detailed implementation plans to be promoted successfully.

Third, an experienced and specialized organization is usually necessary for powerful policy promotion. The first policy promotion, however, used an organization that did not include a group of government officials from related ministries. This was why the legislation of promotion of measures took so long; cooperation and negotiations among the ministries could not be executed, and ultimately, most of the policy goals could not be accomplished. Meanwhile, legislating new laws or utilizing related laws are the most effective ways to

promote policy; had this been fully incorporated into the two public hospital modernization policies in every aspect, even better results could have been achieved. For instance, the "District Public Corporation Law" was utilized for the first policy, and the "Law on the Establishment and Operation of Public District General Hospital" was introduced for the second policy. Introducing new laws or utilizing related ones was not investigated sufficiently to promote the doctors exchange programs with national university hospitals, which certainly could have strengthened human resources at public hospitals.

Fourth, investment for individual hospitals was distributive, instead of being based on a "selection and concentration" philosophy, which led to investment effects that were lower than expected.

Last, the results of each policy for individual public hospitals should be evaluated. Problems can be identified through this evaluation, and corrections can be formulated through feedback. The first policy was not successful in this aspect, but the second policy was, thus helping achieve its goals more effectively.

2. Current State of Public District General Hospitals in Developing Nations

When examining the current healthcare service facilities in countries in the Indochinese Peninsula, such as Vietnam, one can observe that most services are provided by public hospitals. Note, however, that these public hospitals have very old facilities and equipment. Most doctors are not highly skilled, and are insufficient in any case. For example, almost all medical facilities in Vietnam were destroyed during its civil war (like Korea). The key difference is that Vietnam was reunified in 1975. Supported by WHO and international aid groups after the war, the Vietnamese government decided to build a heath station for each commune (village), a health center with 50-100 beds for each district, and a hospital with 300-500 beds for each province. Since 2000, it has been making efforts to control malaria more effectively for low-income earners and residents in remote areas, and improve public healthcare through by expanding health insurance benefits for soldiers, war victims, low-income people, et. al.

As of 2000, Vietnam has 59 districts (called provinces); each province has a provincial health director, who is usually a medical doctor. There are health centers and district hospitals, as well as a provincial general hospital within each province. Patients are first treated in health centers, and then transferred to local hospitals if they need surgery, or to the provincial general hospital if they need additional care.

Medical care was free of charge in Vietnam. With the introduction of the patient allotment system in public hospitals in 1989, however, patients have to pay a small amount for basic service, and additional fees for more complex medical service or medicine. The public insurance system in Vietnam, also introduced in 1989, consists of mandatory insurance and non-mandatory insurance. Mandatory insurance is applied to public servants, state-owned

companies, private companies, defoliant victims, etc., whereas non-mandatory insurance is applied to the rest of the Vietnamese population. The mandatory insurance subscription rate was only around 20% of the entire population in 2000; the non-mandatory insurance subscription rate was only 10%, but it is gradually growing. Finances for public healthcare are supplied through government subsidies, hospital care charges, health insurance, and foreign aid.. District hospitals and provincial hospitals provide the services of public hospitals, but continue to have issues, such as old facilities and equipment, lack of medical human resources, and low operation expenditure. Moreover, patients are not satisfied with public hospitals due to long waiting times, long-term hospitalization, unkind hospital staff, and low quality of healthcare service.

Like Korea, Mozambique experienced a civil war in 1986, over ten years after its independence from Portugal in 1975. Mozambique is nonetheless driving the most successful economic reform among civil war-stricken countries in Africa, where ODAs from all over the world are currently concentrated. Aid amounting to 30% of the nation's GDP was supplied between 1999 and 2001, and lowered to 10-13% between 2002 and 2004, due to Mozambique's growing GDP.

When comparing the health are level (infant mortality, child nutrition, drinking water and wastewater treatment, HIV/AIDS and TB rate, vaccinations, women and youth pregnancy rates, etc.) of Mozambique with other sub-Saharan countries and least developed countries, Mozambique had higher infant mortality, HIV and TB rates, and lower access to drinking and wastewater treatment facilities (World Bank HNPStatic Home, 2006). The major death causes were similar to those of its neighboring nations (Malawi, Zambia, and Zimbabwe) with similar economic development, i.e., infectious diseases and maternal and perinatal diseases (WHO, 2004). The healthcare system in Mozambique consists of three stages: one central organization, 11 provincial organizations, and 114 district organizations. The healthcare facilities in Mozambique have been planned, taking into consideration the population, structure of diseases and death rates of the area where the public hospital will be located. In reality, however, public hospitals are located extremely disproportionately, and accessibility of healthcare is noticeably different depending on the area. The number of hospitals increased 3.7% per annum from 2001 to 2004,[16] and the nation had a total of 1,256 hospitals as of 2007-three central hospitals, eight provincial hospitals, 35 rural and general hospitals, and 775 health centers (Mozambique Statistics, 2007). Except for a few facilities, such as central hospitals, other hospitals in Mozambique are having a difficult time, due to their old facilities, outdated equipment and lack of human resources.

16 DFID Mozambique CAP 2008~2012, Draft for consultation http://www.dfid.gov.uk/pubs/files/mozambique-draft-cas.pdf (2008-6-10)

3. Considerations for Public Hospital Modernization Program Promotion in Developing Nations

Most developing nations have an extremely low private healthcare sector ratio, while their public healthcare sector reaches 80 to 90%. Thus, considerations from Korea's policy implementation should be taken into consideration when promoting modernization programs for their public hospitals.

First, government authorities need to figure out which hospitals should be supported among national university hospitals, district public general hospitals (secondary hospitals) or health centers. In Korea, the most competent national university hospitals in Seoul were modernized through US support. At the same time, health centers were opened for first-level healthcare across the nation. To bring organized and modernized public healthcare to developing nations in the 21st century, however, a suitable public healthcare system for each developing nation should be first established, followed by the implementation of policy based on this system. This matter is not about choice, but about policy priority and financial scale for each country. WHO has emphasized first-level healthcare (health centers) and second-level healthcare (district public general hospitals) as the most important. According to the international health organization, majority of developing nations have already promoted their health center programs, some of which have been successful. Now, it is time for them to establish policies for second-level health care.

Second, government must deal with difficulties in securing the health professionals required to have a functioning healthcare system. Korea introduced the US specialist system in its early developing stage, and excessive investment to educate doctors was committed, while policies to secure human resources for public hospitals were neglected. This led to difficulties in supplying doctors to public facilities. Fortunately, however, many African developing nations are adopting the European healthcare system, which should allow them to continue to educate and train doctors at reasonable expenses, while inducing them to work for public hospitals. In particular, urban centralization of doctors is inevitably expected, and sufficient benefits should therefore be provided for doctors working for local public hospitals.

Third, governments need to ask how district public general hospitals will be operated A key component to this question is to decide if they will they be operated as public organizations or special corporations. For instance, public hospitals in Vietnam are organizations operated by government officials. As a result, doctors are paid at a lower amount than those at private facilities, their turnover rate is very high and it is hard for them to commit to public hospitals. Indeed, some doctors have to treat patients at their own clinics after working at a public hospital, or work overtime at private hospitals. The main reason for this is that the state has insufficient finances for public healthcare, and lack viable alternatives for public hospitals. District public general hospitals are not necessarily organizations operated by government workers, and their independency in operation should

be secured while they are performing their functions at public hospitals. Also in Korea, its municipal and provincial hospitals are being operated as special corporations, which is a more suitable method for their functions and services.

Lastly, five basic elements characterized Korea's two modernization programs, and can be applied to promoting public healthcare policies in developing nations. First is to develop a model for public district general hospitals. Developing nations should primarily establish a model appropriate for the concept of public healthcare in the 21st century. They should then draw a future image of the existing public district general hospitals within their national healthcare systems. Second, based on the established model, mid and long-term development strategies and goals should be produced, considering the internal capacity of public hospitals and their local environments. Third, the improvement of public hospitals should be promoted by an organization retaining experiences and expertise. Fourth, the supply of diversified finances is necessary, instead of a single source, and input should be selectively and intensively consistent. Fifth, support systems such as legislation should be retained to help deal with conflicts and obstacles that can arise during program promotion.

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